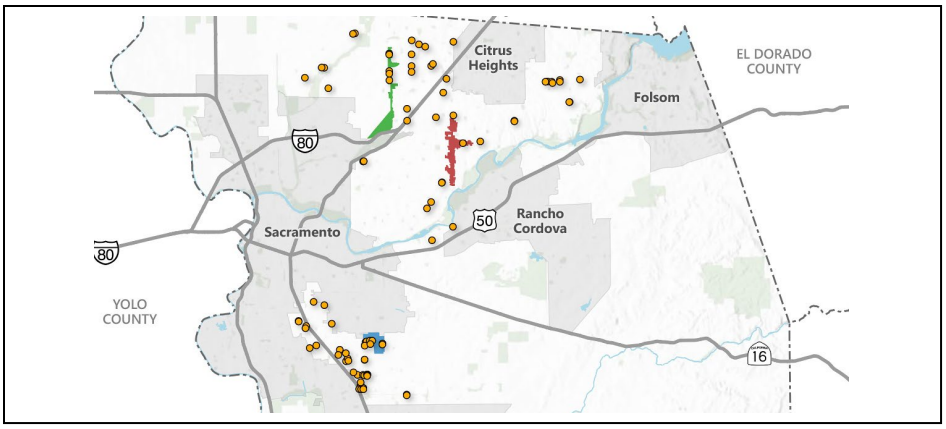
DRAFT SUBSEQUENT ENVIRONMENTAL IMPACT REPORT

SACRAMENTO COUNTY REGIONAL HOUSING NEEDS ALLOCATION REZONE PROJECT



Control Number: PLNP2020-00042
State Clearinghouse Number: 2023060304
April 2024

COUNTY OF SACRAMENTO

DEPARTMENT OF COMMUNITY DEVELOPMENT
PLANNING AND ENVIRONMENTAL REVIEW
827 7TH STREET, ROOM 225
SACRAMENTO, CALIFORNIA 95814

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This Subsequent Environmental Impact Report has been prepared pursuant to the California Environmental Quality Act of 1970 (Public Resources Code Division 13). An Environmental Impact Report is an informational document which, when this Department requires its preparation shall be considered by every public agency prior to its approval or disapproval of a project. The purpose of an Environmental Impact Report is to provide public agencies with detailed information about the effect that a proposed project is likely to have on the environment; to list ways in which any adverse effects of such a project might be minimized; and to suggest alternatives to such a project.

Prepared by the
COUNTY OF SACRAMENTO
DEPARTMENT OF COMMUNITY DEVELOPMENT
PLANNING AND ENVIRONMENTAL REVIEW
827 7TH STREET, ROOM 225
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EXECUTIVE SUMMARY

This subsequent environmental impact report (SEIR) describes the potential environmental impacts associated with the Sacramento County Regional Housing Needs Allocation (RHNA) Rezone Project (herein after referred to as the Project). The purpose of this SEIR is to evaluate the Project's effects on environmental resources, both singularly and in a cumulative context, to examine alternatives to the Project as proposed, and identify mitigation measures to reduce or avoid potentially significant effects. This document has been prepared in compliance with the California Environmental Quality Act (CEQA; Sections 21000-21189 of the Public Resources Code [PRC]) and the State CEQA Guidelines (Title 14, Sections 15000-15387 of the California Code of Regulations).

SUMMARY OF THE PROJECT

The Project consists of rezoning sites totaling approximately 235 acres across unincorporated Sacramento County to provide additional lower income (i.e., extremely low income, very low income, and low income) and moderate-income category housing opportunities.

Unincorporated portions of Sacramento County (i.e., excluding incorporated cities) encompass approximately 469,083 acres or 775 square miles (approximately 79 percent of the entire County). The unincorporated County is divided into 14 communities. The Project proposes rezoning of parcels (or portions of parcels) (referred to as candidate rezone sites) within 10 of the County communities including: Antelope, Arden Arcade, Carmichael/Old Foothill Farms, Cordova, Fair Oaks, North Highlands, Orangevale, Rio Linda/Elverta, South Sacramento, and Vineyard.

The Project does not propose to construct new residential or other development on the approximately 235 acres evaluated in this SEIR; rather, it provides additional capacity for future development of housing units to meet the County's remaining unmet RHNA of 2,884 lower income category units, consistent with State law. Of the approximately 235 acres proposed to be rezoned, approximately 156 acres (66 percent) currently allows for (either by-right or with a discretionary entitlement) multifamily residential development. The Project would increase residential density on these sites and does not change the development footprint. The horizon year for the Project is 2029.

Pursuant to Section 15162 of the State CEQA Guidelines, this SEIR tiers from the EIR for the *Sacramento County General Plan of 2005-2030* EIR (General Plan EIR), and the EIRs for the three distinct area plans (Fair Oaks Boulevard Corridor Plan, North Watt Avenue Corridor Plan, and Old Florin Town Special Planning Area [SPA]). The Fair Oaks Boulevard Corridor Plan, North Watt Avenue Corridor Plan, and Old Florin Town SPA are products of General Plan Policy LU-11 which directed the corridor planning processes for certain commercial corridors.

ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

This SEIR has been prepared to evaluate the physical environmental effects associated with the Project. The environmental impacts and mitigation measures identified in the SEIR are summarized in Tables ES-1 and ES-2 below. Table ES-2 also identifies the level of significance of each impact before mitigation, mitigation measures proposed to reduce impacts, if any, and the level of significance of the impact after implementation of the mitigation measures for the Project.

SUMMARY OF ALTERNATIVES EVALUATED

Alternatives are evaluated for consideration in the SEIR if they were determined to: 1) accomplish all or most of the basic project objectives, 2) be potentially feasible (from economic, legal, regulatory, and technological standpoints), and 3) avoid or substantially lessen any significant effects of the Project. Alternatives that meet these evaluation criteria are evaluated in the SEIR and are listed below.

- **Alternative 1: No Project Alternative.** The No Project Alternative would result in the continuation of existing conditions and planned development in the county. No new significant environmental impacts or increased severity of environmental impacts identified in the General Plan EIR would occur under this alternative because it would retain the current General Plan land use designations and policy provisions, as well as existing zoning.
- **Alternative 2: Green Zones Alternative.** Alternative 2 would consist of rezoning only sites within the five Green Zones within the unincorporated County identified by the Sacramento Area Council of Governments (SACOG) including: Arden Way Corridor, Butterfield RT Station, Fair Oaks Boulevard Corridor, North Watt Corridor, and South Sacramento-Stockton Boulevard-14th Avenue to Mack Road. This alternative would result in a minimum of 3,949 units and a maximum of 5,265 units.
- **Alternative 3: No Sites in the Rio Linda Elverta Community Water District (RLECWD) Alternative.** Alternative 3 would consist of all the Project's candidate rezone sites, except for Sites 28, 29, 65, and 66 that would not be rezoned to accommodate increased residential densities. Under this alternative, up to 166 fewer housing units would be allowed as compared with the Project.

ENVIRONMENTAL SUPERIOR ALTERNATIVE

State CEQA Guidelines Section 15126.6(e)(2) states that when the No Project Alternative is identified as the environmentally superior alternative, the EIR must also identify an environmentally superior alternative from among the other alternatives. As discussed in Chapter 3, "Alternatives," the No Project Alternative is environmentally superior for all environmental resource areas. As a result, this SEIR must identify an alternative among the other alternatives that is environmentally superior. Based on the environmental

analysis contained in this SEIR, the environmentally superior alternative would be Alternative 3. Alternative 3 would avoid the significant and unavoidable water supply impacts in RLECWD associated with the Project and would result in lesser impacts across all resources topics due to the removal of four candidate rezone sites.

AREAS OF CONTROVERSY

In accordance with CEQA regulations, a notice of preparation (NOP) was distributed on June 12, 2023, to agencies, interested parties, organizations, and individuals that may have interest in the Project. Two scoping meetings were held on June 27, 2023. A second NOP was released on December 22, 2023 and a scoping meeting was held on January 4, 2023. Two comment letters were received during the first scoping period from Central Valley Regional Water Quality Control District and Native American Heritage Commission. The comment letters outline the agencies' responsibility to protect water quality and tribal cultural resources. No comments were received during the second scoping period. All of the environmental issues raised in the NOP comment letters have been addressed or otherwise considered during preparation of this SEIR.

ISSUES TO BE RESOLVED

CEQA Guidelines Section 15123(b)(3) requires that an EIR identify issues to be resolved, including the choice among alternatives and whether or how to mitigate significant impacts. With regard to the Project, the major issues to be resolved include decisions by the County, as lead agency, related to:

- Whether this SEIR adequately describes the environmental impacts associated with the Project.
- Whether the benefits of the Project override environmental impacts, if any, that cannot be feasibly avoided or mitigated to a level of insignificance.
- Whether the identified mitigation measures should be approved or modified.
- Whether there are other mitigation measures that should be applied to the Project besides those mitigation measures identified in the SEIR.
- Whether there are any alternatives to the Project that would substantially lessen any of the significant impacts of the Project and achieve most of the basic Project objectives.

ORGANIZATION OF THE SUPPLEMENTAL IMPACT REPORT

The remainder of this document includes a detailed description of the Project, analysis of potential environmental impacts, including cumulative impacts, that could result from

Project implementation, discussion of growth-inducing impacts, and evaluation of potential alternatives to the Project. This document is organized as detailed below.

- Chapter 1 summarizes the Project and the scope and process of the SEIR.
- Chapter 2 describes the location of the Project, Project background, and the nature and location of specific elements of the Project.
- Chapter 3 describes feasible alternatives to the Project, including the No Project Alternative.
- Chapters 4 through 13 include a topic-by-topic analysis of impacts that would or could result from Project implementation. Each chapter includes a discussion of the environmental and regulatory setting, impact analysis, mitigation measures, and cumulative analysis.
- Chapter 14 provides an overview of the environmental evaluation, including impact conclusions, and additional analysis about the Project's potential irreversible and growth-inducement effects in the region.
- Chapter 15 lists all resources used to prepare the SEIR.
- Chapter 16 lists all the acronyms and abbreviations used in the SEIR.
- Chapter 17 identifies the preparers of the SEIR.

IMPACT AND MITIGATION SUMMARY TABLE

Chapter 1, "Introduction," of this SEIR provides a summary of environmental effects adequately addressed in the General Plan EIR, Fair Oaks Boulevard EIR, North Watt Avenue EIR, and Old Florin Town SPA EIR. Chapter 1 also identifies standard mitigation measures and mitigation measures from the respective EIRs that are applicable to the Project, which would apply to development on individual candidate rezone sites to ensure significant impacts would not occur. Table ES-1 provides a summary of the environmental effects adequately addressed in the previous EIRs and lists the mitigation measures identified in Chapter 1.

Table ES-2 provides a summary of the environmental impacts and mitigation measures identified in Chapters 4 through 13 of the SEIR. Table ES-2 briefly describes the impacts and the mitigation measures recommended to eliminate or reduce the impacts resulting from implementation of the Project and the proposed rezone in the three distinct area plans. The residual impact after mitigation is also identified. Adopted mitigation measures from the Fair Oaks Boulevard EIR, North Watt Avenue EIR, and Old Florin Town SPA EIR have been distinguished with either "FO," "NW," or "OFT," respectively, before the adopted mitigation measure to identify in which EIR the adopted measure is located.

Table ES-1: Summary of Resouce Topics Excluded from Detailed Analaysis

GENERAL PLAN/DISTINCT AREA PLANS	ENVIRONMENTAL EFFECTS SUMMARY	MITIGATION MEASURE
Agriculture and Forestry Resources		
General Plan	There are no designated forestry resources in unincorporated Sacramento County. None of the proposed candidate rezone sites are located on lands under an active Williamson Act Contract. Additionally, there are no proposed candidate rezone sites located on areas designated as Farmland (i.e., Prime Farmland, Farmland of Statewide Importance, and Unique Farmland. All candidate rezone sites are included and analyzed in the General Plan EIR. Because impacts, including cumulative impacts, related to agriculture and forestry resources associated with the Project have been adequately addressed in the General Plan EIR, no new or more severe effects compared to the impacts identified in the General Plan EIR would occur	No mitigation is required.
Fair Oaks Boulevard Corridor Plan	The proposed rezone on Site 67 in Fair Oaks Boulevard Corridor Plan is not located on areas designated as Farmland. No impact would occur.	No mitigation is required.
North Watt Avenue Corridor Plan	The proposed rezone on Sites 68 through 72 in North Watt Avenue Corridor Plan are not located on areas designated as Farmland. No impact would occur.	No mitigation is required.
Old Florin Town SPA	Sites 75 and 76 in the Old Florin Town SPA are designated as Farmland of Local Importance. However, these sites were analyzed int eh Old Florin Town SPA and would be less than 50 acres. Development on Sites 75 and 76 would not result in conversion of substantial Farmland of Local Importance to agricultural use that would require mitigation per General Plan Policies CO-51 and AG-5.	No mitigation is required.
Biological Resources		
General Plan	Development under the Project would be subject to General Plan policies and local, regional, state, and federal regulations related to protection of biological resources. However, implementation of the Project would allow for development in portions of the planning area that may contain sensitive biological resources, such as special-status and sensitive plant and wildlife species, and sensitive habitats (including wetlands).	**Mitigation Measure BIO-1: Biological Resources Report and Mitigation Plan** If appropriate habitat (such as native trees, grasslands, wetlands, water features, or any other features that may support special-status plant/animal species, raptors, and nesting birds) is present on a candidate rezone site, the applicant of subsequent development on the candidate rezone site shall retain a qualified biologist to prepare a biological resources report identifying all biological resources onsite. This report shall also constitute as a mitigation plan detailing avoidance, replacement, or otherwise mitigates identified biological impacts. The mitigation plan aspect of the report shall consist of identifying mitigation applicable to subsequent development on a candidate rezone site, as stipulated in Mitigation Measures BIO-2 through BIO-16, which will be submitted to the Environmental Coordinator for review and approval. **Mitigation Measure BIO-2: Native Tree Protection** Prior to any ground disturbing activities associated with subsequent development on candidate rezone sites, the applicant shall submit an arborist report to PER if native trees (as defined by the General Plan) will be impacted by development. The report shall include the species, diameter, dripline, and health of the trees, and shall be prepared by an ISA certified arborist. The report shall include an exhibit that shows the trees and their dripline in proximity to subsequent development improvements. The report shall identify any tree that will be removed and quantify the dripline encroachment from subsequent development.

GENERAL PLAN/DISTINCT AREA PLANS	ENVIRONMENTAL EFFECTS SUMMARY	MITIGATION MEASURE
		A) With the exception of the native trees removed and compensated for through Part B below, all healthy native trees that are 6 inches dbh or larger on a candidate rezone site, all portions of adjacent off-site healthy native trees that are 6 inches dbh or larger which have driplines that extend onto a candidate rezone site, and all off-site healthy native trees that are 6 inches dbh or larger which may be impacted by utility installation and/or improvements associated with subsequent development, shall be preserved and protected as follows: i) A circle with a radius measurement from the trunk of the tree to the tip of its longest limb shall constitute the dripline protection area of each tree. Limbs must not be cut back in order to change the dripline. The area beneath the dripline is a critical portion of the root zone and defines the minimum protected area of each tree. Removing limbs that make up the dripline does not change the protected area. ii) Any protected trees on the site that require pruning shall be pruned by a certified arborist prior to the start of construction work. All pruning shall be in accordance with the American National Standards Institute (ANSI) A300 pruning standards and the International Society of Arboriculture (ISA) “Tree Pruning Guidelines.” iii) Prior to initiating construction, temporary protective fencing shall be installed at least one foot outside the driplines of the protected trees within 100-feet of construction related activities, in order to avoid damage to the tree canopies and root systems. Where encroachment occurs, temporary high visibility protective fencing shall be installed a maximum of one foot outside the work areas in order to minimize damage to the tree canopies and root systems. iv) Any removal of paving or structures (i.e. demolition) that occurs within the dripline of a protected oak tree shall be done under the direct supervision of a certified arborist. To the maximum extent feasible, demolition work within the dripline protection area of the oak tree shall be performed by hand. If the certified arborist determines that it is not feasible to perform some portion(s) of this work by hand, then the smallest/lightest weight equipment that will adequately perform the demolition work shall be used. v) No signs, ropes, cables (except those which may be installed by a certified arborist to provide limb support) or any other items shall be attached to the protected trees. Small metallic numbering tags for the purpose of preparing tree reports and inventories shall be allowed. vi) No vehicles, construction equipment, mobile home/office, supplies, materials or facilities shall be driven, parked, stockpiled or located within the driplines of protected trees. vii) No grading (grade cuts or fills) shall be allowed within the driplines of protected trees, except for the minimum required for construction and streetscape improvements. viii) Drainage patterns on the site shall not be modified so that water collects or stands within, or is diverted across, the dripline of any protected tree. ix) No trenching shall be allowed within the driplines of protected trees. If it is absolutely necessary to install underground utilities within the dripline of a protected tree, the utility line shall be bored and jacked under the supervision of a certified arborist. x) The construction of impervious surfaces within the driplines of protected trees shall be stringently minimized. When it is absolutely necessary, a piped aeration system per County standard detail shall be installed under the supervision of a certified arborist. xi) All portions of any masonry wall that will encroach into the dripline protection area of any protected tree shall be constructed using grade beam wall panels and posts set no closer than 10 feet on center. Any wrought iron fencing shall be similarly installed, with posts set no closer than 10 feet on center. Posts shall be spaced in such a manner as to maximize the separation between the tree trunks and the posts in order to reduce impacts to the trees. xii) Trunk protection measures, per Sacramento County standards, shall be used for all protected trees where development/construction activity, including installation of any masonry wall and wrought iron fence, occurs within 10 feet of the trunk of a tree. xiii) No sprinkler or irrigation system shall be installed in such a manner that sprays water or requires trenching within the driplines of protected trees. An above ground drip irrigation system is recommended. xiv) Landscaping beneath oak trees may include non-plant materials such as bark mulch, wood chips, boulders, etc. The only plant species which shall be planted within the driplines of oak trees are those which are tolerant of the natural semi-arid environs of the trees. A list of such drought-tolerant plant species is available with Planning and Environmental Review (PER). Limited drip irrigation approximately twice per summer is recommended for the understory plants. B) To the maximum extent feasible, all on-site healthy native trees shall be protected and preserved. Any substantial (>20%) encroachment and/or removal of native trees shall be compensated by planting native trees (as defined by the General Plan), equivalent to the dbh inches lost, based on the ratios listed below, at locations that are authorized by PER. On-site preservation of native trees that are less than 6 inches (<6 inches) dbh, may also be used to meet this compensation requirement. Encroachment of over 20 percent within the dripline radius of native trees will

GENERAL PLAN/DISTINCT AREA PLANS	ENVIRONMENTAL EFFECTS SUMMARY	MITIGATION MEASURE
		require compensatory mitigation based on the percentage of encroachment multiplied by the dbh. Encroachment over 50 percent will require compensation for the entire tree. Equivalent compensation based on the following ratio is required: • one preserved native oak tree < 6 inches dbh on-site = 1 inch dbh • one depot seedling (40 cubic inches or larger) = 1 inch dbh • one 15-gallon tree = 1 inch dbh • one 24-inch box tree = 2 inches dbh • one 36-inch box tree = 3 inches dbh Replacement tree planting shall be completed prior to the issuance of building permits or a bond shall be posted by the applicant in order to provide funding for purchase, planting, irrigation, and 3-year maintenance period, should the applicant default on replacement tree mitigation. The bond shall be in an amount equal to the prevailing rate of the County Tree Preservation Fund. Prior to the approval of Improvement Plans or building permits, a Replacement Native Tree Planting Plan shall be prepared by a certified arborist or licensed landscape architect and shall be submitted to the Environmental Coordinator for approval. The Replacement Native Tree Planting Plan(s) shall include the following minimum elements: 1. Species, size and locations of all replacement plantings and < 6-inch dbh trees to be preserved; 2. Method of irrigation; 3. The Sacramento County Standard Tree Planting Detail L-1, including the 10-foot deep boring hole to provide for adequate drainage; 4. Planting, irrigation, and maintenance schedules; 5. Identification of the maintenance entity and a written agreement with that entity to provide care and irrigation of the trees for a 3-year establishment period, and to replace any of the replacement oak trees which do not survive during that period. 6. Designation of 20 foot root zone radius and landscaping to occur within the radius of oak trees < 6-inches dbh to be preserved on-site. No replacement tree shall be planted within 15 feet of the driplines of existing oak trees or landmark size trees that are retained on-site, or within 15 feet of a building foundation or swimming pool excavation. The minimum spacing for replacement oak trees shall be 20 feet on-center. Examples of acceptable planting locations are publicly owned lands, common areas, and landscaped frontages (with adequate spacing). Generally unacceptable locations are utility easements (PUE, sewer, storm drains), under overhead utility lines, private yards of single family lots (including front yards), and roadway medians. Native trees <6 inches dbh to be retained on-site shall have at least a 20-foot radius suitable root zone. The suitable root zone shall not have impermeable surfaces, turf/lawn, dense plantings, soil compaction, drainage conditions that create ponding, utility easements, or other overstory tree(s) within 20 feet of the tree to be preserved. Trees to be retained shall be determined to be healthy and structurally sound for future growth, by an ISA Certified Arborist subject to PER approval. If native tree replacement plantings are demonstrated to the satisfaction of the Environmental Coordinator to be infeasible for any or all trees removed, then compensation shall be through payment into the County Tree Preservation Fund. Payment shall be made at a rate of $325.00 per dbh inch removed but not otherwise compensated, or at the prevailing rate at the time payment into the fund is made. **Mitigation Measure BIO-3: Non-native Tree Canopy** Removal of non-native tree canopy for development shall be mitigated by creation of new tree canopy equivalent to the acreage of non-native tree canopy removed. In Environmental Justice (EJ) communities, tree canopy creation/mitigation shall be consistent with General Plan policy EJ-23 implementation measure, which requires projects in under-canopied EJ communities to provide an additional 25% tree replacement for lost canopy. New tree canopy acreage shall be calculated using the Sacramento County Department of Transportation 15-year shade cover values for tree species. Preference is given to on-site mitigation, but if this is infeasible, then funding shall be contributed to the Sacramento Tree Foundation's Greenprint program in an amount proportional to the tree canopy lost (as determined by the 15-year shade cover calculations for the tree species to be planted through the funding, with the cost to be determined by the Sacramento County Tree Foundation).

Mitigation Measure BIO-4: Nesting Raptors

If construction activity associated with subsequent development on candidate rezone sites (which includes clearing, grubbing, or grading) is to commence within 500 feet of suitable nesting habitat between March 1 and September 15, a survey for raptor nests shall be conducted by a qualified biologist. The survey shall cover all potential tree and ground nesting habitat on-site and off-site up to a distance of 500 feet from the project boundary. The survey shall occur within 30 days of the date that construction will encroach within 500 feet of suitable habitat. The biologist shall supply a brief written report (including date, time of survey, survey method, name of surveyor and survey results) to the Environmental Coordinator prior to ground disturbing activity. If no active nests are found during the survey, no further mitigation will be required. If any active nests are found, the Environmental Coordinator and California Fish and Wildlife shall be contacted to determine appropriate avoidance/protective measures. The avoidance/protective measures shall be implemented prior to the commencement of construction within 500 feet of an identified nest.

Mitigation Measure BIO-5: Swainson's Hawk Nesting Habitat.

If construction, grading, or improvements associated with subsequent development on candidate rezone sites are to commence between March 1 and September 15, a focused survey for Swainson's hawk nests on the site and within ¼ mile of the site shall be conducted by a qualified biologist no later than 30 days prior to the start of construction work (including clearing and grubbing). If active nests are found, the California Fish and Wildlife shall be contacted to determine appropriate protective measures, and these measures shall be implemented prior to the start of any ground-disturbing activities. If no active nests are found during the focused survey, no further mitigation will be required.

Mitigation Measure BIO-6: Migratory Bird Nest Protection.

To avoid impacts to nesting migratory birds as a result of subsequent development on candidate rezone sites, the following shall apply:

1. If construction activity (which includes clearing, grubbing, or grading) is to commence within 50 feet of nesting habitat between February 1 and August 31, a survey for active migratory bird nests shall be conducted no more than 14 days prior to construction by a qualified biologist.
2. Trees slated for removal shall be removed during the period of September through January, in order to avoid the nesting season. Any trees that are to be removed during the nesting season, which is February through August, shall be surveyed by a qualified biologist and will only be removed if no nesting migratory birds are found.
3. If active nest(s) are found in the survey area, a non-disturbance buffer, the size of which has been determined by a qualified biologist, shall be established and maintained around the nest to prevent nest failure. All construction activities shall be avoided within this buffer area until a qualified biologist determines that nestlings have fledged, or until September 1.

Mitigation Measure BIO-7: Avoid, Minimize, and Mitigate for Impacts on Western Burrowing Owl and Occupied Nesting Habitat

In the event appropriate Western Burrowing Owl nesting habitat is present on candidate rezone sites:

- A qualified biologist shall conduct a preconstruction survey for burrowing owl no more than 30 days prior to ground-disturbing activities to provide updated information on owl locations and occupied burrows for impact avoidance, minimization, and mitigation planning. The survey shall cover the limits of ground disturbance and potentially suitable habitat within 500 feet. The survey shall be consistent with CDFG (2012), or more current CDFW guidelines. If ground-disturbing activities are delayed, then additional surveys shall be conducted such that no more than 7 days elapse between the survey and ground-disturbing activities.
- A Burrowing Owl Mitigation and Management Plan shall be developed in consultation with CDFW and consistent with CDFG's Staff Report on Burrowing Owl Mitigation (March 2012), or more current CDFW guidelines prior to project construction. The CDFW-approved Burrowing Owl Mitigation and Management Plan shall be submitted to the County of Sacramento for review prior to the start of construction. The plan shall address long-term ecological sustainability and maintenance of the site for burrowing owls on the project site and in adjacent areas. The Plan shall require the applicant to achieve a performance standard of no net loss of burrowing owl nesting and foraging habitat acreage, function, and values and shall include the following elements:
    - A description of the preconstruction distribution and abundance of burrowing owls and existing habitat conditions at the project site.
    - Avoidance and minimization measures to be implemented during project construction to avoid direct and indirect impacts on burrowing owls (e.g., establishment of a minimum of 50 meters, up to 500 meters, non-disturbance buffers around active burrows depending on the time of year and type of activity, consistent with CDFW's 2012 Staff Report guidelines), including a discussion of any proposed passive relocation activities, if necessary (e.g., non-breeding season active burrows that cannot feasibly be avoided).
    - Proposed management of burrowing owl nesting and foraging habitat during project operation and maintenance to achieve the goal of no net loss of existing habitat value for burrowing owls.
    - A monitoring and reporting plan addressing implementation and success of the management plan and identifying actions needed to maintain foraging and nesting habitat and reduce stressors on wintering and nesting burrowing owls.

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		○ An adaptive management plan that includes remedial action to be taken if the performance standards of no net loss of burrowing owl nesting and foraging habitat value are not being met. Remedial action shall focus on site-specific enhancements, or if appropriate, acquisition of credits in a burrowing owl mitigation bank, or another form of mitigation acceptable to CDFW. • If CDFW determines that off-site compensatory mitigation is necessary to comply with the performance standard of no net loss of habitat acreage, function, and values for burrowing owls, the applicant may provide off-site compensatory mitigation through acquisition of a conservation easement or mitigation credits from an appropriate mitigation bank, as approved by CDFW. **Mitigation Measure BIO-8: Avoid, Minimize, and Mitigate for Impacts on Tricolored Blackbird** In the event that appropriate habitat or species are identified on a candidate rezone site (as identified in the biological resources report pursuant to Mitigation Measure BIO-1), the following shall apply: • To the maximum extent feasible, clearing, grubbing, removal, and/or disturbance (e.g., trimming) to any vegetation that is suitable tricolored blackbird nesting habitat shall be performed outside of the nesting season (September through March) to avoid impacts to nesting birds. If vegetation disturbance/removal cannot be avoided during the nesting season for this species, the following measures shall be implemented. • A qualified biologist shall conduct a preconstruction survey for nesting tricolored blackbird approximately two days prior to vegetation or tree removal or ground-disturbing activities during the nesting season (approximately April through August). The survey shall cover the limits of construction and suitable nesting habitat within 500 feet. • If any active nests are observed during surveys, a qualified biologist shall establish a suitable avoidance (i.e., non-disturbance) buffer from the active nest. The buffer distance for tricolored blackbird shall generally be 500 feet and shall be determined based on factors such as topographic features, intensity and extent of the disturbance, timing relative to the nesting cycle, and anticipated ground disturbance schedule. Limits of construction shall be established in the field with flagging, fencing, or other appropriate barriers to avoid active nests. Construction limits shall be based on the biologist-defined appropriate buffer distance and shall be maintained until the chicks have fledged and the nests are no longer active, as determined by the qualified biologist. • If vegetation removal activities are delayed, additional nest surveys shall be conducted such that no more than 7 days elapse between the survey and vegetation removal activities. • If an active nest is identified within 500 feet of the work area after construction has started, work within 500 feet of the nest shall be suspended until the qualified biologist can provide appropriate avoidance and minimization measures to ensure that the nest is not disturbed by construction. Appropriate measures may include a no-disturbance buffer until the birds have fledged, limitations on construction activities that generate substantial vibration and/or noise, and/or full-time monitoring by a qualified biologist during construction activities conducted near the nest. **Mitigation Measure BIO-9: Avoid and Minimize Impacts to Special-Status Bats** A qualified biologist shall conduct a pre-construction survey for special-status bat species within 14 days prior to development or ground disturbing activities including grading, vegetation clearing, tree removal, or construction. If no bats are observed, a letter report shall be prepared to document the survey and provided to project proponent, and no additional measures are recommended. If development does not commence within 14 days of the pre-construction survey, or halts for more than seven days, an additional survey is required prior to resuming or starting work. **Mitigation Measure BIO-10: Avoid, Minimize, and Mitigate for Impacts on Valley Elderberry Longhorn Beetle and Their Habitat** In the event that appropriate habitat or species are identified on a candidate rezone site (as identified in the biological resources report pursuant to Mitigation Measure BIO-1), the following shall apply: • Conduct a preconstruction survey for valley elderberry longhorn beetle consistent with the Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle (Desmocerus californicus dimorphus) (USFWS 2017), or more current conservation guidelines, to confirm and update the location of elderberry shrubs and occupancy by this species and to assess final project impacts. \ • Direct impacts to individual elderberry shrubs (i.e., within 20 feet or less of project ground disturbance) shall be mitigated through transplanting the shrub(s) and providing compensation at a 1:1 ratio in accordance with the Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle (Desmocerus californicus dimorphus) (USFWS 2017), or more current conservation guidelines.

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		• Indirect impacts to individual elderberry shrubs (i.e., plants between 20 to 165 feet of project ground disturbance) shall be avoided by subsequent development and are subject to the implementation of the following additional measures: ○ Avoidance and Fencing. Subsequent development activities that may damage or kill an elderberry plant (e.g., trenching, paving, etc.) shall be avoided to the extent feasible. If avoidance of all plants is not feasible, impacts to plants shall be compensated through planting of elderberry plants in areas not subject to project disturbance at a ratio of 1:1. All areas to be avoided during construction activities shall be fenced and/or flagged as close to the project solar development area as feasible. Temporary construction fencing and flagging shall be installed at least 165 feet outside the edge of the driplines of the elderberry plants. Environmentally sensitive area signs shall be erected along the edge of the avoidance area. In areas where encroachment on the 165-foot buffer has been approved by USFWS, a minimum setback of at least 20 feet from the dripline of each elderberry plant shall be provided, as well as documentation of USFWS setback approval. ○ Timing. All subsequent development activities that could occur within 165 feet of an elderberry plant shall be conducted outside of the flight season of the valley elderberry longhorn beetle (i.e., March through July) to the maximum extent feasible. ○ Trimming. Trimming may remove or destroy valley elderberry longhorn beetle eggs and/or larvae and may reduce the health and vigor of the elderberry plant. Therefore, to avoid and minimize direct impacts to valley elderberry longhorn beetle, trimming shall occur between November and February and shall avoid the removal of any branches or stems that are greater than 1 inch in diameter. Measures to address regular and/or large-scale maintenance (trimming) shall be established and approved by USFWS. ○ Mowing. Mechanical weed removal within the dripline of any elderberry plant shall be limited to the season when adult valley elderberry longhorn beetles are not active (i.e., August through February) and shall avoid damage to the elderberry plant. ○ Construction Monitoring. A qualified biologist shall monitor the project site if work would occur within the 165-foot avoidance buffer to ensure that all avoidance and minimization measures are implemented, as applicable. The amount and duration of monitoring shall depend on the project specifics and shall be discussed with USFWS. • A qualified biologist shall provide training for all contractors, work crews, and any on-site personnel on the status of the valley elderberry longhorn beetle, its host plant and habitat, the need to avoid damaging the elderberry shrubs, and the possible penalties for not complying with these requirements. **Mitigation Measure BIO-11: Avoid, Minimize, and Mitigate for Impacts on Vernal Pool Fairy Shrimp, Vernal Pool Tadpole Shrimp, or Midvalley Fairy Shrimp** In the event that appropriate habitat or species are identified on a candidate rezone site (as identified in the biological resources report pursuant to Mitigation Measure BIO-1), the following shall apply: • Unless a smaller buffer is approved through formal consultation with USFWS, construction fencing shall be installed a minimum of 250 feet from the delineated wetland edge of any potentially suitable aquatic habitats (e.g., vernal pools, seasonal wetlands) for vernal pool fairy shrimp and vernal pool tadpole shrimp. All construction and operations activities are prohibited within this buffer area. If total avoidance is achieved, no further action is required. • If avoidance, as described above, is not feasible, implement Mitigation Measure BIO-14, Avoid, Minimize, and Mitigate for Impacts on State and Federally Protected Wetlands to achieve the performance standard of no net loss of State and Federally Protected Wetlands, including vernal pool habitat acreage, function, and values for vernal pool fairy shrimp, vernal pool tadpole shrimp, and midvalley fairy shrimp. Direct and indirect effects to onsite suitable aquatic habitats that may support federally listed vernal pool branchiopods shall be offset through onsite preservation and/or the purchase of tadpole shrimp and fairy shrimp species preservation credits from a USFWS-approved in-lieu fee program or other USFWS-approved conservation or mitigation bank.. The mitigation ratios shall, at minimum, comply with applicable mitigation ratios in terms and conditions of biological opinion issued by U.S. Fish and Wildlife Service pursuant to section 7 of the Endangered Species Act. **Mitigation Measure BIO-12: Western Pond Turtle** In the event that appropriate habitat or species are identified on a candidate rezone site (as identified in the biological resources report pursuant to Mitigation Measure BIO-1), the following shall apply: 1. Twenty four hours prior to the commencement of ground-disturbing activity (i.e. clearing, grubbing, or grading) suitable habitat within the project area shall be surveyed for western pond turtle by a qualified biologist. The survey shall include aquatic habitat and 1,650 feet of

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		adjacent uplands surrounding aquatic habitat within the project area. The biologist shall supply a brief written report (including date, time of survey, survey method, name of surveyor and survey results) to the Environmental Coordinator prior to ground disturbing activity. 2. Construction personnel shall receive worker environmental awareness training. This training instructs workers how to recognize western pond turtles and their habitat. 3. If a western pond turtle is encountered during active construction, all construction shall cease until the animal has moved out of the construction area on its own or relocated by a qualified biologist. If the animal is injured or trapped, a qualified biologist shall move the animal out of the construction area and into a suitable habitat area. California Fish and Wildlife and the Environmental Coordinator shall be notified within 24-hours that a turtle was encountered. **Mitigation Measure BIO-13: Western Spadefoot Toad** In the event that appropriate habitat or species are identified on a candidate rezone site (as identified in the biological resources report pursuant to Mitigation Measure BIO-1), the following shall apply: Prior to surface disturbance in suitable habitat for Western Spadefoot Toad within the proposed project activity areas, a qualified biologist shall conduct surveys to determine the presence of the western spadefoot toad (*Spea hammondii*). Surveys shall be conducted at the appropriate time of the year (typically February-March when eggs, larvae, or tadpoles can be detected). If western spadefoot toad is encountered during surveys, a site-specific avoidance, minimization, and/or relocation plan shall be prepared and ensure any measures in the approved plan are in place prior to project activities. If relocation (including out of harm's way), western spadefoot toad shall only be relocated by a qualified biologist with the appropriate state and/or federal handling authorizations. Within suitable aquatic or upland western spadefoot habitat, all excavated steep-walled holes and trenches more than 6 inches deep will be covered with plywood (or similar material) or provided with one or more escape ramps constructed of earth fill or wooden planks at the end of each work day or 30 minutes prior to sunset, whichever occurs first. All steep-walled holes and trenches will be inspected each morning to ensure that no wildlife has become entrapped. All construction pipes, culverts, similar structures, construction equipment, and construction debris left overnight within suitable habitat will be inspected for western spadefoot toad. If erosion control is implemented within suitable aquatic or upland western spadefoot habitat, non-entangling erosion control material will be used to reduce the potential for entrapment. Tightly woven fiber netting (mesh size less than 0.25 inch) or similar material will be used to ensure that western spadefoots are not trapped (no monofilament). Coconut coir matting and fiber rolls containing burlap are examples of acceptable erosion control materials. **Mitigation Measure BIO-14: Wetlands, Vernal Pools, and Surface Waters** Prior to approval of grading permits or improvement plans and where wetlands, vernal pools, or other surface waters are present on candidate rezone sites, the applicant shall obtain all applicable permits from State and Federal regulatory agencies, including: • Section 1600 Streambed Alteration Agreement from CDFW (for impact on riparian area and other sensitive natural communities not considered Waters of the U.S. (WUS) or State); • CWA Section 404 permit from USACE for impacts to WUS; • CWA Section 401 Clean Water Certification from the Regional Water Quality Control Board for impacts to WUS; and/or, • Waste Discharge Permit from Regional Water Quality Control board for impacts to Waters of the State. As part of the permit applications, the applicant shall develop a habitat mitigation plan that will include mitigation for impacted waters of the US/State on a no-net-loss basis. The plan may include on-site restoration, if feasible, off-site preservation, or purchasing mitigation credits from an agency-approved wetlands mitigation bank, paying an agency-approved in-lieu fee, and/or developing conservation lands to compensate for permanent loss of resources. Mitigation ratios shall be no less than 1:1 and shall be determined during the permitting process. The applicant shall implement all conditions of the permits, including any performance monitoring, if required for on-site restoration and report on the results of the monitoring to the appropriate agencies at the frequency and duration included in the permits. **Mitigation Measure BIO-15: Special Status Vernal Pool Plants** Prior to the initial ground disturbance of candidate rezone sites containing special-status plant species or potential habitat identified in the biological resources report (Mitigation Measure BIO-1), a rare plant survey shall be performed by a qualified botanist in accordance to the Protocols for

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		Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities dated March 20, 2018, or the most recent CDFW rare plant survey protocols. Submit a written report to the Environmental Coordinator which describes the survey. The survey report should include a brief description of the vegetation, survey results (which includes a list of all species observed), photographs, time spent surveying, date of surveys, a map showing the location of the survey route and any rare plant populations and copies of any rare plant occurrence forms. If no rare plants are found, no further mitigation for plant species is required. If a special status plant or natural community is located, complete and submit to the CNDDB a California Native Species (or Community) Field Survey Form or equivalent written report. Total avoidance of habitats which contain rare plants shall be required unless deemed infeasible by the Environmental Coordinator. If avoidance is infeasible, prior to construction within 250 feet of the vernal pool(s) which contain the rare plant occurrences, notify California Department of Fish and Wildlife and U.S. Fish and Wildlife Service and comply with any permit or mitigation requirements stipulated by those agencies. Submit copies of all such correspondence, including a copy of any required permits, to the Environmental Coordinator. Measures may include but are not limited to a preconstruction survey of all areas to be disturbed. If any special-status plant species are identified, the botanist will flag and Global Positioning System (GPS) the location. Impacts to special-status plant species shall be avoided to the maximum extent feasible and habitat that supports special-status plant species shall be preserved. If avoidance is not feasible, perennial plant species shall be mitigated with established protocols during consultation with federal and state agencies. **Mitigation Measure BIO-16: Sanford's Arrowhead** If Sanford's Arrowhead are found on candidate rezone sites, the botanist shall establish distribution of the colony(s) and estimate the number of individuals in the population. Unless deemed infeasible by the Environmental Coordinator, all plants or tuber/rhizomes shall be removed from the area of impact and transplanted to a new or existing preserve or, if the impact is temporary, replanted in the same location after the disturbance. Surveys shall be performed annually at the transplant location for a period of three years, to ensure success. If survival is not meeting a minimum 60% survivorship, transplantation will be deemed failed. In cases where transplanting is deemed infeasible, or where transplanting has failed, compensatory mitigation shall be provided. **Mitigation Measure BIO-17: Compliance with South Sacramento Habitat Conservation Plan** The applicant of subsequent development on candidate rezone sites in South Sacramento Habitat Conservation Plan (SSHCP) (Sites 30 through 59 and 73 through 79) shall obtain authorization through SSHCP prior to all ground disturbing activities, on-site and off-site. Authorization under SSHCP shall include implementation and conformance with all applicable SSHCP Avoidance and Minimization Measures (Appendix INTRO-2) and payment of fees necessary to mitigate for impacts to species and habitat.
Fair Oaks Boulevard Corridor Plan	Development on Site 67 in the Fair Oaks Boulevard Corridor Plan was previously analyzed in the Fair Oaks Boulevard EIR. The proposed development on Site 67 would be denser than assumed in the EIR. Future development on Site 67 in the Fair Oaks Corridor area may have impacts on native trees, waters of the U.S. and/or riparian habitat.	**Mitigation Measures BIO-1, BIO-3, BIO-5 through BIO-13, BIO-15, and BIO-16** **Mitigation Measure FO-BR-3: SPA Development and Redevelopment Oak Tree Protection and Compensation** Prior to execution of redevelopment/ development projects within the SPA area, the project proponent(s) shall submit an arborist report for the project impact areas when appropriate habitat exists. The report shall include the species, diameter, dripline, and health of the trees, and shall be prepared by an ISA certified arborist. The report shall include an exhibit that shows the trees and their driplines in proximity to the project improvements. The report shall identify any tree that will be removed and shall quantify any encroachment from project equipment or facilities within driplines of native oaks. A) With the exception of the oak trees removed and compensated for through Part B below, all healthy native oak trees that are 6 inches dbh or larger on the project site, all portions of adjacent offsite healthy native oak trees that are 6 inches dbh or larger which have driplines that extend onto the project site, and all off-site healthy native oak trees that are 6 inches dbh or larger which may be impacted by utility installation and/or improvements associated with this project, shall be preserved and protected as follows: 1. A circle with a radius measurement from the trunk of the tree to the tip of its longest limb shall constitute the dripline protection area of the tree. Limbs must not be cut back in order to change the dripline. The area beneath the dripline is a critical portion of the root zone and defines the minimum protected area of the tree. Removing limbs which make up the dripline does not change the protected area.

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		2. Chain link fencing or a similar protective barrier shall be installed one foot outside the driplines of the oak trees prior to initiating project construction, in order to avoid damage to the trees and their root systems. 3. Any removal of paving or structures (i.e. demolition) that occurs within the dripline of a protected oak tree shall be done under the direct supervision of a certified arborist. To the maximum extent feasible, demolition work within the dripline protection area of the oak tree shall be performed by hand. If the certified arborist determines that it is not feasible to perform some portion(s) of this work by hand, then the smallest/lightest weight equipment that will adequately perform the demolition work shall be used. 4. No signs, ropes, cables (except cables which may be installed by a certified arborist to provide limb support) or any other items shall be attached to the oak trees. 5. No vehicles, construction equipment, mobile home/office, supplies, materials or facilities shall be driven, parked, stockpiled or located within the dripline of the oak trees. 6. Any soil disturbance (scraping, grading, trenching, and excavation) is to be avoided within the dripline of the oak trees. Where this is necessary, an ISA Certified Arborist will provide specifications for this work, including methods for root pruning, backfill specifications and irrigation management guidelines. 7. Before grading, excavation or trenching within five feet outside the driplines of protected oak trees, root pruning shall be required at the limits of grading or excavation to cut roots cleanly to a depth of the excavation or 36 inches (whichever is less). Roots shall be cut by manually digging a trench and cutting exposed roots with a saw, vibrating knife, rock saw, narrow trencher with sharp blades or other approved root-pruning equipment under the supervision of an ISA Certified Arborist. 8. All underground utilities and drain or irrigation lines shall be routed outside the driplines of oak trees. If lines must encroach upon the dripline, they should be tunneled or bored under the tree under the supervision of a certified arborist. 9. Any herbicides placed under paving materials must be safe for use around trees and labeled for that use. Any pesticides used on site must be tree-safe and not easily transported by water. 10. Drainage patterns on the site shall not be modified so that water collects or stands within, or is diverted across, the dripline of the oak tree. 11. No sprinkler or irrigation system shall be installed in such a manner that it sprays water within the dripline of the oak tree. 12. Tree pruning required for clearance during construction must be performed by an ISA Certified Arborist or Tree Worker. 13. Landscaping beneath the oak tree may include non-plant materials such as boulders, decorative rock, wood chips, organic mulch, non-compacted decomposed granite, etc. Landscape materials shall be kept two (2) feet away from the base of the trunk. The only plant species which shall be planted within the dripline of the oak tree are those which are tolerant of the natural semi-arid environs of the trees. Limited drip irrigation approximately twice per summer is recommended for the understory plants. B) To the maximum extent feasible, all on-site healthy native oak trees shall be protected and preserved. Any substantial (>20%) encroachment and/or removal of native oak trees shall be compensated by planting native trees (valley oak/Quercus lobata, interior live oak/*Quercus wislizenii*, blue oak/*Quercus douglasii*), equivalent to the dbh inches lost, based on the ratios listed below, at locations that are authorized by the Department of Environmental Review and Assessment. On-site preservation of native oak trees that are less than 6 inches (< 6 inches) dbh may also be used to meet this compensation requirement. Encroachment of over 20 percent within the dripline radius of native trees will require compensatory mitigation based on the percentage of encroachment multiplied by the dbh. Encroachment over 50 percent will require compensation for the entire tree. Equivalent compensation based on the following ratio is required: • one preserved native oak tree < 6 inches dbh on-site = 1 inch dbh • one D-pot seedling (40 cubic inches or larger) = 1 inch dbh • one 15-gallon tree = 1 inch dbh • one 24-inch box tree = 2 inches dbh • one 36-inch box tree = 3 inches dbh Replacement tree planting shall be completed prior to the issuance of building permits or a bond shall be posted by the applicant in order to provide funding for purchase, planting, irrigation, and 3-year maintenance period, should the applicant default on replacement tree mitigation. The bond shall be in an amount equal to the prevailing rate of the County Tree Preservation Fund.

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		Prior to the approval of Improvement Plans or building permits, a Replacement Oak Tree Planting Plan shall be prepared by a certified arborist or licensed landscape architect and shall be submitted to the Environmental Coordinator for approval. The Replacement Oak Tree Planting Plan(s) shall include the following minimum elements: 1. Species, size and locations of all replacement plantings and < 6-inch dbh trees to be preserved; 2. Method of irrigation; 3. If planting in soils with a hardpan/ duripan or claypan layer, include the Sacramento County Standard Tree Planting Detail L-1, including the 10-foot deep boring hole to provide for adequate drainage; 4. Planting, irrigation, and maintenance schedules; 5. Identification of the maintenance entity and a written agreement with that entity to provide care and irrigation of the trees for a 3-year establishment period, and to replace any of the replacement oak trees which do not survive during that period. 6. Designation of 20 foot root zone radius and landscaping to occur within the radius of oak trees, 6 inches dbh to be preserved on-site. No replacement tree shall be planted within 15 feet of the driplines of existing oak trees or landmark size trees that are retained onsite, or within 15 feet of a building foundation or swimming pool excavation. The minimum spacing for replacement oak trees shall be 20 feet on-center. Examples of acceptable planting locations are publicly owned lands, common areas, and landscaped frontages (with adequate spacing). Generally unacceptable locations are utility easements (PUE, sewer, storm drains), under overhead utility lines, private yards of single family lots (including front yards), and roadway medians. Oak trees <6 inches dbh to be retained on-site shall have at least a 20-foot radius suitable root zone. The suitable root zone shall not have impermeable surfaces, turf/lawn, dense plantings, soil compaction, drainage conditions that create ponding, utility easements, or other overstory tree(s) within 20 feet of the tree to be preserved. Trees to be retained shall be determined to be healthy and structurally sound for future growth, by an ISA Certified Arborist subject to Department of Environmental Review and Assessment approval. If oak tree replacement plantings are demonstrated to the satisfaction of the Environmental Coordinator to be infeasible for any or all trees removed, then compensation shall be through payment into the County Tree Preservation Fund. Payment shall be made at a rate of $325.00 per dbh inch removed but not otherwise compensated, or at the prevailing rate at the time payment into the fund is made. **Mitigation Measure FO-BR-4: Waters of the U.S.** Prior to execution of redevelopment/ development projects within the SPA area, the project proponent(s) shall submit a wetland delineation for the project impact areas when appropriate habitat exists. The wetland delineation shall be prepared by a qualified biologist. When a construction level project is proposed in the future, and Waters of the U.S. are impacted on the project site, to compensate for their loss one of the following measures shall be implemented: 1. Preserve or create wetlands sufficient to result in no net loss of wetland acreage, and protect their required watersheds as is necessary for the continued function of wetlands on the project site. The project design, configuration, and wetland management plan shall provide reasonable assurances that the wetlands will be protected and their long-term ecological health maintained. 2. Where a Section 404 Permit has been issued by the Corps of Engineers, or an application has been made to obtain a Section 404 Permit, the Mitigation and Management Plan required by that permit or proposed to satisfy the requirements of the Corps for granting a permit may be submitted for purposes of satisfying Paragraph 1, provided a no net loss of wetlands is achieved. 3. Pay to the County an amount based on a rate of $35,000 per acre of the unmitigated/uncompensated wetlands, which shall constitute mitigation for purposes of implementing adopted no net loss policies and CEQA required mitigation. The payment shall be collected by the Department of Planning and Community Development at the time of Improvement Plan or Building Permit approval, whichever occurs first, and deposited into the Wetlands Restoration Trust Fund. **Mitigation Measure FO-BR-5: Riparian Habitat** Where appropriate riparian habitat exists, the project proponent(s) of redevelopment/ development projects within the SPA area shall submit a biological resources report prepared by a qualified biologist or botanist delineating the extent of on-site riparian habitat and:

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		1. Prior to initiating project construction, install chain link fencing or a similar protective barrier at the limits of any on site riparian zone as dictated by the biological assessment in order to protect and preserve the riparian habitat. No earthwork shall be conducted within the protection area and fencing shall remain in place for the duration of all construction work. Or, 2. Where preservation is found to be infeasible, prior to the issuance of building, grading or other improvement permits, also prepare a re-vegetation plan for any altered riparian habitat, consistent with General Plan Policies that compensates for riparian habitat removals. The re-vegetation plan shall include an implementation program and quantifiable success criteria. o Disturbed riparian herbaceous areas of the project site shall be re-planted with a combination of creeping wild rye seed, willow plants, or other suitable native species. Replanting shall compensate the removal of riparian vegetation. All tree stock shall be standard six inch tree pots (6" x 16" containers), and shall be chosen from the following native species: *Acer negundo californicum* (California box elder) *Alnus rhombifolia* (White alder) *Fraxinus latifolia* (Oregon ash) *Juglans californica var. hindsii* (California black walnut) *Populus fremontii* (Fremont cottonwood) *Quercus lobata* (Valley oak) *Salix. lasiolepis* (arroyo willow) *S. exigua* (narrow leaf sandbar willow) o The tree plantings shall be monitored for three years from the date of planting. The success criteria for tree survival shall be 80 percent throughout the monitoring period. If at anytime during the monitoring period the survival rate falls below the success criteria, in-kind replacement trees shall be planted to achieve the success criteria. Any new trees required shall be monitored for three years after planting. Or, 3. Any mitigation required by the state or federal permitting agencies that compensates for the loss of riparian vegetation, functions and values and that provides for a native revegetation plan consistent with or exceeding the requirements of measure 1 above shall be deemed mitigation sufficient to reduce impacts to a less than significant level and may be utilized in place of items 1 and 2 above. **Mitigation Measure FO-BR-6: Raptor Nesting Habitat** Where appropriate raptor nesting habitat exists, if construction, grading, or project-related improvements are to occur between March 1 and September 15, a focused survey for raptor nests on the site and on nearby trees shall take place within ½ mile of the project site and shall be conducted by a qualified biologist within 14 days prior to the start of construction work (including clearing and grubbing). If active nests are found, the California Department of Fish and Game (CDFG) shall be contacted to determine appropriate protective measures. If no active nests are found during the focused survey, no further mitigation will be required.
North Watt Avenue Corridor Plan	Development on Sites 68 through 72 in the North Watt Avenue Corridor Plan was previously analyzed in the North Watt Avenue EIR. The proposed development on Sites 68 through 72 would be denser than assumed in the EIR. Future development on Sites 68 through 72 in the North Watt Avenue Corridor area may have impacts on native trees, streams, wetlands and other surface waters, riparian habitat, and special-status species.	**Mitigation Measures BIO-1, BIO-3, BIO-5 through BIO-13, BIO-15, and BIO-16** **Mitigation Measure NW-BR-1: Oak Tree Protection** Prior to execution of redevelopment/ development projects within the Corridor Plan area, the project proponent(s) shall submit an arborist report for the project impact areas if appropriate habitat exists. The report shall include the species, diameter, dripline, and health of the trees, and shall be prepared by an ISA certified arborist. The report shall include an exhibit that shows the trees and their dripline in proximity to the project improvements. The report shall identify any tree that will be removed and quantify the dripline encroachment from project equipment or facilities. A) With the exception of the trees removed and compensated for through Part B below, all healthy native trees that are 6 inches dbh or larger on the project site, all portions of adjacent off-site healthy native oak trees that are 6 inches dbh or larger which have driplines that extend onto the project site, and all off-site healthy native oak trees that are 6 inches dbh or larger which may be impacted by utility installation and/or improvements associated with this project, shall be preserved and protected as follows: i) A circle with a radius measurement from the trunk of the tree to the tip of its longest limbs shall constitute the dripline protection area of each tree. Limbs must not be cut back in order to change the dripline. The area beneath the dripline is a critical portion of the root

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		zone and defines the minimum protected area of each tree. Removing limbs that make up the dripline does not change the protected area. ii) Any protected trees on the site that require pruning shall be pruned by a certified arborist prior to the start of construction work. All pruning shall be in accordance with the American National Standards Institute (ANSI) A300 pruning standards and the International Society of Arboriculture (ISA) "Tree Pruning Guidelines." iii) Prior to initiating construction, temporary protective fencing shall be installed at least one foot outside the driplines of the protected trees within 100-feet of construction related activities, in order to avoid damage to the tree canopies and root systems. Where encroachment occurs, temporary high visibility protective fencing shall be installed a maximum of one foot outside the work areas in order to minimize damage to the tree canopies and root systems. iv) Any removal of paving or structures (i.e. demolition) that occurs within the dripline of a protected oak tree shall be done under the direct supervision of a certified arborist. To the maximum extent feasible, demolition work within the dripline protection area of the oak tree shall be performed by hand. If the certified arborist determines that it is not feasible to perform some portion(s) of this work by hand, then the smallest/lightest weight equipment that will adequately perform the demolition work shall be used. v) No signs, ropes, cables (except those which may be installed by a certified arborist to provide limb support) or any other items shall be attached to the protected trees. Small metallic numbering tags for the purpose of preparing tree reports and inventories shall be allowed. vi) No vehicles, construction equipment, mobile home/office, supplies, materials or facilities shall be driven, parked, stockpiled or located within the driplines of protected trees. vii) No grading (grade cuts or fills) shall be allowed within the driplines of protected trees, except for the minimum required for construction and streetscape improvements. viii) Drainage patterns on the site shall not be modified so that water collects or stands within, or is diverted across, the dripline of any protected tree. ix) No trenching shall be allowed within the driplines of protected trees. If it is absolutely necessary to install underground utilities within the dripline of a protected tree, the utility line shall be bored and jacked under the supervision of a certified arborist. x) The construction of impervious surfaces within the driplines of protected trees shall be stringently minimized. When it is absolutely necessary, a piped aeration system per County standard detail shall be installed under the supervision of a certified arborist. xi) All portions of any masonry wall that will encroach into the dripline protection area of any protected tree shall be constructed using grade beam wall panels and posts set no closer than 10 feet on center. Any wrought iron fencing shall be similarly installed, with posts set no closer than 10 feet on center. Posts shall be spaced in such a manner as to maximize the separation between the tree trunks and the posts in order to reduce impacts to the trees. xii) Trunk protection measures, per Sacramento County standards, shall be used for all protected trees where development/construction activity, including installation of any masonry wall and wrought iron fence, occurs within 10 feet of the trunk of a tree. xiii) No sprinkler or irrigation system shall be installed in such a manner that sprays water or requires trenching within the driplines of protected trees. An above ground drip irrigation system is recommended. xiv) Landscaping beneath oak trees may include non-plant materials such as bark mulch, wood chips, boulders, etc. The only plant species which shall be planted within the driplines of oak trees are those which are tolerant of the natural semi-arid environs of the trees. A list of such drought-tolerant plant species is available at the Division of Environmental Review and Assessment. Limited drip irrigation approximately twice per summer is recommended for the understory plants. B) To the maximum extent feasible, all on-site healthy native oak trees shall be protected and preserved. Any substantial (>20%) encroachment and/or removal of native oak trees shall be compensated by planting native trees (valley oak/Quercus lobata, interior live oak/Quercus wislizenii, blue oak/Quercus douglasii, and California black walnut), equivalent to the dbh inches lost, based on the ratios listed below, at locations that are authorized by the Division of Environmental Review and Assessment. On-site preservation of native oak trees that are less than 6 inches (<6 inches) dbh, may also be used to meet this compensation requirement. Encroachment of over 20 percent within the

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dripline radius of native trees will require compensatory mitigation based on the percentage of encroachment multiplied by the dbh. Encroachment over 50 percent will require compensation for the entire tree.

Equivalent compensation based the following ratio is required:

- one preserved native oak tree < 6 inches dbh on-site = 1 inch dbh
- one deepot seedling (40 cubic inches or larger) = 1 inch dbh
- one 15-gallon tree = 1 inch dbh
- one 24-inch box tree = 2 inches dbh
- one 36-inch box tree = 3 inches dbh

Replacement tree planting shall be completed prior to the issuance of building permits or a bond shall be posted by the applicant in order to provide funding for purchase, planting, irrigation, and 3-year maintenance period, should the applicant default on replacement tree mitigation. The bond shall be in an amount equal to the prevailing rate of the County Tree Preservation Fund.

Prior to the approval of Improvement Plans or building permits, a Replacement Oak Tree Planting Plan shall be prepared by a certified arborist or licensed landscape architect and shall be submitted to the Environmental Coordinator for approval. The Replacement Oak Tree Planting Plan(s) shall include the following minimum elements:

1. Species, size and locations of all replacement plantings and < 6-inch dbh trees to be preserved;
2. Method of irrigation;
3. The Sacramento County Standard Tree Planting Detail L-1, including the 10-foot deep boring hole to provide for adequate drainage;
4. Planting, irrigation, and maintenance schedules;
5. Identification of the maintenance entity and a written agreement with that entity to provide care and irrigation of the trees for a 3-year establishment period, and to replace any of the replacement oak trees which do not survive during that period.
6. Designation of 20 foot root zone radius and landscaping to occur within the radius of oak trees < 6-inches dbh to be preserved on-site.

No replacement tree shall be planted within 15 feet of the driplines of existing oak trees or landmark size trees that are retained on-site, or within 15 feet of a building foundation or swimming pool excavation. The minimum spacing for replacement oak trees shall be 20 feet on-center. Examples of acceptable planting locations are publicly owned lands, common areas, and landscaped frontages (with adequate spacing). Generally unacceptable locations are utility easements (PUE, sewer, storm drains), under overhead utility lines, private yards of single family lots (including front yards), and roadway medians.

Oak trees <6 inches dbh to be retained on-site shall have at least a 20-foot radius suitable root zone. The suitable root zone shall not have impermeable surfaces, turf/lawn, dense plantings, soil compaction, drainage conditions that create ponding, utility easements, or other overstory tree(s) within 20 feet of the tree to be preserved. Trees to be retained shall be determined to be healthy and structurally sound for future growth, by an ISA Certified Arborist subject to Division of Environmental Review and Assessment approval.

If oak tree replacement plantings are demonstrated to the satisfaction of the Environmental Coordinator to be infeasible for any or all trees removed, then compensation shall be through payment into the County Tree Preservation Fund. Payment shall be made at a rate of $325.00 per dbh inch removed but not otherwise compensated, or at the prevailing rate at the time payment into the fund is made.

Mitigation Measure NW-BR-2: Potential Wetland Features

Prior to execution of redevelopment/ development projects within the Corridor Plan area or installation of public service infrastructure, the project proponent(s) shall submit a wetland delineation to the Division of Environmental Review and Assessment for the project impact areas if appropriate habitat exists. The wetland delineation shall be prepared by a qualified biologist.
When a construction level project is proposed in the future, and appropriate habitat exists on the project site, to compensate for the loss of wetlands and Waters of the U.S., one of the following measures shall be implemented:

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		1. Preserve or create wetlands sufficient to result in no net loss of wetland acreage, and protect their required watersheds as is necessary for the continued function of wetlands on the project site. The project design, configuration, and wetland management plan shall provide reasonable assurances that the wetlands will be protected and their long-term ecological health maintained. 2. Where a Section 404 Permit has been issued by the Corps of Engineers, or an application has been made to obtain a Section 404 Permit, the Mitigation and Management Plan required by that permit or proposed to satisfy the requirements of the Corps for granting a permit may be submitted for purposes of satisfying Paragraph 1, provided a no net loss of wetlands is achieved. 3. Pay to the county an amount based on a rate of $35,000 per acre of the unmitigated/uncompensated wetlands, which shall constitute mitigation for purposes of implementing adopted no net loss policies and CEQA required mitigation. The payment shall be collected by the Community Planning and Development Department at the time of Improvement Plan or Building Permit approval, whichever occurs first, and deposited into the Wetlands Restoration Trust Fund. **Mitigation Measure NW-BR-3: Riparian Habitat** Where riparian habitat exists, the project proponent(s) of redevelopment/ development projects within the Corridor Plan area shall submit a biological assessment performed by a qualified biologist or botanist to the Division of Environmental Review and Assessment delineating the extent of on-site riparian habitat and shall ensure no net loss of habitat consistent with County Policies with the following mitigation: 1. Prior to initiating project construction install chain link fencing or a similar protective barrier at the limits of any on site riparian zone as dictated by the biological assessment in order to protect and preserve the riparian habitat. No earthwork shall be conducted within the protection area and fencing shall remain in place for the duration of all construction work. Or, 2. Where preservation is found to be infeasible, prior to the issuance of building, grading or other improvement permits, the applicant shall prepare a re-vegetation plan for any altered riparian habitat, consistent with General Plan Policies, that compensates for riparian habitat removals. The re-vegetation plan shall be prepared by a qualified biologist or botanist and provide quantifiable success criteria and include at least a one year monitoring and adaptive management program as well as implementation and funding mechanisms. The plan shall be subject to the approval of the Division of Environmental Review and Assessment. Or, **3.** Any mitigation required by the state or federal permitting agencies that compensates for the loss of riparian vegetation, functions and values and that provides for a native re-vegetation plan consistent with or exceeding the requirements of measure 1 above shall be deemed mitigation sufficient to reduce impacts to a less than significant level and may be utilized in place of items 1 and 2 above. **Mitigation Measure NW-BR-4: Raptor Nesting Habitat** Where appropriate raptor nesting habitat exists, if construction, grading, or project-related improvements are to occur between March 1 and September 15, a focused survey for raptor nests on the site and on nearby trees shall take place within ½ mile of the project site and shall be conducted by a qualified biologist within 14 days prior to the start of construction work (including clearing and grubbing). If active nests are found, the California Department of Fish and Game (CDFG) shall be contacted to determine appropriate protective measures. If no active nests are found during the focused survey, no further mitigation will be required.
Old Florin Town SPA	Development on Sites 73 through 79 in the Old Florin Town SPA was previously analyzed in the Old Florin Town SPA EIR. The proposed development on Sites 73 through 79 would be denser than assumed in the EIR. Future development on Sites 73 through 79 in the Old Florin Town SPA may have impacts on native oaks trees, wetlands, vernal pools, and special-status species.	**Mitigation Measures BIO-1, BIO-3 through BIO-10, BIO-12, BIO-13, BIO-16, and BIO-17** **Mitigation Measure OFT-BR-1** Prior to execution of redevelopment/ development projects within the SPA area, the project proponent(s) shall submit an arborist report for the project impact areas if trees are present on the site. The report shall include the species, diameter, dripline, and health of the trees, and shall be prepared by an ISA certified arborist. The report shall include an exhibit that shows the trees and their dripline in proximity to the project improvements. The report shall identify any tree that will be removed and quantify the dripline encroachment from project equipment or facilities. A) With the exception of the trees removed and compensated for through Part B below, all healthy native trees that are 6 inches dbh or larger on the project site, all portions of adjacent off-site healthy native oak trees that are 6 inches dbh or larger which have driplines that extend onto the project site, and all off-site healthy native oak trees that are 6 inches dbh or larger which may be impacted by utility installation and/or improvements associated with this project, shall be preserved and protected as follows:

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		i) A circle with a radius measurement from the trunk of the tree to the tip of its longest limb shall constitute the dripline protection area of each tree. Limbs must not be cut back in order to change the dripline. The area beneath the dripline is a critical portion of the root zone and defines the minimum protected area of each tree. Removing limbs that make up the dripline does not change the protected area. ii) Any protected trees on the site that require pruning shall be pruned by a certified arborist prior to the start of construction work. All pruning shall be in accordance with the American National Standards Institute (ANSI) A300 pruning standards and the International Society of Arboriculture (ISA) "Tree Pruning Guidelines." iii) Prior to initiating construction, temporary protective fencing shall be installed at least one foot outside the driplines of the protected trees within 100-feet of construction related activities, in order to avoid damage to the tree canopies and root systems. Where encroachment occurs, temporary high visibility protective fencing shall be installed a maximum of one foot outside the work areas in order to minimize damage to the tree canopies and root systems. iv) Any removal of paving or structures (i.e. demolition) that occurs within the dripline of a protected oak tree shall be done under the direct supervision of a certified arborist. To the maximum extent feasible, demolition work within the dripline protection area of the oak tree shall be performed by hand. If the certified arborist determines that it is not feasible to perform some portion(s) of this work by hand, then the smallest/lightest weight equipment that will adequately perform the demolition work shall be used. v) No signs, ropes, cables (except those which may be installed by a certified arborist to provide limb support) or any other items shall be attached to the protected trees. Small metallic numbering tags for the purpose of preparing tree reports and inventories shall be allowed. vi) No vehicles, construction equipment, mobile home/office, supplies, materials or facilities shall be driven, parked, stockpiled or located within the driplines of protected trees. vii) No grading (grade cuts or fills) shall be allowed within the driplines of protected trees, except for the minimum required for construction and streetscape improvements. viii) Drainage patterns on the site shall not be modified so that water collects or stands within, or is diverted across, the dripline of any protected tree. ix) No trenching shall be allowed within the driplines of protected trees. If it is absolutely necessary to install underground utilities within the dripline of a protected tree, the utility line shall be bored and jacked under the supervision of a certified arborist. x) The construction of impervious surfaces within the driplines of protected trees shall be stringently minimized. When it is absolutely necessary, a piped aeration system per County standard detail shall be installed under the supervision of a certified arborist. xi) All portions of any masonry wall that will encroach into the dripline protection area of any protected tree shall be constructed using grade beam wall panels and posts set no closer than 10 feet on center. Any wrought iron fencing shall be similarly installed, with posts set no closer than 10 feet on center. Posts shall be spaced in such a manner as to maximize the separation between the tree trunks and the posts in order to reduce impacts to the trees. xii) Trunk protection measures, per Sacramento County standards, shall be used for all protected trees where development/construction activity, including installation of any masonry wall and wrought iron fence, occurs within 10 feet of the trunk of a tree. xiii) No sprinkler or irrigation system shall be installed in such a manner that sprays water or requires trenching within the driplines of protected trees. An above ground drip irrigation system is recommended. xiv) Landscaping beneath oak trees may include non-plant materials such as bark mulch, wood chips, boulders, etc. The only plant species which shall be planted within the driplines of oak trees are those which are tolerant of the natural semi-arid environs of the trees. A list of such drought-tolerant plant species is available at the Department of Environmental Review and Assessment. Limited drip irrigation approximately twice per summer is recommended for the understory plants. B) To the maximum extent feasible, all on-site healthy native oak trees shall be protected and preserved. Any substantial (>20%) encroachment and/or removal of native oak trees shall be compensated by planting native trees (valley oak/Quercus lobata, interior live oak/Quercus wislizenii, blue oak/Quercus douglasii, and California black walnut), equivalent to the dbh inches lost, based on the ratios listed below, at locations that are authorized by the Department of Environmental Review and Assessment. On-site preservation of native oak trees that are less than 6 inches (<6 inches) dbh, may also be used to meet this compensation requirement. Encroachment of over 20 percent within the dripline radius of native trees will require compensatory mitigation based on the percentage of encroachment multiplied by the dbh.

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		Encroachment over 50 percent will require compensation for the entire tree. Equivalent compensation based on the following ratio is required: • one preserved native oak tree < 6 inches dbh on-site = 1 inch dbh • one deepot seedling (40 cubic inches or larger) = 1 inch dbh • one 15-gallon tree = 1 inch dbh • one 24-inch box tree = 2 inches dbh • one 36-inch box tree = 3 inches dbh Replacement tree planting shall be completed prior to the issuance of building permits or a bond shall be posted by the applicant in order to provide funding for purchase, planting, irrigation, and 3-year maintenance period, should the applicant default on replacement tree mitigation. The bond shall be in an amount equal to the prevailing rate of the County Tree Preservation Fund. Prior to the approval of Improvement Plans or building permits, a Replacement Oak Tree Planting Plan shall be prepared by a certified arborist or licensed landscape architect and shall be submitted to the Environmental Coordinator for approval. The Replacement Oak Tree Planting Plan(s) shall include the following minimum elements: 1. Species, size and locations of all replacement plantings and < 6-inch dbh trees to be preserved; 2. Method of irrigation; 3. The Sacramento County Standard Tree Planting Detail L-1, including the 10-foot deep boring hole to provide for adequate drainage; 4. Planting, irrigation, and maintenance schedules; 5. Identification of the maintenance entity and a written agreement with that entity to provide care and irrigation of the trees for a 3-year establishment period, and to replace any of the replacement oak trees which do not survive during that period. 6. Designation of 20 foot root zone radius and landscaping to occur within the radius of oak trees < 6-inches dbh to be preserved on-site. No replacement tree shall be planted within 15 feet of the driplines of existing oak trees or landmark size trees that are retained on-site, or within 15 feet of a building foundation or swimming pool excavation. The minimum spacing for replacement oak trees shall be 20 feet on-center. Examples of acceptable planting locations are publicly owned lands, common areas, and landscaped frontages (with adequate spacing). Generally unacceptable locations are utility easements (PUE, sewer, storm drains), under overhead utility lines, private yards of single family lots (including front yards), and roadway medians. Oak trees <6 inches dbh to be retained on-site shall have at least a 20- foot radius suitable root zone. The suitable root zone shall not have impermeable surfaces, turf/lawn, dense plantings, soil compaction, drainage conditions that create ponding, utility easements, or other overstory tree(s) within 20 feet of the tree to be preserved. Trees to be retained shall be determined to be healthy and structurally sound for future growth, by an ISA Certified Arborist subject to Department of Environmental Review and Assessment approval. If oak tree replacement plantings are demonstrated to the satisfaction of the Environmental Coordinator to be infeasible for any or all trees removed, then compensation shall be through payment into the County Tree Preservation Fund. Payment shall be made at a rate of $325.00 per dbh inch removed but not otherwise compensated, or at the prevailing rate at the time payment into the fund is made. **Mitigation Measure OFT-BR-2** Prior to execution of redevelopment/ development projects within the SPA area, the project proponent(s) shall submit a wetland delineation for the project impact areas if appropriate habitat exists. The wetland delineation shall be prepared by a qualified biologist. When a construction level project is proposed in the future, and appropriate habitat exists on the project site, to compensate for the loss of wetlands and Waters of the U.S., one of the following measures shall be implemented: 1. Preserve or create wetlands sufficient to result in no net loss of wetland acreage, and protect their required watersheds as is necessary for the continued function of wetlands on the project site. The project design, configuration, and wetland management plan shall provide reasonable assurances that the wetlands will be protected and their long-term ecological health maintained. 2. Where a Section 404 Permit has been issued by the Corps of Engineers, or an application has been made to obtain a Section 404 Permit, the Mitigation and Management Plan required by that permit or proposed to satisfy the requirements of the Corps for granting a permit may be submitted for purposes of satisfying Paragraph 1, provided a no net loss of wetlands is achieved.

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		3. Pay to the County an amount based on a rate of $35,000 per acre of the unmitigated/uncompensated wetlands, which shall constitute mitigation for purposes of implementing adopted no net loss policies and CEQA required mitigation. The payment shall be collected by the Department of Planning and Community Development at the time of Improvement Plan or Building Permit approval, whichever occurs first, and deposited into the Wetlands Restoration Trust Fund. **Mitigation Measure OFT-BR-3** Where vernal pools habitat exists, the project proponent(s) of redevelopment/ development projects within the SPA area shall compensate for impacts to vernal pool species through consultation with the U.S. Fish and Wildlife Service as outlined in Section 7 of the Endangered Species Act. The project applicant shall implement all measures included in the Biological Opinion issued as a result of this consultation.
Cultural Resources		
General Plan	Development on the proposed candidate rezone sites in the unincorporated County was previously analyzed in the General Plan EIR. The proposed development on the candidate rezone sites would be denser than assumed in the EIR. Future development on candidate rezone sites may have impacts on cultural, historical, and architectural resources.	**Mitigation Measure CULT-1: Cultural Resources Survey** Prior to approval of grading plans or issuance of building permits, the applicant of subsequent development on candidate rezone sites must provide documentation that there are no cultural resources present within the construction area (including staging areas and similar). A qualified cultural resources professional shall perform a preliminary analysis of the construction area, to determine the relative sensitivity of the construction area. This need not include a formal cultural resources survey if the cultural resources investigator determines a finding of negative presence can be made from previous surveys or otherwise. If cultural resources are considered not to be present, Mitigation Measure CULT-2 will still apply. If additional work is required, Mitigation Measure CULT-2 and CULT-3 shall apply. **Mitigation Measure CULT-2: Cultural Resources Subsequent Assessment** Subsequent development on candidate rezone sites that have been determined sensitive for known and/or unknown cultural resources within the construction area (which includes staging areas and similar) shall adhere to one or a combination of the following, to the satisfaction of the Environmental Coordinator: A. Conduct an archaeological/historical survey and assessment, by a qualified professional archaeologist, of the area of direct impact. If the subsequent development area includes known resources, than the survey will assess the condition of the resource. B. Based on this review and, as appropriate, a subsurface testing program will be developed and implemented to determine the significance of the resource. C. Following the field investigations, a technical report describing the evaluation shall be prepared to the satisfaction of the Environmental Coordinator. D. If based on the results of the field investigations the resource is not considered significant or important, no additional work would be required for that resource, and all construction related impacts would be considered less than significant. E. If based on the results of the field investigations resources were identified as being significant the following mitigation would apply: a. Total Avoidance: Redesign the subsequent development as to preserve and protect all significant cultural resources. This would reduce impacts to less than significant levels. OR, if a redesign is determined infeasible by the Environmental Coordinator, then, b. Data Recovery: After all design options have been exhausted that would result in the preservation of significant resources, institute a data recovery program to the satisfaction of Environmental Coordinator. Impacts to the resource would remain significant. **Mitigation Measure CULT-3: Cultural Resources Inadvertent Discovery** In the event that human remains are discovered in any location other than a dedicated cemetery, work shall be halted and the County Coroner contacted. For all other potential tribal cultural resources [TCRs], archaeological, or cultural resources discovered during project's ground disturbing activities, work shall be halted until a qualified archaeologist and/or tribal representative may evaluate the resource. 1. **Unanticipated human remains**. Pursuant to Sections 5097.97 and 5097.98 of the State Public Resources Code, and Section 7050.5 of the State Health and Safety Code, if a human bone or bone of unknown origin is found during construction, all work is to stop and the County Coroner and the Planning and Environmental Review shall be immediately notified. If the remains are determined to be Native American, the coroner shall notify the Native American Heritage Commission within 24 hours, and the Native American Heritage Commission shall

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		identify the person or persons it believes to be the most likely descendent from the deceased Native American. The most likely descendent may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposition of, with appropriate dignity, the human remains and any associated grave goods. 2. **Unanticipated cultural resources**. In the event of an inadvertent discovery of cultural resources (excluding human remains) during construction, all work must halt within a 100-foot radius of the discovery. A qualified professional archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for prehistoric and historic archaeology, shall be retained at the Applicant's expense to evaluate the significance of the find. If it is determined due to the types of deposits discovered that a Native American monitor is required, the Guidelines for Monitors/Consultants of Native American Cultural, Religious, and Burial Sites as established by the Native American Heritage Commission shall be followed, and the monitor shall be retained at the Applicant's expense. a. Work cannot continue within the 100-foot radius of the discovery site until the archaeologist and/or tribal monitor conducts sufficient research and data collection to make a determination that the resource is either 1) not cultural in origin; or 2) not potentially eligible for listing on the National Register of Historic Places or California Register of Historical Resources. b. If a potentially-eligible resource is encountered, then the archaeologist and/or tribal monitor, Planning and Environmental Review staff, and project proponent shall arrange for either 1) total avoidance of the resource, if possible; or 2) test excavations or total data recovery as mitigation. The determination shall be formally documented in writing and submitted to the County Environmental Coordinator as verification that the provisions of CEQA for managing unanticipated discoveries have been met. **Mitigation Measure CULT-4: Historic Resources** If existing structures of ages 50 years or greater are present on a candidate rezone site, and have not been formally evaluated for the National Register of Historic Places (NRHP) or California Register of Historical Resources (CRHR), the applicant of subsequent development on candidate rezone sites shall retain a qualified architectural historian to conduct a pedestrian or windshield survey, and if needed, a formal evaluation applying the criteria of the NRHP and the CRHR shall be prepared to determine if they are significant historic resources. Results of the evaluations shall be submitted to the Environmental Coordinator for review and approval prior to approval of any permits authorizing construction. If resources are determined not to be eligible for listing on the NRHP or CRHR, further mitigation is not required. If resources are determined to be eligible, such resources shall be avoided. However, if avoidance is not feasible, Mitigation Measure CULT-5 shall be implemented. **Mitigation Measure CULT-5: Historic Documentation Report** Prior to the demolition of any existing historic buildings on a candidate rezone site, the following measures shall be implemented: a) The applicant of subsequent development on a candidate rezone site shall retain a qualified architectural historian to prepare a "Historic Documentation Report." The report shall include current photographs of each building displaying each elevation, architectural details or features, and overview of the buildings, together with a textual description of the building along with additional history of the building, its principal architect or architects, and its original occupants. The photo-documentation shall be done in accordance with Historic American Buildings Survey/Historic American Engineering Record (HABS/HAER) guidelines, which shall include archival quality negatives and prints. The report shall be deposited with the Environmental Coordinator, the Department of Museums, and the State Office of Historic Preservation, as well as other appropriate organizations and agencies as identified by Sacramento County Planning and Environmental Review (PER).
Fair Oaks Boulevard Corridor Plan	Development on Site 67 in the Fair Oaks Boulevard Corridor Plan was previously analyzed in the Fair Oaks Boulevard EIR. The proposed development on Site 67 would be denser than assumed in the EIR. Future development on Site 67 may have impacts on cultural, historical, and architectural resources.	**Mitigation Measure FO-CR-1: Evaluated Historical Architectural Resources** Significant historical architectural resources within Fair Oaks Boulevard Corridor Plan shall be preserved in situ with all proposed modifications carried out to The Secretary of Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings. In the instance that demolition of a significant historical architectural resource is proposed, the applicant shall have a qualified architectural historian prepare a historical report with archival prints of the structure, including architectural details, for CRHR Criterion 3 eligible properties and/or preparation of public interpretation documents (video, articles, local history) for treatment of CRHR Criterion 1 eligible properties. All documentation shall be archived with the Sacramento Archives and Museum Collection Center (SAMCC) and the County of Sacramento. **Mitigation Measure FO-CR-2: Unevaluated Historical Architectural Resources** Properties that have not been subject to a previous architectural evaluation and are at least 50 years or older shall have a historic architectural study performed by a qualified, professional architectural historian if potential historic structures present on the project site are subject to demolition or otherwise impacted. The resulting report should include results of a background literature search and field survey, an historic context statement, and analysis of the potential significance of the noted resource, and recommendations for preservation and/or mitigation. If the structure is considered

GENERAL PLAN/DISTINCT AREA PLANS	ENVIRONMENTAL EFFECTS SUMMARY	MITIGATION MEASURE
		significant and demolition is proposed, mitigation documentation, as detailed in Mitigation Measure CR-1, shall be prepared, reviewed and endorsed by the Planning Department. **Mitigation Measure FO-CR-3: Prehistoric and Historic Archaeological Resources** A cultural resources survey will be required prior to any project development of four properties located within the Corridor Plan Area (An exhibit denoting the parcels is on file with the Department of Environmental Review and Assessment, 827 7th Street, Room 220, Sacramento, CA 95691) not previously subject to intensive investigation. If ground disturbing activities are planned within or adjacent to the boundaries of any identified archeological site, the following shall be required: 1. The site area will be inspected by a qualified, professional archaeologist to assess the condition of the property and determine the current status of the deposit. 2. Based on this review and, as appropriate, a subsurface testing program will be developed and implemented to determine if the property meets criteria to be listed on the California Register of Historic Resources or the National Register of Historical Places. The course of the testing program should be clearly delineated in a research design which outlines prehistory of the area; research domains, questions, and data requirements; research methods inclusive of field and laboratory studies; report preparation; and significance criteria. 3. Following field investigations, a technical report describing the evaluation program should be prepared. At a minimum this report shall include the elements discussed in the research design, as well as a description of the recovered site assemblage and a significance evaluation. If, based on the results of the testing program, a site is not determined to be an important archaeological resource, than effects to it would have been reduced to less than significant. 4. If, based on the results of the field investigations, resources were identified as being significant the following mitigation would apply: a. Total Avoidance: Redesign the proposed project as to preserve and protect all significant cultural resources. This would reduce impacts to less than significant levels. OR, f a redesign is determined infeasible by the Department of Environmental Review and Assessment, then, b. Data Recovery: After all design options have been exhausted that would result in the preservation of significant resources, institute a data recovery program to the satisfaction of the Department of Environmental Review and Assessment. **Mitigation Measure FO-CR-4: Undiscovered Cultural Resources** Should any cultural resources, such as structural features, unusual amounts of bone or shell, artifacts, human remains, or architectural remains be encountered during any development activities, work shall be suspended and the Department of Environmental Review and Assessment shall be immediately notified at (916) 874-7914. At that time, the Department of Environmental Review and Assessment will coordinate any necessary investigation of the find with appropriate specialists as needed. The project proponent shall be required to implement any mitigation deemed necessary for the protection of the cultural resources. In addition, pursuant to Section 5097.97 of the State Public Resources Code and Section 7050.5 of the State Health and Safety Code, in the event of the discovery of human remains, all work is to stop and the County Coroner shall be immediately notified. If the remains are determined to be Native American, guidelines of the Native American Heritage Commission shall be adhered to in the treatment and disposition of the remains.
North Watt Avenue Corridor Plan	Development on Sites 68 through 72 in the North Watt Avenue Corridor Plan was previously analyzed in the North Watt Avenue EIR. The proposed development on Sites 68 through 72 would be denser than assumed in the EIR. Future development on Sites 68 through 72 may have impacts on cultural, historical, and architectural resources.	**Mitigation Measure NW-CR-1: Evaluated Historical Architectural Resources** Significant historical architectural resources within North Watt Avenue Corridor Plan shall be preserved in situ with all proposed modifications carried out to The Secretary of Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings. In the instance that demolition of a significant historical architectural resource is proposed, the applicant shall have a qualified architectural historian prepare a historical report with archival prints of the structure, including architectural details, for CRHR Criterion 3 eligible properties and/or preparation of public interpretation documents (video, articles, local history) for treatment of CRHR Criterion 1 eligible properties. All documentation shall be archived with the Sacramento Archives and Museum Collection Center (SAMCC) and the County of Sacramento. **Mitigation Measure NW-CR-2: Unevaluated Historical Architectural Resources** Properties that have not been subject to a previous architectural evaluation and are at least 50 years or older shall have a historic architectural study performed by a qualified, professional architectural historian if potential historic structures present on the project site are subject to demolition or otherwise impacted. The resulting report should include results of a background literature search and field survey, an historic context statement, and

GENERAL PLAN/DISTINCT AREA PLANS	ENVIRONMENTAL EFFECTS SUMMARY	MITIGATION MEASURE
		analysis of the potential significance of the noted resource, and recommendations for preservation and/or mitigation. If the structure is considered significant and demolition is proposed, mitigation documentation, as detailed in Mitigation Measure CR-1, shall be prepared, reviewed and endorsed by the Planning Division. **Mitigation Measure NW-CR-3: Unanticipated Discoveries of Cultural Resources** If subsurface deposits believed to be cultural or human in origin are discovered during construction, then all work must halt within a 200-foot radius of the discovery. A qualified professional archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for prehistoric and historic archaeology, shall be retained at the Applicant's expense to evaluate the significance of the find. If it is determined due to the types of deposits discovered that a Native American monitor is required, the Guidelines for Monitors/Consultants of Native American Cultural, Religious, and Burial Sites as established by the Native American Heritage Commission shall be followed, and the monitor shall be retained at the Applicant's expense. Work cannot continue within the 200-foot radius of the discovery site until the archaeologist conducts sufficient research and data collection to make a determination that the resource is either 1) not cultural in origin; or 2) not potentially eligible for listing on the National Register of Historic Places or California Register of Historical Resources. If a potentially-eligible resource is encountered, then the archaeologist, DERA, and project proponent shall arrange for either 1) total avoidance of the resource, if possible; or 2) test excavations or total data recovery as mitigation. The determination shall be formally documented in writing and submitted to DERA as verification that the provisions of CEQA for managing unanticipated discoveries have been met. In addition, pursuant to Section 5097.97 of the State Public Resources Code and Section 7050.5 of the State Health and Safety Code, in the event of the discovery of human remains, all work is to stop and the County Coroner shall be immediately notified. If the remains are determined to be Native American, guidelines of the Native American Heritage Commission shall be adhered to in the treatment and disposition of the remains
Old Florin Town SPA	Development on Sites 73 through 79 in the Old Florin Town SPA was previously analyzed in the Old Florin Town SPA EIR. The proposed development on Sites 73 through 79 would be denser than assumed in the EIR. Future development on Sites 73 through 79 may have impacts on cultural, historical, and architectural resources.	**Mitigation Measure OFT-CR-1** Cultural resources surveys will be required in areas not previously subject to intensive investigation. If ground disturbing activities are planned within or adjacent to the boundaries of any identified archeological site, the following shall be required: 1. The site area will be inspected by a qualified, professional archaeologist to assess the condition of the property and determine the current status of the deposit. 2. Based on this review and, as appropriate, a subsurface testing program will be developed and implemented to determine if the property meets criteria to be listed on the California Register of Historic Resources or the National Register of Historical Places. The course of the testing program should be clearly delineated in a research design which outlines prehistory of the area; research domains, questions, and data requirements; research methods inclusive of field and laboratory studies; report preparation; and significance criteria. 3. Following field investigations, a technical report describing the evaluation program should be prepared. At a minimum this report shall include the elements discussed in the research design, as well as a description of the recovered site assemblage and a significance evaluation. If, based on the results of the testing program, a site is not determined to be an important archaeological resource, than effects to it would have been reduced to less than significant. 4. If, based on the results of the field investigations, resources were identified as being significant the following mitigation would apply: a. Total Avoidance: Redesign the proposed project as to preserve and protect all significant cultural resources. This would reduce impacts to less than significant levels. OR, if a redesign is determined infeasible by the Department of Environmental Review and Assessment, then, b. Data Recovery: After all design options have been exhausted that would result in the preservation of significant resources, institute a data recovery program to the satisfaction of the Department of Environmental Review and Assessment. **Mitigation Measure OFT-CR-2** Should any cultural resources, such as structural features, unusual amounts of bone or shell, artifacts, human remains, or architectural remains be encountered during any development activities, work shall be suspended and the Department of Environmental Review and Assessment shall be immediately notified at (916) 874-7914. At that time, the Department of Environmental Review and Assessment will coordinate any necessary investigation of the find with appropriate specialists as needed. The project proponent shall be required to implement any mitigation deemed necessary for the protection of the cultural

GENERAL PLAN/DISTINCT AREA PLANS	ENVIRONMENTAL EFFECTS SUMMARY	MITIGATION MEASURE
		resources. In addition, pursuant to Section 5097.97 of the State Public Resources Code and Section 7050.5 of the State Health and Safety Code, in the event of the discovery of human remains, all work is to stop and the County Coroner shall be immediately notified. If the remains are determined to be Native American, guidelines of the Native American Heritage Commission shall be adhered to in the treatment and disposition of the remains. **Mitigation Measure OFT-CR-3** Significant historical architectural resources within OFT SPA shall be preserved in situ with all proposed modifications carried out to The Secretary of Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings. In the instance that demolition of a significant historical architectural resource is proposed, an Alternatives Analysis shall be submitted by the applicant to the Planning Department for review and endorsement. The Alternatives Analysis shall present alternatives to demolition that are site specific, such as relocation or adaptive reuse of the structure. If the Planning Department, in conjunction with the established review procedures in the SPA, determines that the only feasible alternative is demolition, than the applicant shall have an architectural historian prepare a historical report with archival prints of the structure, including architectural details, to be archived with the Sacramento Archives and Museum Collection Center (SAMCC) and the County of Sacramento. **Mitigation Measure OFT-CR-4** Properties that have not been subject to a previous architectural evaluation and are at least 50 years or older shall have a historic architectural study performed by a qualified, professional architectural historian if potential historic structures present on the project site are subject to demolition or otherwise impacted. The resulting report should include results of a background literature search and field survey, an historic context statement, and analysis of the potential significance of the noted resource, and recommendations for preservation and/or mitigation. If the structure is considered significant and demolition is proposed, an Alternatives Analysis, detailed in Mitigation Measure CR-3, shall be prepared, reviewed and endorsed by the Planning Department.
Geology and Soils		
General Plan	Implementation of the Project would not result in development on sites that were not previously analyzed as developed in the General Plan EIR. Development throughout the County would be subject to County Ordinances and State laws to ensure that future projects would not result in erosion, seismicity hazards, or unstable soils. All impacts related to geology and soils associated with the Project have been adequately addressed in the General Plan EIR. No new or more severe geology and soils effects compared to the impacts identified in the General Plan EIR would occur.	No mitigation is required.
Fair Oaks Boulevard Corridor Plan	Site 67 in the Fair Oaks Boulevard Corridor Plan was previously analyzed in the Fair Oaks Boulevard EIR. Future development on Site 67 would be subject to County Ordinances and State laws to ensure that development would not result in erosion, seismicity hazards, or unstable soils. No new or more severe geology and soils effects than those identified in the Fair Oaks Boulevard EIR would occur.	No mitigation is required.
North Watt Avenue Corridor Plan	Sites 68 through 72 in the North Watt Avenue Corridor Plan were previously analyzed in the North Watt Avenue EIR. Future development on Sites 68 through 72 would be subject to County Ordinances and State laws to ensure that development would not result in erosion, seismicity hazards, or unstable soils. No new or more severe geology and soils effects than those identified in the North Watt Avenue EIR would occur.	No mitigation is required.

GENERAL PLAN/DISTINCT AREA PLANS	ENVIRONMENTAL EFFECTS SUMMARY	MITIGATION MEASURE
Old Florin Town SPA	Sites 73 through 79 in the Old Florin Town SPA were previously analyzed in the Old Florin Town SPA EIR. Future development on Sites 73 through 79 would be subject to County Ordinances and State laws to ensure that development would not result in erosion, seismicity hazards, or unstable soils. No new or more severe geology and soils effects than those identified in the Old Florin Town SPA EIR would occur.	No mitigation is required.
Hazards and Hazardous Materials		
General Plan	Implementation of the Project would not result in development on sites that were not previously analyzed as developed in the General Plan EIR. Cleanup of sites identified as having potential hazardous materials in the General Plan EIR would be required prior to development. Cleanup on these sites would be subject to local, State, and federal regulations regarding cleanup and remediation.	**Mitigation Measure HAZ-1: Environmental Site Assessments** The applicant of subsequent development on candidate rezone sites shall prepare a Phase I Environmental Site Assessment. The Phase I analysis shall disclose whether the site is listed as a known toxic site in the State Water Resources Control Board's GeoTracker or the Department of Toxic Substances' EnviroStor databases, and any historic uses onsite which may have contributed to toxics onsite. The analyses shall be submitted to the Environmental Coordinator for review and approval prior to any onsite ground-disturbing activities associated with subsequent development and all identified measures to minimize exposure to potential toxic substances shall be implemented. In the event the Phase I analyses identify the need for a subsequent Phase II Environmental Site Assessment, Soil Management Plan or a Health Risk Assessment, the applicant of subsequent development on candidate rezone sites shall continue to consult with PER and prepare the Phase II analyses. All site clean-up recommendations shall be completed prior to issuance of any building or grading permit, unless PER approves clearance due to extenuating circumstances.
Fair Oaks Boulevard Corridor Plan	Site 67 is not located in areas identified with hazardous materials. Proposed residential development on Site 67 would not result in an increased use of hazardous materials greater than previously analyzed in the Fair Oaks Boulevard EIR.	No mitigation is required.
North Watt Avenue Corridor Plan	Sites 68 through 72 are not located in areas identified with hazardous materials. Proposed residential development on Sites 68 through 72 would not result in an increased use of hazardous materials greater than previously analyzed in the North Watt Avenue EIR.	No mitigation is required.
Old Florin Town SPA	Sites 73 through 79 are not located in areas identified with hazardous materials. Proposed residential development on Sites 73 through 79 would not result in an increased use of hazardous materials greater than previously analyzed in the Old Florin Town SPA.	No mitigation is required.
Hydrology and Water Quality		
General Plan	Implementation of the Project would not result in development on sites that were not previously analyzed as developed in the General Plan EIR. All infill projects would be subject to the Sacramento County Floodplain Management Ordinance that requires an analysis of how grading impacts the surrounding area, including identification and preservation of floodplain storage. Development as part of the Project would be subject to Chapter 16.44 of the Sacramento County Code for land grading and erosion control, as well as the Statewide Construction General National Pollutant Discharge Elimination System Permit from the Central	No mitigation is required.

GENERAL PLAN/DISTINCT AREA PLANS	ENVIRONMENTAL EFFECTS SUMMARY	MITIGATION MEASURE
	Valley Regional Water Quality Control Board. No new or more severe hydrology and water quality effects than those identified in the General Plan EIR would occur	
Fair Oaks Boulevard Corridor Plan	Site 67 in the Fair Oaks Boulevard Corridor Plan was previously analyzed in the Fair Oaks Boulevard EIR. Development in infill and commercial corridor areas would be subject to coordination with the Department of Water Resources to meet the specifications of the Sacramento County Improvement Standards and the Sacramento County Floodplain Management Ordinance to ensure drainage and stormwater quality impacts would be reduced. No new or more severe hydrology and water quality effects than those identified in the Fair Oaks Boulevard EIR would occur.	No mitigation is required.
North Watt Avenue Corridor Plan	Sites 68 through 72 in the North Watt Avenue Corridor Plan was previously analyzed in the North Watt Avenue EIR. Development in infill and commercial corridor areas would be subject to coordination with the Department of Water Resources to meet the specifications of the Sacramento County Improvement Standards and the Sacramento County Floodplain Management Ordinance to ensure drainage and stormwater quality impacts would be reduced. No new or more severe hydrology and water quality effects than those identified in the North Watt Avenue EIR would occur.	No mitigation is required.
Old Florin Town SPA	Sites 73 through 79 in the Old Florin Town SPA was previously analyzed in the Old Florin Town SPA EIR. Development in infill and commercial corridor areas would be subject to coordination with the Department of Water Resources to meet the specifications of the Sacramento County Improvement Standards and the Sacramento County Floodplain Management Ordinance to ensure drainage and stormwater quality impacts would be reduced. No new or more severe hydrology and water quality effects than those identified in the Old Florin Town SPA EIR would occur.	No mitigation is required.
Land Use		
General Plan	Increased density from the Project would increase the potential number of dwelling units in the unincorporated County, but would not create structures, such as roadways, that could physically divide an established community. The Project would amend the General Plan and revise the Zoning Code for consistency with the goals and policies in the 2021-2029 Housing Element. Proposed amendments would ensure compliance with State law requirements for the Housing Element and meet RHNA allocations for the unincorporated County. Therefore, no conflict with other land use plans, policies, or regulations would occur. No new or more severe land use effects compared to the impacts identified in the General Plan EIR would occur	No mitigation is required.

GENERAL PLAN/DISTINCT AREA PLANS	ENVIRONMENTAL EFFECTS SUMMARY	MITIGATION MEASURE
Fair Oaks Boulevard Corridor Plan	Development on Site 67 would not physically divide an established community. Additionally, proposed land use and zoning changes for Site 67 would ensure compliance with State law for the Housing Element and meet RHNA allocations for the unincorporated County. Therefore, no conflict with other land use plans, policies, or regulations would occur. no new or more severe land use effects compared to the impacts identified in the Fair Oaks Boulevard EIR would occur.	No mitigation is required.
North Watt Avenue Corridor Plan	Development on Sites 68 through 72 would not physically divide an established community. Additionally, proposed land use and zoning changes for Sites 68 through 72 would ensure compliance with State law for the Housing Element and meet RHNA allocations for the unincorporated County. Therefore, no conflict with other land use plans, policies, or regulations would occur. no new or more severe land use effects compared to the impacts identified in the North Watt Avenue EIR would occur.	No mitigation is required.
Old Florin Town SPA	Development on Sites 73 through 79 would not physically divide an established community. Additionally, proposed land use and zoning changes for Sites 73 through 79 would ensure compliance with State law for the Housing Element and meet RHNA allocations for the unincorporated County. Therefore, no conflict with other land use plans, policies, or regulations would occur. no new or more severe land use effects compared to the impacts identified in the Old Florin Town SPA EIR would occur.	No mitigation is required.
Mineral Resources		
General Plan	The Project would not change the extent or character of land disturbance from what was evaluated in the General Plan EIR (no change in the overall area of development). No candidate rezone sites are located in an area with mineral resources. no new or more severe mineral resources effects compared to the impacts identified in the General Plan EIR would occur.	No mitigation is required.
Fair Oaks Boulevard Corridor Plan	Site 67 in the Fair Oaks Boulevard Corridor Plan is not located in an area of known mineral resources. Therefore, no new or more severe mineral resources effects compared to the impacts identified in the Fair Oaks Boulevard EIR would occur.	No mitigation is required.
North Watt Avenue Corridor Plan	Sites 68 through 72 in the North Watt Avenue Corridor Plan are not located in an area of known mineral resources. Therefore, no new or more severe mineral resources effects compared to the impacts identified in the North Watt Avenue EIR would occur.	No mitigation is required.
Old Florin Town SPA	Sites 73 through 79 in the Old Florin Town SPA are not located in an area of known mineral resources. Therefore, no new or more severe mineral resources effects compared to the impacts identified in the Old Florin Town SPA EIR would occur.	No mitigation is required.

GENERAL PLAN/DISTINCT AREA PLANS	ENVIRONMENTAL EFFECTS SUMMARY	MITIGATION MEASURE
Population and Housing		
General Plan	The Project would increase the potential number of dwelling units in the unincorporated County and would not remove housing or otherwise displace substantial numbers of people or homes. The purpose of the Project is to meet the RHNA for the County's Housing Element approved by the State Department of Housing and Community Development (HCD). Therefore, the Project would not induce substantial unplanned growth in the unincorporated County. No new or more severe population and housing effects compared to the impacts identified in the General Plan EIR would occur	No mitigation is required.
Fair Oaks Boulevard Corridor Plan	The purpose of the proposed rezone on Site 67 is to meet the RHNA for the County's Housing Element approved by HCD and would not induce substantial unplanned growth. Development on Site 67 would increase the number of potential dwelling units and would not remove housing or otherwise displace substantial numbers of people or homes. No new or more severe population and housing effects compared to the impacts identified in the Fair Oaks Boulevard EIR would occur.	No mitigation is required.
North Watt Avenue Corridor Plan	The purpose of the proposed rezone on Sites 68 through 72 is to meet the RHNA for the County's Housing Element approved by HCD and would not induce substantial unplanned growth. Development on Sites 68 through 72 would increase the number of potential dwelling units and would not remove housing or otherwise displace substantial numbers of people or homes. No new or more severe population and housing effects compared to the impacts identified in the North Watt Avenue EIR would occur.	No mitigation is required.
Old Florin Town SPA	The purpose of the proposed rezone on Sites 73 through 79 is to meet the RHNA for the County's Housing Element approved by HCD and would not induce substantial unplanned growth. Development on Sites 73 through 79 would increase the number of potential dwelling units and would not remove housing or otherwise displace substantial numbers of people or homes. No new or more severe population and housing effects compared to the impacts identified in the Old Florin Town SPA EIR would occur.	No mitigation is required.

Table ES-2: Executive Summary of Impacts and Mitigation

GENERAL PLAN/DISTINCT AREA PLAN	PREVIOUS EIR IMPACT CONCLUSION [1]	PROJECT LEVEL IMPACT SUMMARY	PROJECT LEVEL IMPACT BEFORE MITIGATION [1]	MITIGATION MEASURE	PROJECT LEVEL IMPACT AFTER MITIGATION (RELATIVE TO PREVIOUS EIRS IMPACT) [1]
AESTHETICS					
Impact AES-1: Degradation of Visual Character or Quality of Public Views					
General Plan	LTS	The rezoning of candidate sites would result in some modifications to development standards but would not significantly alter the visual character of the County's infill and corridor plan areas. All future developments on candidate rezone sites would undergo non-discretionary design review to ensure compliance with Design Guidelines, aiming to enhance development and visual quality across the County. The Project would not result in new substantial adverse physical impacts associated with the degradation of existing visual character or quality of public views than what would occur with implementation of the General Plan.	LTS	No mitigation is required.	LTS
Fair Oaks Boulevard Corridor Plan	Not Evaluated	The proposed rezone on Site 67 would potentially increase development density on the site but would not significantly change the planned visual character or quality of public views. Compliance with development standards and design guidelines would ensure that the proposed rezone of Site 67 would not result in new or more severe significant impacts related to degradation of existing visual character or quality of public views than would occur with implementation of the Fair Oaks Boulevard Corridor Plan.	LTS	No mitigation is required.	LTS
North Watt Avenue Corridor Plan	LTS	The proposed rezone on Sites 68 through 72 would potentially increase development density on the sites but would not significantly alter the planned visual character or quality of public views. Compliance with development standards and design guidelines would ensure that the proposed rezone of Sites 68 through 72 would not result in new or more severe significant impacts related to degradation of existing visual character or quality of public	LTS	No mitigation is required.	LTS

[1] PS = Potentially Significant S = Significant SU = Significant and Unavoidable LS = Less Than Significant

GENERAL PLAN/DISTINCT AREA PLAN	PREVIOUS EIR IMPACT CONCLUSION [1]	PROJECT LEVEL IMPACT SUMMARY	PROJECT LEVEL IMPACT BEFORE MITIGATION [1]	MITIGATION MEASURE	PROJECT LEVEL IMPACT AFTER MITIGATION (RELATIVE TO PREVIOUS EIRS IMPACT) [1]
		views than would occur with implementation of the North Watt Avenue Corridor Plan.			
Old Florin Town SPA	LTS	The proposed rezone on Sites 73 through 79 would potentially change the allowed uses on the sites but would not significantly alter the overall massing and scale of potential development. Compliance with development standards and design guidelines would ensure that the proposed rezone of Sites 73 through 79 would not result in new or more severe significant impacts related to degradation of existing visual character or quality of public views than would occur with implementation of the Old Florin Town SPA.	LTS	No mitigation is required.	LTS
Impact AES-2: Creation of New sources of substantial Light or Glare					
General Plan	SU	All future projects on candidate rezone sites are subject to applicable development standards of the Zoning Code and/or distinct area plans. Additionally, future projects would be required to comply with applicable guidelines and regulations related to light and glare, including the Countywide Design Guidelines and specific design guidelines contained in distinct area plans. The Project would not introduce new sources of substantial light or glare that were not considered and would not substantially worsen the impacts disclosed in the General Plan EIR. The Project would not result in new substantial adverse physical impacts associated with creation of a new source of substantial light or glare than would occur with implementation of the General Plan.	LTS	No feasible mitigation measure is available.	SU
Fair Oaks Boulevard Corridor Plan	Not Evaluated	The proposed rezone on Site 67 would potentially increase the development density on the site but would not significantly change the overall lighting and glare from what could be built under existing conditions. Compliance with development standards and design guidelines would ensure that the proposed rezone of Site 67 would not result in new or more severe significant impacts related to creation of a new source of substantial light or glare than would occur with implementation of the Fair Oaks Boulevard Corridor Plan.	LTS	No mitigation is required.	LTS

GENERAL PLAN/DISTINCT AREA PLAN	PREVIOUS EIR IMPACT CONCLUSION [1]	PROJECT LEVEL IMPACT SUMMARY	PROJECT LEVEL IMPACT BEFORE MITIGATION [1]	MITIGATION MEASURE	PROJECT LEVEL IMPACT AFTER MITIGATION (RELATIVE TO PREVIOUS EIRS IMPACT) [1]
North Watt Avenue Corridor Plan	LTS	The proposed rezone on Sites 68 through 72 would potentially increase the development density on the sites but would not significantly change the overall lighting and glare from what could be built under existing conditions. Compliance with development standards and design guidelines would ensure that the proposed rezone of Sites 68 through 72 would not result in new or more severe significant impacts related to creation of a new source of substantial light or glare than would occur with implementation of the North Watt Avenue Corridor Plan.	LTS	No mitigation is required.	LTS
Old Florin Town SPA	LTS	The proposed rezone on Sites 73 through 79 would potentially increase the development density on the sites but would not significantly change the overall lighting and glare from what could be built under existing conditions. Compliance with development standards and design guidelines would ensure that the proposed rezone of Sites 73 through 79 would not result in new or more severe significant impacts related to creation of a new source of substantial light or glare than would occur with implementation of the Old Florin Town SPA.	LTS	No mitigation is required.	LTS
AIR QUALITY					
Impact AQ-1: Short-Term Construction Emissions of Criteria Pollutants and Precursors (NO_X, ROG, PM_{10}, and $PM_{2.5}$)					
General Plan	SU	The largest candidate rezone site proposed under the Project is Site 15 which is 11.45 acres and has a proposed maximum density of 458 units (whereas the existing maximum density is 229 units). Construction emissions associated with increased residential capacity on Site 15 would not exceed SMAQMD criteria pollutant thresholds with implementation of SMAQMD's dust-reducing BMPs. Therefore, it is unlikely that construction emissions related to increasing capacity on any other individual candidate rezone site would exceed SMAQMD criteria pollutant thresholds. However, construction of the additional residential units (when considered as a whole) as part of the proposed rezone	S	**Mitigation Measure AQ-1: Implement SMAQMD's Basic Construction Emission Control Practices** For all development on candidate rezone sites identified as part of the Project, construction contractors shall implement SMAQMD's Basic Construction Emission Control Practices as conditions of approval, including the following: • water all exposed surfaces two times daily. Exposed surfaces include, but are not limited to soil piles, graded areas, unpaved parking areas, staging areas, and access roads; • cover or maintain at least two feet or free board space on haul trucks transporting soil, sand, or other loose material on the site. Any haul trucks that would be traveling along freeways or major roadways should be covered; • use wet power vacuum street sweepers to remove any visible trackout mud or dirt onto adjacent public roads at least once a day. Use of dry power sweeping is prohibited; • limit vehicle speeds on unpaved roads to 15 miles per hour (mph);	SU

GENERAL PLAN/DISTINCT AREA PLAN	PREVIOUS EIR IMPACT CONCLUSION [1]	PROJECT LEVEL IMPACT SUMMARY	PROJECT LEVEL IMPACT BEFORE MITIGATION [1]	MITIGATION MEASURE	PROJECT LEVEL IMPACT AFTER MITIGATION (RELATIVE TO PREVIOUS EIRS IMPACT) [1]
		would result in slightly greater emissions than development on the candidate rezone sites under the current zoning. Therefore, because the General Plan EIR determined that criteria pollutant emissions related to construction would be significant, construction-related emissions associated with the proposed Project would be more severe. Because the impact associated with the Project is more severe relative to the impact identified in the General Plan EIR, this change in impact is considered significant.		• complete construction of all roadways, driveways, sidewalks, parking lots as soon as possible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used; • minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes [required by California Code of Regulations, Title 13, sections 2449(d)(3) and 2485]. Provide clear signage that posts this requirement for workers at the entrances to the site; and • maintain all construction equipment in proper working condition according to manufacturer's specifications. The equipment must be checked by a certified mechanic and determined to be running in proper condition before it is operated.	
Fair Oaks Boulevard Corridor Plan	SU	Construction emissions associated with increased residential capacity on Site 67 would not exceed SMAQMD criteria pollutant thresholds with implementation of SMAQMD's dust-reducing BMPs. However, construction of the additional residential units within the Fair Oaks Boulevard area as part of the proposed rezone would result in slightly greater emissions than development on Site 67 under the current zoning. Because the impact associated with the proposed rezone on Site 67 under the Project is more severe relative to the impact identified in the Fair Oaks Boulevard EIR, this change in impact is considered significant.	S	**Mitigation Measure AQ-1** **Mitigation Measure FO-AQ-1: Construction Ozone Precursor Emissions and Diesel Particulates** Development proposals on Site 67 that exceed the SMAQMD NO_x screening levels shown in Table AQ-12 of the Fair Oaks Boulevard EIR, or any similar screening standard adopted by SMAQMD at the time of project application, shall be required to prepare construction emission estimates based on projected construction timelines and equipment lists prior to approval of improvement plans. When emissions exceed the SMAQMD construction thresholds of significance (currently of 85 pounds per day of NO_x) or the applicable standard in place at the time of application, the following measure shall be implemented: 1. The project applicant, or its designee, shall provide a plan for approval by the Sac Metro Air District that demonstrates the heavy-duty off-road vehicles (50 horsepower or more) to be used 8 hours or more during the construction project will achieve a project wide fleet-average 10 percent NO_x reduction compared to the most recent California Air Resources Board (CARB) fleet average. The plan shall have two components: an initial report submitted before construction and a final report submitted at the completion. o Submit the initial report at least four (4) business days prior to construction activity using the Sac Metro Air District's Construction Mitigation Tool o Provide project information and construction company information. o Include the equipment type, horsepower rating, engine model year, projected hours of use, and the CARB equipment identification number for each piece of equipment in the plan. Incorporate all owned, leased and subcontracted equipment to be used. o Submit the final report at the end of the job, phase, or calendar year, as pre-arranged with Sac Metro Air District staff and documented in the approval letter, to demonstrate continued project compliance.	SU

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				2. The Sac Metro Air District may conduct periodic site inspections to determine compliance. Nothing in this mitigation shall supersede other air district, state or federal rules or regulations. 3. This mitigation will sunset on January 1, 2028, when full implementation of the CARB In-Use Off-Road Regulation is expected.	
North Watt Avenue Corridor Plan	SU	Candidate rezone sites within the North Watt Avenue Corridor area would not be expected to exceed SMAQMD thresholds for construction emissions on an individual level. Construction of the additional residential units on Sites 68 through 72 (considered as a whole) within the North Watt Avenue Corridor area as part of the proposed rezone would result in slightly greater emissions than development of the sites under the current zoning. Therefore, because the North Watt Avenue EIR determined that criteria pollutant emissions related to construction would be significant, construction-related emissions associated with the proposed Project would be more severe. Because the impact associated with the Project is more severe relative to the impact identified in the North Watt Avenue EIR, this change in impact is considered significant.	S	**Mitigation Measure AQ-1** **Mitigation Measure NW-AQ-1: Construction Ozone Precursor Emissions and Diesel Particulates** Development proposals on Sits 68 through 72 that exceed the SMAQMD NO_x screening levels, or any similar screening standard adopted by SMAQMD at the time of project application, shall be required to prepare construction emission estimates based on projected construction timelines and equipment lists prior to approval of improvement plans. When emissions exceed the SMAQMD construction thresholds of significance (currently of 85 pounds per day of NO_x) or the applicable standard in place at the time of application, the following measure shall be implemented: 1. The project applicant, or its designee, shall provide a plan for approval by the Sac Metro Air District that demonstrates the heavy-duty off-road vehicles (50 horsepower or more) to be used 8 hours or more during the construction project will achieve a project wide fleet-average 10 percent NO_X reduction compared to the most recent California Air Resources Board (CARB) fleet average. The plan shall have two components: an initial report submitted before construction and a final report submitted at the completion. o Submit the initial report at least four (4) business days prior to construction activity using the Sac Metro Air District's Construction Mitigation Tool o Provide project information and construction company information. o Include the equipment type, horsepower rating, engine model year, projected hours of use, and the CARB equipment identification number for each piece of equipment in the plan. Incorporate all owned, leased and subcontracted equipment to be used. o Submit the final report at the end of the job, phase, or calendar year, as pre-arranged with Sac Metro Air District staff and documented in the approval letter, to demonstrate continued project compliance. 2. The Sac Metro Air District may conduct periodic site inspections to determine compliance. Nothing in this mitigation shall supersede other air district, state or federal rules or regulations. 3. This mitigation will sunset on January 1, 2028, when full implementation of the CARB In-Use Off-Road Regulation is expected	SU
Old Florin Town SPA	SU	Candidate rezone sites within the Old Florin Town SPA would not be expected to exceed SMAQMD thresholds for construction emissions on an individual level. Construction of the additional residential units on Sites 73 through 79 (considered as a whole) within the Old Florint Town SPA as part of the proposed rezone would result in	S	**Mitigation Measure AQ-1** **Mitigation Measure OFT-AQ-1: Construction Ozone Precursor Emissions and Diesel Particulates** Development proposals on Sites 73 through 79 that exceed the SMAQMD NO_x screening levels shown in Table AQ-2 of the Old Florin Town SPA EIR, or any similar screening standard adopted by SMAQMD at the time of project application, shall be required to prepare construction emission estimates based on projected construction	SU

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		slightly greater emissions than development of the sites under the current zoning. Therefore, because the Old Florin Town EIR determined that criteria pollutant emissions related to construction would be significant, construction-related emissions associated with the proposed Project would be more severe. Because the impact associated with the Project is more severe relative to the impact identified in the Old Florin Twon SPA EIR, this change in impact is considered significant.		timelines and equipment lists prior to approval of improvement plans. When emissions exceed the SMAQMD construction thresholds of significance (currently of 85 pounds per day of NO_x) or the applicable standard in place at the time of application, the following measure shall be implemented: 1. The project applicant, or its designee, shall provide a plan for approval by the Sac Metro Air District that demonstrates the heavy-duty off-road vehicles (50 horsepower or more) to be used 8 hours or more during the construction project will achieve a project wide fleet-average 10 percent NO_X reduction compared to the most recent California Air Resources Board (CARB) fleet average. The plan shall have two components: an initial report submitted before construction and a final report submitted at the completion. a. Submit the initial report at least four (4) business days prior to construction activity using the Sac Metro Air District's Construction Mitigation Tool b. Provide project information and construction company information. c. Include the equipment type, horsepower rating, engine model year, projected hours of use, and the CARB equipment identification number for each piece of equipment in the plan. Incorporate all owned, leased and subcontracted equipment to be used. d. Submit the final report at the end of the job, phase, or calendar year, as pre-arranged with Sac Metro Air District staff and documented in the approval letter, to demonstrate continued project compliance. 2. The Sac Metro Air District may conduct periodic site inspections to determine compliance. Nothing in this mitigation shall supersede other air district, state or federal rules or regulations. 3. This mitigation will sunset on January 1, 2028, when full implementation of the CARB In-Use Off-Road Regulation is expected.	
Impact AQ-2: Long-term Operational Emissions of Criteria Pollutants and Precursors (NO_X, ROG, PM_{10}, and $PM_{2.5}$)					

GENERAL PLAN/DISTINCT AREA PLAN	PREVIOUS EIR IMPACT CONCLUSION [1]	PROJECT LEVEL IMPACT SUMMARY	PROJECT LEVEL IMPACT BEFORE MITIGATION [1]	MITIGATION MEASURE	PROJECT LEVEL IMPACT AFTER MITIGATION (RELATIVE TO PREVIOUS EIRS IMPACT) [1]
General Plan	SU	The largest candidate rezone site proposed under the Project is Site 15 which is 11.45 acres and has a proposed maximum density of 458 units (whereas the existing maximum density is 229 units). Site 15 would not exceed either of these screening thresholds as the maximum density that could be allowed on Site 15 under the Project is 458 units. Because Site 15 is the largest candidate site in terms of proposed units and the site would not exceed SMAQMD's screening thresholds, it is unlikely that operational emissions related to increasing capacity on any other individual candidate site would exceed SMAQMD's operational criteria pollutant thresholds. However, operation of the proposed residential capacity under the Project would also result in emissions exceeding the SMAQMD thresholds for ROG, NO_x, daily PM_{10}, and annual PM_{10}. Because the General Plan EIR determined that criteria pollutant emissions related to operation would be significant, operation-related emissions associated with the proposed Project would be more severe. Because the impact associated with the Project is more severe relative to the impact identified in the General Plan EIR.	S	**Tier 1 BMP 1 from Mitigation Measure CC-2**	SU
Fair Oaks Boulevard Corridor Plan	SU	Site 67 would not exceed either of these screening thresholds as the maximum density that could be allowed on Site 67 under the Project is 37 units and would thus not be expected to exceed SMAQMD thresholds for NO_x or PM. Operation of the anticipated units on Site 67 within the Fair Oaks Boulevard Corridor area would not result in operational emissions above SMAQMD's recommended thresholds and operational emissions related to the increased residential capacity under the Project on Site 67 would not be greater than those analyzed in the Fair Oaks Boulevard EIR and would therefore not result in new substantial impacts. However, adopted Mitigation Measure FO-AQ-2 states that all development projects within the Fair Oaks Boulevard Corridor area shall implement reduction measures to achieve a minimum of 15 percent reduction in operational and area source emissions. Because these	PS	**Mitigation Measure FO-AQ-2: Operational Emissions** All development projects within the Fair Oaks Boulevard Corridor SPA shall comply with the SMAQMD endorsed Fair Oaks Boulevard Corridor Operational Air Quality Management Plan (8-06-2009), which requires implementation of reduction measures that will achieve a minimum of 15 percent reduction in operational and area source emissions, consistent with General Plan Policy.	SU

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		measures are not incorporated into the proposed rezone on Site 67 within the Fair Oaks Boulevard Corridor area, this impact would be potentially significant.			
North Watt Avenue Corridor Plan	SU	Candidate rezone sites within the North Watt Avenue Corridor area, would not be expected to exceed SMAQMD thresholds for NO_x or PM on an individual level. Operation of the approved residential capacity on Sites 68 through 72 within the North Watt Avenue Corridor area would not exceed the SMAQMD thresholds for ROG, NO_x, daily PM_{10}, and annual PM_{10}. because the North Watt Avenue EIR determined that criteria pollutant emissions related to operation would be significant, operation-related emissions associated with the proposed Project would be more severe. Because the impact associated with the Project is more severe relative to the impact identified in the North Watt Avenue EIR, this change in impact is considered significant.	S	**Mitigation Measure NW-AQ-2: Operational Emissions** All development projects within the North Watt Avenue Corridor Plan shall comply with the SMAQMD endorsed Air Quality Mitigation Plan (7-16-2010), which requires implementation of reduction measures that will achieve a minimum of 15.75 percent reduction in operational and area source emissions, consistent with General Plan Policy.	SU
Old Florin Town SPA	SU	Candidate rezone sites within the Old Florin Town SPA, would not be expected to exceed SMAQMD thresholds for NO_x or PM on an individual level. Operation of the approved residential capacity on Sites 73 through 79 within the Old Florin Town SPA would not exceed the SMAQMD thresholds for ROG, NO_x, daily PM_{10}, and annual PM_{10}. Because the Old Florin Town SPA EIR determined that criteria pollutant emissions related to operation would be significant, operation-related emissions associated with the proposed Project would be more severe. Because the impact associated with development on Sites 73 through 79 allowed under the Project is more severe relative to the impact identified in the Old Florin Town SPA EIR, this change in impact is considered significant.	S	**Mitigation Measure OFT-AQ-2: Operational Emissions** All development projects within the Old Florin Town SPA shall comply with the SMAQMD endorsed Old Florin Town SPA Operational Air Quality Mitigation Plan (09/28/2009), which requires implementation of reduction measures that will achieve a minimum of 15 percent reduction in operational and area source emissions, consistent with General Plan Policy. The AQMP shall be incorporated into the Old Florin Town SPA.	SU
Impact AQ-3: Mobile-Source CO Concentrations					
General Plan	LTS	Based on the transportation analysis prepared for the Project, the Project would result in approximately 6,750 peak trips per hour when added to existing trips along this segment of roadway. SMAQMD no longer has a recommended screening criteria for assessing the potential of a CO hotspot.	LTS	No mitigation is required.	LTS

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		However, other air districts, such as the Bay Area Air Quality Management District (BAAQMD), have numerical screening criteria available. The Project would not result in an exceedance of the threshold of 44,000 vehicles/hour at any one intersection, and the Project would not result in a CO hotspot. The Project would not result in a new or substantially more severe impact related to CO emissions than was evaluated in the General Plan EIR.			
Fair Oaks Boulevard Corridor Plan	Not Evaluated	As stated above for the General Plan, operation of residential development allowed under the Project would result in a maximum of 6,750 trips per hour along any single roadway segment. This is below the BAAQMD threshold of 44,00 vehicles/hour at any one intersection. The rezone of Site 67 as part of the Project would not result in a new or substantially more severe impact related to CO emissions than was evaluated in the Fair Oaks Boulevard EIR.	LTS	No mitigation is required.	LTS
North Watt Avenue Corridor Plan	Not Evaluated	As stated above for the General Plan, operation of residential development allowed under the Project would result in a maximum of 6,750 trips per hour along any single roadway segment. This is below the BAAQMD threshold of 44,00 vehicles/hour at any one intersection. The rezone of Sites 68 through 72 as part of the Project would not result in a new or substantially more severe impact related to CO emissions than was evaluated in the North Watt Avenue EIR.	LTS	No mitigation is required.	LTS
Old Florin Town SPA	Not Evaluated	As stated above for the General Plan, operation of residential development allowed under the Project would result in a maximum of 6,750 trips per hour along any single roadway segment. This is below the BAAQMD threshold of 44,00 vehicles/hour at any one intersection. The rezone of Sites 73 through 79 as part of the Project would not result in a new or substantially more severe impact related to CO emissions than was evaluated in the Old Florin Town SPA EIR	LTS	No mitigation is required.	LTS
Impact AQ-4: Exposure of Sensitive Receptors to TACs					
General Plan	LTS	Construction of future candidate rezone sites would have the potential to generate	S	**Mitigation Measure AQ-2: Require Construction Health Risk Assessment**	LTS

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		TACs exceeding SMAQMD's 10 in one million threshold of significance, the Project could result in a new impact compared to what was identified in the General Plan EIR.		Prior to approval of improvement plans, grading plans, or building permits, (whichever occurs first) a site-specific HRA shall be required for all construction projects anticipated to last more than six months and located within 500 feet of sensitive receptors (as defined by SJVAPCD). All recommendations from the HRA shall be enforced as conditions of approval of the development. Measures to reduce diesel PM exposure include, but are not limited to: • use of heavy-duty equipment meeting EPA's Tier 4 emission standards, as defined in 40 CFR 1039 and complying with the appropriate test procedures and provisions contained in 40 CFR Parts 1065 and 1068; and • use of battery-electric off-road equipment as it becomes available. Implementation of this measure shall be required in the contract the Project applicant establishes with its construction contractors. Future applicants overseeing development on candidate rezone sites shall demonstrate plans to fulfill the requirements of this measure in a report or in Project improvement plan details submitted to the County before the use of any off-road diesel-powered construction equipment on the site.	
Fair Oaks Boulevard Corridor Plan	LTS with mitigation	Construction on Site 67 would have the potential to generate TACs exceeding SMAQMD's 10 in one million threshold of significance, the Project could result in a new impact compared to what was identified in the Fair Oaks Boulevard EIR.	S	**Mitigation Measure AQ-2 and Mitigation Measure FO-AQ-1**	LTS
North Watt Avenue Corridor Plan	LTS with mitigation	Construction on Sites 68 through 72 would have the potential to generate TACs exceeding SMAQMD's 10 in one million threshold of significance, the Project could result in a new impact compared to what was identified in the North Watt Avene EIR.	S	**Mitigation Measure AQ-2 and Mitigation Measure NW-AQ-1**	LTS
Old Florin Town SPA	LTS with mitigation	Construction on Sites 73 through 79 would have the potential to generate TACs exceeding SMAQMD's 10 in one million threshold of significance, the Project could result in a new impact compared to what was identified in the Old Florin Town SPA EIR.	S	**Mitigation Measure AQ-2 and Mitigation Measures OFT-AQ-1**	LTS
Impact AQ-5: Consistency with an Applicable Air Quality Plan					
General Plan	SU	The additional residential development allowed under the Project satisfies the goals of the 2030 General Plan and Housing Element by creating sufficient capacity to address the County's current RHNA obligations. Infill and corridor sites, such as those proposed under the Project, are shown to reduce VMT and are therefore consistent with the 2020 MTP/SCS. Additionally, the 2020 MTP/SCS was adopted prior to the adoption of the 2021-2029 Housing Element and thus informs the	LTS	No mitigation is required.	SU

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		growth projections of the 2021-2029 Housing Element. Therefore, the growth projections of the 2021-2029 Housing Element, which include the proposed increase in residential capacity under the Project, are consistent with the 2020 MTP/SCS. The additional residential capacity under the proposed Project would be considered more efficient in terms of emissions per capita compared to the residential capacity analyzed in the General Plan because the rezone could result in a greater number of people being housed within the same development footprint. Decreasing per capita emissions, especially those related to VMT, aligns with the goals of the 2022 SIP.			
Fair Oaks Boulevard Corridor Plan	Not Evaluated	Similar to the discussion above for the General Plan, the proposed rezone on Site 67 satisfies the goals of the 2030 General Plan and Housing Element to create sufficient capacity to address the County's current RHNA obligations. The proposed rezone would reduce VMT and decrease per capita emissions. Therefore, development on Site 67 would be consistent with the 2020 MTP/SCS and the goals of the 2022 SIP.	LTS	No mitigation is required.	LTS
North Watt Avenue Corridor Plan	Not Evaluated	Similar to the discussion above for the General Plan, the proposed rezone on Sites 68 through 722 satisfies the goals of the 2030 General Plan and Housing Element to create sufficient capacity to address the County's current RHNA obligations. The proposed rezone would reduce VMT and decrease per capita emissions. Therefore, development on Sites 68 through 72 would be consistent with the 2020 MTP/SCS and the goals of the 2022 SIP.	LTS	No mitigation is required.	LTS
Old Florin Town SPA	Not Evaluated	Similar to the discussion above for the General Plan, the proposed rezone on Sites 73 through 79 satisfies the goals of the 2030 General Plan and Housing Element to create sufficient capacity to address the County's current RHNA obligations. The proposed rezone would reduce VMT and decrease per capita emissions. Therefore, development on Sites 73 through 79 would	LTS	No mitigation is required.	LTS

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		be consistent with the 2020 MTP/SCS and the goals of the 2022 SIP.			
Impact AQ-6: Exposure to Objectionable Odors					
General Plan	Not Evaluated	Construction-related odors would occur intermittently, disperse quickly, and would cease upon the completion of the construction phase. Operational odors are not typically associated with residential land uses such as those proposed in the Project. Therefore, implementation of the Project would not result in new or more severe significant impacts related to odor than would occur with implementation of the General Plan.	LTS	No mitigation is required.	LTS
Fair Oaks Boulevard Corridor Plan	Not Evaluated	Similar to the discussion above for the General Plan, development on Site 67 would result in temporary construction-related odors and would not result in operational odors. Therefore, development on Site 67 would not result in new or more severe significant impacts odor than would occur with implementation of the Fair Oaks Boulevard Corridor Plan.	LTS	No mitigation is required.	LTS
North Watt Avenue Corridor Plan	Not Evaluated	Similar to the discussion above for the General Plan, development on Sites 68 through 72 would result in temporary construction-related odors and would not result in operational odors. Therefore, development on Sites 68 through 72would not result in new or more severe significant impacts odor than would occur with implementation of the North Watt Avenue Corridor Plan.	LTS	No mitigation is required.	LTS
Old Florin Town SPA	Not Evaluated	Similar to the discussion above for the General Plan, development on Sites 73 through 79 would result in temporary construction-related odors and would not result in operational odors. Therefore, development on Sites 73 through 79 would not result in new or more severe significant impacts odor than would occur with implementation of the Old Florin Town SPA.	LTS	No mitigation is required.	LTS
CLIMATE CHANGE					
Impact CC-1: Generate GHG Emissions, Either Directly Or Indirectly, That May Have A Significant Impact On The Environment					
General Plans	SU	Construction and operational activities related to increased capacity allowed under	S	**Mitigation Measure CC-1: Implement Measures to Reduce Construction Greenhouse Gas Emissions**	SU

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		the Project would generate greater GHG emissions than what would be emitted from potential development of the approved land uses and, the Project would result in a more severe impact as compared to what was identified in the General Plan EIR.		Future development project on any of the candidate rezone sites including one or more of the following components shall be subject to this mitigation measure. The construction components are: • include buildings more than 4 stories tall; • include demolition activities; • include major trenching activities; • have a construction schedule that is unusually compact, fast-paced, or involves more than 2 phases (i.e., grading, paving, building construction, and architectural coatings) occurring simultaneously; • involve cut-and-fill operations (moving earth with haul trucks and/or flattening or terracing hills); and • require import or export of soil materials that will require a considerable amount of haul truck activity . If future development on any of the candidate rezone sites include of the above components, individual development projects shall prepare and submit a project-specific GHG analysis utilizing CalEEMod for review and approval by the Environmental Coordinator that shows GHG emissions associated with construction of the project. If GHG emissions levels would exceed SMAQMD's 1,100 MTCO2e per year screening thresholds, project applicants shall implement feasible construction-related GHG reduction measures (example measures listed below). The GHG analysis shall demonstrate the project's contribution to GHG and quantify reductions in construction GHG, if necessary, such that construction emissions are minimized. Applicants may choose the mitigation measures to be implemented on a project-by-project basis, as long as the measures selected are sufficient in reducing construction-related GHG impacts to less-than-significant levels (i.e., below SMAQMD's 1,100 MTCO2e per year threshold). Construction measures may include but are not limited to: • Use alternative fuels in construction equipment (e.g., electric, hybrid). • Minimize idling time either by shutting off equipment when not in use or reducing the time of idling to no more than 2 minutes (A 5-minute limit is required by the state airborne toxics control measure [Title 13, Sections 2449(d)(3) and 2485 of the California Code of Regulations].) Provide clear signage that posts this requirement for workers at the entrances to the site, and develop an enforceable mechanism to monitor idling time to ensure compliance with this measure. Require that all diesel-fueled off-road construction equipment be equipped with EPA Tier 4 Final compliant engines or better as a condition of contract. • Require all on-road heavy-duty trucks to have zero emissions or meet the most stringent emissions standard, such as MY 2024–2026, as a condition of contract. • Use CARB-approved renewable diesel fuel in off-road construction equipment and on-road trucks. • Use EPA's SmartWay certified trucks for deliveries and equipment transport.	

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				• Require all construction equipment to be maintained and properly tuned in accordance with manufacturers' specifications. • Perform checks that determine equipment is running in proper condition prior to operation. These checks must be performed by a certified mechanic. • Where grid power is available, prohibit portable diesel engines, and provide electrical hookups for electric construction tools, such as saws, drills, and compressors, and use electric tools whenever feasible. Where grid power is not available, use alternative fuels, such as propane or solar electrical power, for generators at construction sites. • Provide carpools, shuttle vans, and transit passes to construction workers, and offer meal options on-site or shuttles to nearby meal destinations for construction employees. • Provide secure bicycle parking for construction workers. • Reduce electricity use in the construction office by using LED bulbs, powering off computers every day, and, if existing heating and cooling units are determined to be inefficient (i.e., not in compliance with the most recent mandatory efficiency standards of the California Energy Code), replacing these units with more efficient ones. • Minimize energy used during site preparation by deconstructing existing structures to the greatest extent feasible. • Recycle or salvage nonhazardous construction and demolition debris, with a goal of recycling at least 15 percent more by weight than the diversion requirement in Title 24. • Use locally sourced or recycled materials for construction materials (goal of at least 20 percent based on costs for building materials and based on volume for roadway, parking lot, sidewalk, and curb materials). Wood products used should be certified through a sustainable forestry program. • Use low-carbon concrete, minimize the amount of concrete used, and produce concrete on-site if it is more efficient and lower-emitting than transporting ready-mix. • Develop a plan to efficiently use water for adequate dust control since substantial amounts of energy can be consumed during the pumping of water. • Include all requirements in applicable bid documents, purchase orders, and contracts, with successful contractors demonstrating the ability to supply the compliant on- or off-road construction equipment for use prior to any ground-disturbing and construction activities. OR When the County adopts the 2022 CAP, future development projects shall incorporate GHG emissions reduction measures contained therein. Such participation shall be subject to a demonstration that the emissions reduction measures selected are equivalent to or more effective than the specific requirements listed above.	

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				Mitigation Measure CC-2: Implement Measures to Reduce Operational Greenhouse Gas Emissions Individual development projects shall incorporate the Tier 1 Best Management Practices or propose alternatives that demonstrate the same level of GHG reductions as BMPs 1 and 2, listed below. At a minimum, the individual development projects shall mitigate natural gas emissions and provide necessary wiring for an all-electric retrofit to accommodate future installation of electric space heating, water heating, drying, and cooking appliances. For projects that exceed SMAQMD's 1,100 $MTCO_2e$ per year screening thresholds after application of Tier 1 BMPs 1 and 2, the individual project shall meet OPRs SB 743 technical advisory de minimis criteria for VMT. If the subject site is one of the 18 candidate rezone sites (Sites 2, 4, 6, 13, 14, 17, 18, 24, 25, 26, 27, 28, 56, 57, 62, 63, 65, and 66) identified as having a VMT impact in Chapter 10 "Transportation," Mitigation Measure TRAN-1 would apply and would satisfy the requirements of SMAQMDs Tier 2 BMP 3. **Tier 1** • **BMPs Required for All Future Projects** ○ BMP 1: No natural gas: Projects shall be designed and constructed without natural gas infrastructure or proposed alternatives that demonstrate the same level of GHG reductions. At a minimum, pre-wiring for an all-electric retrofit as detailed above is required. ○ BMP 2: EV-ready: Projects shall meet the current CALGreen Tier 2 standards, except all EV-capable spaces shall instead be EV-ready. EV-capable requires the installation of "raceway" (the enclosed conduit that forms the physical pathway for electrical wiring to protect it from damage) and adequate panel capacity to accommodate future installation of a dedicated branch circuit and charging station(s). EV-ready requires all EV-capable improvements plus installation of dedicated branch circuit(s) (electrical pre-wiring), circuit breakers, and other electrical components, including a receptacle (240-volt outlet) or blank cover needed to support future installation of one or more charging stations. **Tier 2** • **BMP Required for Sites exceeding 1,100 $MTCO_2e$ operationally after implementing Tier 1 BMPs and not meeting OPRs SB 743 technical advisory de minimis criteria for VMT (potentially (Sites 2, 4, 6, 13, 14, 17, 18, 24, 25, 26, 27, 28, 56, 57, 62, 63, 65, and 66 found to have a VMT impact per Chapter 10, "Transportation"):** ○ BMP 3: Reduce residential VMT by 15 percent relative to Sacramento County targets. In areas with above-average existing VMT, provide electrical capacity for future 100% electric vehicles. ○ To comply with BMP 3, applicable projects shall implement Mitigation Measure TRAN-1 and shall provide electrical capacity for future 100% electric vehicles.	

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				OR **Future 2022 CAP** When the County adopts the 2022 CAP, future development projects shall incorporate GHG emissions reduction measures contained therein. Such participation shall be subject to a demonstration that the emissions reduction measures selected are equivalent to or more effective than the specific requirements listed above.	
Fair Oaks Boulevard Corridor Plan	LTS with Mitigation	Construction activities that could occur as a result of the proposed additional residential capacity would not exceed the 1,100 $MTCO_2e$ threshold and would thus would not result in a new or more severe impact over what was already disclosed in the Fair Oaks Boulevard EIR. Operation of the proposed land uses on Site 67 would result in an additional 46 $MTCO_2e$ per year compared to the approved land uses. The increased residential capacity under the Project on Site 67, if unmitigated, would result in a new and more severe impact as compared to the impacts disclosed in the Fair Oaks Boulevard EIR.	PS	**Mitigation Measures CC-1 and CC-2**	LTS
North Watt Avenue Corridor Plan	LTS with Mitigation	Construction activities related to increased capacity allowed under the Project would exceed SMAQMD's 1,100 $MTCO_2e$ per year threshold and thus would result in a new or more severe impact over what would occur with implementation of the North Watt Avenue Corridor Plan. In addition, without implementation of SMAQMD's Tier 1 BMP 1 and BMP 2, development allowed as part of the Project on Sites 68 through 72 during operation would exceed SMAQMD's 1,100 $MTCO_2e$ per year threshold. The increased residential capacity under the Project on Sites 68 through 72 would result in a new significant impact compared to the impact disclosed in the North Watt Avenue EIR.	S	**Mitigation Measures CC-1 and CC-2**	SU
Old Florin Town SPA	LTS with Mitigation (operation) Not Evaluated (construction)	Construction activities that could occur as a result of the proposed additional residential capacity allowed on Sites 73 through 79 would not exceed the 1,100 $MTCO_2e$ threshold. Without implementation of SMAQMD's Tier 1 BMP 1 and BMP 2, development allowed as part of the Project on Sites 73 through 79 during operation would exceed SMAQMD's 1,100 $MTCO_2e$ per year threshold. The increased residential capacity under the Project on	S	**Mitigation Measures CC-1 CC-2**	SU

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		Sites 73 through 79 would result a new and more severe impact over what was already disclosed in the Old Florin Town SPA EIR.			
Impact CC-2: Conflict With Any Applicable Plan, Policy, Or Regulation of An Agency Adopted for The Purpose of Reducing the Emissions Of GHG					
General Plan	SU	Construction and operation related to the proposed increase in residential capacity under the General Plan would result in a more efficient distribution of emissions per capita because emissions of criteria pollutants associated with sources such as mobile sources, area sources, and energy sources are considered more efficient when the associated development houses a larger number of people in a smaller area, as is proposed under the Project. Implementation of the anticipated increased residential capacity under the General Plan would result in a more efficient distribution of GHG emissions per capita than the approved residential capacity, the Project would support the goals of the 2022 Scoping Plan. The Project would not result in a new or more severe impact related to consistency with an applicable GHG reduction plan than what was disclosed in the General Plan EIR.	LTS	No mitigation is required.	LTS
Fair Oaks Boulevard Corridor Plan	Not Evaluated	Similar to the discussion above for the General Plan, development of Site 67 would result in a more efficient distribution of GHG emissions per capita than the approved residential capacity. The Project would support the goals of the 2022 Scoping Plan. Development on Site 67 as part of the Project would not result in a new or more severe impact related to consistency with an applicable GHG reduction plan than what was disclosed in the Fari Oaks Boulevard EIR.	LTS	No mitigation is required.	LTS
North Watt Avenue Corridor Plan	Not Evaluated	Similar to the discussion above for the General Plan, development of Sites 68 through 72 would result in a more efficient distribution of GHG emissions per capita than the approved residential capacity. The Project would support the goals of the 2022 Scoping Plan. Development on Sites 68 through 72 as part of the Project would not result in a new or more severe impact related to consistency with an applicable	LTS	No mitigation is required.	LTS

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		GHG reduction plan than what was disclosed in the North Watt Avenue EIR.			
Old Florin Town SPA	Not Evaluated	Similar to the discussion above for the General Plan, development of Sites 73 through 79 would result in a more efficient distribution of GHG emissions per capita than the approved residential capacity. The Project would support the goals of the 2022 Scoping Plan. Development on Sites 73 through 79 as part of the Project would not result in a new or more severe impact related to consistency with an applicable GHG reduction plan than what was disclosed in the Old Florin Town SPA EIR.	LTS	No mitigation is required.	LTS
ENERGY					
Impact EN-1: Wasteful, Inefficient, or Unnecessary Consumption of Energy, During Project Construction or Operation					
General Plan	Not Evaluated	Development allowed under the Project would require increased energy consumption for temporary construction activities related to vehicle use and material transport. Once operational, development allowed under the Project would increase the total amount of transportation-related energy, but the transportation energy would be more efficient on a per-capita basis. The Project would require additional building energy and natural gas consumption as compared to exiting development allowed on the candidate rezone sites. There have been significant technological advancements since the certification of the General Plan EIR, such as vehicle fuel efficiency, renewable energy generation, and building-design efficiencies – all of which increase overall Project energy efficiencies. For these reasons, increased residential development allowed under the Project would be overall more energy efficient than development that would have been evaluated in the General Plan EIR on the proposed candidate rezone sites. The Project's contribution to impacts would not be substantial and overall impacts would be less than significant.	LTS	No mitigation is required.	LTS
Fair Oaks Boulevard Corridor Plan	Not Evaluated	Similar to the analysis conducted for the General Plan, fuel consumption, energy and natural gas demand, and VMT per capita would all become more efficient with	LTS	No mitigation is required.	LTS

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		increased density as a result of development on Site 67 as part of the proposed rezone. Development on Site 67 as part of the proposed rezone would not result in new or more severe impacts related to energy and the usage of energy for construction and operation on Site 67 would not be considered wasteful, inefficient, or unnecessary. The Project's contribution to impacts would not be substantial and overall impacts would be less than significant.			
North Watt Avenue Corridor Plan	Not Evaluated	Similar to the analysis conducted for the General Plan, fuel consumption, energy and natural gas demand, and VMT per capita would all become more efficient with increased density as a result of development on Sites 68 through 72 as part of the proposed rezone. Development on Sites 68 through 72 as part of the proposed rezone would not result in new or more severe impacts related to energy and the usage of energy for construction and operation on Sites 68 through 72 would not be considered wasteful, inefficient, or unnecessary. The Project's contribution to impacts would not be substantial and overall impacts would be less than significant.	LTS	No mitigation is required.	LTS
Old Florin Town SPA	Not Evaluated	Similar to the analysis conducted for the General Plan, fuel consumption, energy and natural gas demand, and VMT per capita would all become more efficient with increased density as a result of development on Sites 73 through 79 as part of the proposed rezone. Development on Sites 73 through 79 as part of the proposed rezone would not result in new or more severe impacts related to energy and the usage of energy for construction and operation on Sites 73 through 79 would not be considered wasteful, inefficient, or unnecessary. The Project's contribution to impacts would not be substantial and overall impacts would be less than significant.	LTS	No mitigation is required.	LTS
Impact EN-2: Obstruct a State or Local Plan for Renewable Energy or Energy Efficiency					
General Plan	Not Evaluated	Although future development associated with the Project has the potential to result in	LTS	No mitigation is required.	LTS

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		the overall increase in consumption of energy resources during construction and operation, development as part of the Project would result in implementation of various energy conservation features. The energy conservation features would be incorporated into new development as part of the Project, such as the installation of energy efficient appliances and increasing residential density, which increases energy efficiency associated with the Project, and aligning with the Energy Efficiency Action Plan. Energy reduction features would align with the GHG reduction and energy efficiency goals of the 2022 Scoping Plan by deploying clean technologies and supporting sustainable development. The Project's contribution to impacts would not be substantial and overall impacts would be less than significant.			
Fair Oaks Boulevard Corridor Plan	Not Evaluated	Similar to the analysis conducted for the General Plan, development on Site 67 would be consistent with appliable State or local plans for renewable energy. The Project's contribution to impacts would not be substantial and overall impacts would be less than significant.	LTS	No mitigation is required.	LTS
North Watt Avenue Corridor Plan	Not Evaluated	Similar to the analysis conducted for the General Plan, development on Sites 68 through 72 would be consistent with appliable State or local plans for renewable energy. The Project's contribution to impacts would not be substantial and overall impacts would be less than significant.	LTS	No mitigation is required.	LTS
Old Florin Town SPA	Not Evaluated	Similar to the analysis conducted for the General Plan, development on Sites 73 through 79 would be consistent with appliable State or local plans for renewable energy. The Project's contribution to impacts would not be substantial and overall impacts would be less than significant.	LTS	No mitigation is required.	LTS
NOISE					
Impact NOI-1: Construction Noise that Exceeds County Standards					
General Plan	Not Evaluated	The Project would allow for increased development density compared to what was	PS	**Mitigation Measure NOI-1: Develop and Implement A Nighttime Construction Noise Control Plan**	SU

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		proposed in the General Plan EIR. Buildout of the Project would result in a net new capacity of approximately 4,081 residential units. The proposed increase in density on candidate rezone sites could prolong noise generated during construction and result in different construction methods. Construction activities are anticipated to occur primarily during daytime hours, when sensitive receptors are less sensitive to increased noise levels, nighttime construction could be required and could occur for some residential construction if there are tasks that must be done continuously until completed (e.g., concrete pouring) or that require road closures. Because the construction details are not known, it is not possible to conclude that future development as part of the Project would avoid generation of temporary construction noise levels that exceed County nighttime exterior noise standards. This impact would be potentially significant.		This mitigation measure shall apply to sites where construction would occur outside of permitted construction hours (i.e., between 8:00 p.m. and 6:00 a.m. Monday through Friday and between 8:00 p.m. and 7:00 a.m. on Saturdays and Sundays) pursuant to Section 6.68.090(e) of the County Code and within 2,000 feet of a sensitive receptor. Prior to the commencement of any construction activity, the project applicant, in coordination with selected construction contractors, and a qualified acoustical professional, shall prepare a nighttime construction noise control plan based on finalized project-specific information (e.g., specific equipment profiles, construction locations). The plan shall include: • A detailed description of the proposed nighttime construction activities, • A list of equipment used during all nighttime construction activities, • Projected noise levels generated during the nighttime construction activities at surrounding noise-sensitive land uses, • The location of sensitive receptors in relation to the proposed nighttime construction activities, and • Designation of a disturbance coordinator. The contact information (e.g., phone number) of such a person shall be posted conspicuously at one or more locations around the construction site and provided to nearby residences (i.e., those within 500 feet of construction). The disturbance coordinator shall receive all public complaints and be responsible for determining the cause of the complaint and implementing any feasible measures to alleviate the problem. • A detailed plan to notify residents (e.g., through mailers in multiple languages) within 2,000 feet of the site of upcoming planned nighttime construction activity. Residents shall be notified at least one week prior to any anticipated nighttime construction work and notification shall include the contact information of the disturbance coordinator. The applicant shall provide proof of notification to the County one week prior to the scheduled nighttime construction activities. The following noise control measures (or other equally effective measures approved by the County) shall be included in the plan as necessary to reduce noise levels to the appropriate threshold (i.e., 50 dB L_{eq} and 70 dB L_{max}), to the extent feasible, at the nearest sensitive receptor: • Construction scheduling and phasing shall be designed so that impact equipment (e.g., pile drivers) are not used during the hours of 8:00 p.m. and 6:00 a.m. on Monday through Friday, and between 8:00 p.m. and 7:00 a.m. on Saturday and Sunday. • For construction activity that would occur within a clear line-of-sight of offsite sensitive receptors, temporary noise curtains shall be installed as close as possible to the noise-generating activity such that the curtains obstruct the direct line of sight between the noise-generating construction activity and the nearby sensitive receptors. Temporary noise curtains shall consist of durable, flexible composite material featuring a noise barrier layer bound to sound-absorptive material on one side. The noise barrier layer shall consist of rugged, impervious, material with a surface weight of at least one pound per square foot and be designed to result in a 10-dB reduction at the sensitive receptor location. Noise-reducing enclosures shall be used around stationary noise-generating equipment (e.g., compressors and generators) if equipment would operate within a clear line-of-sight of offsite sensitive receptors.	

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Fair Oaks Boulevard Corridor Plan	Considered nuisance rather than an environmental impact.	Site 67 is zoned as BP (Business and Professional Office) and has a General Plan designation of TOD (Transit Oriented Development). Although the proposed rezone would change the allowed land use type on Site 67 compared to what is evaluated in the Fair Oaks Boulevard EIR, development would occur within the same footprint as analyzed in the Fair Oaks Boulevard EIR. However, because details about site-specific construction are not currently known, it is not possible to determine construction activities, noise levels, or time periods for development on Site 67. Nighttime construction activity at Site 67 could result in a 40+ dB increase in nighttime ambient noise levels. This would be considered a substantial temporary increase in noise. Because it cannot be assured that nighttime construction associated with development of Site 67 would not be needed, and if needed, would not result in a substantial temporary increase in noise, this impact would be potentially significant.	PS	**Mitigation Measure NOI-1**	SU
North Watt Avenue Corridor Plan	Considered nuisance rather than an environmental impact.	Sites 68 through 72, are located within the Town Center (Site 72) and Elkhorn District (Sites 68 through 71) of the North Watt Avenue Corridor area. Sensitive land uses near Sites 68 through 72 could be exposed to increased construction noise related to increased density proposed on the sites. Development on Sites 68 through 72 could require nighttime construction, such as for roadway improvements or for some foundation designs that require continuous concrete pours. Nighttime construction could result in a substantial increase in noise for all future development under the Project consistent with what would have been analyzed under the North Watt Avenue EIR. Impacts would be potentially significant.	PS	**Mitigation Measure NOI-1**	SU
Old Florin Town SPA	Considered nuisance rather than an environmental impact.	Candidate rezone sites Site 73 through 79, are located within the Old Florin Town SPA. Although the proposed rezone would increase allowed development density compared to what was evaluated in Old Florin Town SPA EIR, the development would occur within the same footprint as	PS	**Mitigation Measure NOI-1**	SU

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		analyzed in the Old Florin Town SPA EIR. As there are no specific development proposals for Sites 73 to 79, the timing, duration, and magnitude of construction activities is currently unknown. Construction activities that occur within the permitted hours detailed in Section 6.68.090(e) of the County Code are exempt from County noise standards. Therefore, impacts related to daytime construction would not be greater or more severe than those which were analyzed in the Old Florin Town SPA EIR. Nighttime construction could result in a substantial increase in noise for all future development under the Project consistent with what would have been analyzed under the Old Florin Town SPA EIR. Impacts would be potentially significant.			
Impact NOI-2: Generate Construction Vibration					
General Plan	Not Evaluated	Implementation of the Project would increase allowed development density compared to what was assumed in the General Plan EIR. The proposed increase in density could result in different construction methods, as constructing a multi-unit residential building could use different equipment than constructing single family residences or a building with fewer units. However, the timing, duration, and magnitude of construction activities for individual development allowed under the Project are currently unknown. Although the General Plan EIR did not analyze vibration impacts, use of a vibratory roller and to a lesser extent, pile driving, are common construction activities in residential development, and it is likely that the analysis would have concluded that vibration impacts would be significant and unavoidable. This impact is considered potentially significant, consistent with what would have been disclosed in the General Plan EIR, had the analysis addressed this impact.	PS	**Mitigation Measure NOI-2: Develop and Implement a Vibration Control Plan** This mitigation measure shall apply to construction involving pile-driving activities located within 97 feet of any building to reduce the potential for structural damage, and within 541 feet of an occupied residence or building, to minimize the disturbance from pile-driving activities; or vibratory roller activities located within 26 feet of any building to reduce the potential for structural damage, and within 136 feet of an occupied residence or building, to minimize the disturbance from vibratory roller activities. A vibration control plan shall be developed by the project applicant and their construction contractor(s) to be submitted to and approved by the Environmental Coordinator before issuance of any improvement plans or grading permits for a project involving pile-driving activities located within 97 feet of any building and within 541 feet of an occupied residence or building, or vibratory roller activities located within 26 feet of any building or and within 136 feet of an occupied residence or building. The plan shall consider all potential vibration-inducing activities that would occur within the distance parameters described above and include various measures, setback distances, precautions, monitoring programs, and alternative methods to traditional pile-driving or other vibration intensive activities with the potential to result in structural damage or adverse impacts to sensitive receptors. The following vibration control measures (or other equally effective measures approved by the County's Environmental Coordinator) shall be included in the plan: • To prevent structural damage minimum setback requirements for different types of ground vibration-producing activities (e.g., pile driving, vibratory roller) for the purpose of preventing damage to nearby structures shall be established based on the proposed equipment use and locations, once determined. Factors to be considered include the specific nature of the vibration producing activity (e.g., type and duration of pile driving, weight and type of construction equipment), local soil conditions, and the fragility/resiliency of the nearby structures. Established setback requirements (e.g., 100 feet) can be breached if a project-specific, site-specific analysis is conducted by a qualified geotechnical engineer or ground	SU

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				vibration specialist that indicates that no structural damage would occur at nearby buildings or structures. • To prevent disturbance for sensitive land uses, minimum setback requirements for different types of ground vibration producing activities (e.g., pile driving, vibratory roller) shall be established based on the proposed activities and locations, once determined. Established setback requirements (e.g., 550 feet, 140 feet) can be breached only if a project-specific, site-specific, technically adequate ground vibration study indicates that the buildings would not be exposed to ground vibration levels in excess of 72 VdB, and ground vibration measurements performed during the construction activity confirm that the buildings are not being exposed to levels in excess of 72 VdB. • All vibration-inducing activity within the distance parameters described above shall be monitored and documented for ground vibration noise and vibration noise levels at the nearest sensitive land use and associated recorded data submitted to Sacramento County so as not to exceed the recommended FTA standards. • Alternatives to traditional pile driving (e.g., sonic pile driving, jetting, cast-in-place or auger cast piles, non-displacement piles, pile cushioning, torque or hydraulic piles) or alternatives to traditional vibratory equipment shall be considered and implemented where feasible to reduce vibration levels. • Limit vibration-inducing vibratory and impact activities (e.g., pile driving, vibratory rollers, jack hammers) to the daytime hours between 6:00 a.m. and 8:00 p.m. Monday through Friday and between 8:00 a.m. and 8:00 p.m. on Saturday and Sunday. • Operate all vibration inducing impact equipment as far away from vibration-sensitive sites as reasonably possible from nearby structures . • Phase pile-driving and high-impact activities so as not to occur simultaneously with other construction activities, to the extent feasible. The total vibration level produced could be significantly less when each vibration source is operated at separate times.	
Fair Oaks Boulevard Corridor Plan	Not Evaluated	One candidate rezone site, Site 67, is located within the East Fair Oaks Boulevard District of the Fair Oaks Boulevard Corridor area. Given that there is no analysis of construction vibration in the Fair Oaks Boulevard EIR, the analysis of impacts related to construction vibration included in the General Plan Proposed Project Impact Evaluation above would apply to the candidate rezone Site 67. Existing residences are located within 136 feet and 541 feet of Site 67. Therefore, if a pile driver or vibratory roller were used at Site 67, the FTA threshold for human annoyance to frequent vibration events (i.e., 75 VdB) would be exceeded. This impact is potentially significant	PS	**Mitigation Measure NOI-2**	SU
North Watt Avenue Corridor Plan	Not Evaluated	Candidate rezone Sites 68 through 72 are located within the North Watt Avenue	PS	**Mitigation Measure NOI-2**	SU

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		Corridor area. Given that the North Watt Avenue EIR did not analyze impacts related to construction vibration, the analysis of impacts related to construction vibration included under "Sacramento County General Plan" would apply to candidate rezone sites within the North Watt Avenue Corridor Plan. See "Sacramento County General Plan" above for the applicable impact evaluation. Existing residences are located within 136 feet and 541 feet of Sites 68 through 72. Therefore, if a pile driver or vibratory roller were used at these sites, the FTA threshold for human annoyance to frequent vibration events (i.e., 75 VdB) would be exceeded. This impact is potentially significant.			
Old Florin Town SPA	Not Evaluated	Candidate rezone Sites 73 through 79 are located within the Old Florin Town SPA. Given that the Old Florin Town SPA EIR did not analyze impacts related to construction vibration, the analysis of impacts related to construction vibration included under "Sacramento County General Plan" would apply to the candidate rezone sites within the Old Florin Town SPA. There are residences located within 136 feet and 541 feet of Sites 76 through 79. Additionally, there is a church within 136 feet of Sites 73 through 75 and Site 78. Therefore, if a pile driver or vibratory roller were used at these sites, the FTA threshold for human annoyance to frequent vibration events (i.e., 75 VdB) would be exceeded. This impact is potentially significant.	PS	**Mitigation Measure NOI-2**	SU
Impact NOI-3: Operational Traffic Noise					
General Plan	SU	The Project would result in the generation of new vehicle trips from future development on the proposed candidate rezone sites. Additional vehicle trips would result in increases in traffic-related noise levels. Traffic noise modeling was conducted for existing and existing plus Project traffic conditions using Project-specific ADT volumes for affected roadway segments. Assuming full buildout, implementation of the Project would result in an increase in noise along 25 studied roadway segments, a decrease in noise along 3 studied roadway segments, and no change to noise levels along 20 roadway segments.	LTS	No feasible mitigation measure is available.	SU

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		However, consistent with County General Plan Policy NO-9, traffic noise level increases from the Project would be less than the allowable 1.5 dB L_{dn} for roadway segments with noise levels above 65 dB or 3+ dB increase for roadways with noise levels between 60 and 65 dB L_{dn}. The proposed Project would not result in a new or substantially more severe impact from new vehicle trips generated by the Project. The Project's contribution to impacts would be less than significant and overall impacts would remain significant and unavoidable, consistent with the findings of the General Plan EIR.			
Fair Oaks Boulevard Corridor Plan	SU	The proposed rezone of Site 67 would add residential development on the Fair Oaks Boulevard from California Avenue to Marshall Avenue roadway segment. However, traffic noise levels along this roadway segment would remain the same at Site 67 with the proposed Project. The proposed rezone of Site 67 would not result in a new or substantially more severe impact from new vehicle trips generated by the Project. The contribution of development on Site 67 to traffic noise would not be substantial and overall impacts would remain significant and unavoidable, consistent with the findings of the Fair Oaks Boulevard EIR.	LTS	No feasible mitigation measure is available.	SU
North Watt Avenue Corridor Plan	SU	The proposed rezone on Sites 68 through 72 would add residential development on roadway segments 47 (e.g., Watt Avenue from Antelope Road to Elkhorn Boulevard) and 48 (e.g., Watt Avenue from Elkhorn Boulevard to Don Julio Boulevard) in the North Watt Avenue Corridor area. Although roadway segment 47 would experience an increase in noise, the increase would not exceed the allowable incremental traffic noise increase threshold of 1.5 dB for roadway segments with existing noise levels above 65 dB $L_{dn.}$ The proposed rezone of Sites 68 through 72 would not result in a new or substantially more severe impact from new vehicle trips generated by the Project. The contribution of development on Sites 68 through 72 to traffic noise would not be substantial and overall impacts	LTS	No feasible mitigation measure is available.	SU

GENERAL PLAN/DISTINCT AREA PLAN	PREVIOUS EIR IMPACT CONCLUSION [1]	PROJECT LEVEL IMPACT SUMMARY	PROJECT LEVEL IMPACT BEFORE MITIGATION [1]	MITIGATION MEASURE	PROJECT LEVEL IMPACT AFTER MITIGATION (RELATIVE TO PREVIOUS EIRS IMPACT) [1]
		would remain significant and unavoidable, consistent with the findings of the North Watt Avenue EIR.			
Old Florin Town SPA	SU	The proposed rezone on Sites 73 through 79 would add additional residential development along four roadway segments (i.e., roadway segments 17, 18, 33, and 34) in the Old Florin Town SPA. Traffic noise increases along these roadway segments would not exceed the allowable incremental traffic noise increase threshold of 1.5 dB for roadway segments with existing noise levels above 65 dB L_{dn}. The proposed rezone of Sites 73 through 79 would not result in a new or substantially more severe impact from new vehicle trips generated by the Project. The contribution of development on Sites 73 through 79 to traffic noise would not be substantial and overall impacts would remain significant and unavoidable, consistent with the findings of the Old Florin Town SPA EIR.	LTS	No feasible mitigation measure is available.	SU
Impact NOI-4: Expose Existing Sensitive Receptors to New Stationary Noise Sources that Exceed the Applicable Noise Standards					
General Plan	Not Evaluated	The Project would include the rezone of parcels to Medium- and High-Density Residential. Mechanical noise equipment (e.g., HVAC systems) would be the primary noise source associated with medium- and high-density residential developments. Because it is not known at this time where individual developments associated with the Project would be specifically located on candidate rezone sites, details regarding the location of HVAC units are not known. However, subsequent development on the candidate rezone sites would be required to comply with applicable County guidelines, standards, and specifications related to operational noise. Adherence to existing regulations would ensure that noise impacts related to stationary noise sources would be reduced such that they would not exceed County standards. The proposed Project would not result in a substantially more severe impact from stationary noise sources than would occur with implementation of the General Plan.	LTS	No mitigation is required.	LTS
Fair Oaks Boulevard Corridor Plan	LTS with Mitigation	The proposed rezone on Site 67 would allow for residential development at	LTS	No mitigation is required.	LTS with Mitigation

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		increased density in the Fair Oaks Boulevard Corridor area. Noise sources associated with residential land uses include mechanical equipment such as HVAC equipment, residential landscaping activities, and outdoor recreational activities. Pursuant to County General Plan Policy NO-6, non-transportation noise sources generated by the proposed rezone on Site 67 would be required to be reduced so as not to exceed the County interior and exterior noise level standards at existing noise-sensitive land uses in the vicinity of Site 67. The proposed rezone of Site 67 would not result in a new or substantially more severe impact from stationary noise sources. Stationary noise sources from future of development on Site 67 would not be substantial and overall impacts would remain less than significant with mitigation, consistent with the findings of the Fair Oaks Boulevard EIR.			
North Watt Avenue Corridor Plan	LTS with Mitigation	The proposed rezone on Sites 68 through 72 would allow for residential development at increased density in the North Watt Avenue Corridor area. Noise sources associated with residential land uses include residential landscaping equipment, voices, outdoor recreational activities, and mechanical equipment such as HVAC equipment. Pursuant to General Plan Policy NO-6, non-transportation noise sources generated by the proposed rezone on Sties 68 through 72 would be required to be mitigated so as not to exceed the County interior and exterior noise level standards at existing noise-sensitive land uses in the vicinity of Sites 68 through 72. The proposed rezone of Sites 68 through 72 would not result in a new or substantially more severe impact from stationary noise sources. Stationary noise sources from future of development on Sites 68 through 72 would not be substantial and overall impacts would remain less than significant with mitigation, consistent with the findings of the North Watt Avenue EIR.	LTS	No mitigation is required.	LTS with Mitigation
Old Florin Town SPA	LTS with Mitigation	The proposed rezone on Sites 73 through 79 would allow for residential development at increased density in the Old Florin Town	LTS	No mitigation is required.	LTS with Mitigation

GENERAL PLAN/DISTINCT AREA PLAN	PREVIOUS EIR IMPACT CONCLUSION [1]	PROJECT LEVEL IMPACT SUMMARY	PROJECT LEVEL IMPACT BEFORE MITIGATION [1]	MITIGATION MEASURE	PROJECT LEVEL IMPACT AFTER MITIGATION (RELATIVE TO PREVIOUS EIRS IMPACT) [1]
		SPA. Noise sources associated with residential land uses include residential landscaping equipment, voices, outdoor recreational activities, and mechanical equipment such as HVAC equipment. Pursuant to General Plan Policy NO-6, non-transportation noise sources generated by the proposed rezone on Sites 73 through 79 would be required to be mitigated so as not to exceed the County interior and exterior noise level standards at existing noise-sensitive land uses in the vicinity of Sites 73 through 79. The proposed rezone of Sites 73 through 79 would not result in a new or substantially more severe impact from stationary noise sources. Stationary noise sources from future of development on Sites 73 through 79 would not be substantial and overall impacts would remain less than significant with mitigation, consistent with the findings of the Old Florin Town SPA EIR.			
PUBLIC SERVICES AND RECREATION					
Impact PSR-1: Require Construction of New Fire Protection Facilities					
General Plan	LTS	The Project would result in the rezoning of candidate sites within infill and distinct planning areas of Sacramento County, which have existing fire protection and emergency services. Compliance with development standards and design guidelines would ensure that the proposed Project would not result in new substantial adverse physical impacts associated with the provision of new or physically altered fire and emergency services and/or facilities than would occur with implementation of the General Plan.	LTS	No mitigation is required.	LTS
Fair Oaks Boulevard Corridor Plan	LTS	The proposed rezone on Site 67 would result in a net increase in residential capacity of 12 units. The addition of 12 units would not significantly change acceptable service ratios, response times, or performance objectives within the applicable station response area. Any development on Site 67 would be required to meet the existing regulations related to fire/emergency access requirements. The rezone of Site 67 would not result new	LTS	No mitigation is required.	LTS

GENERAL PLAN/DISTINCT AREA PLAN	PREVIOUS EIR IMPACT CONCLUSION [1]	PROJECT LEVEL IMPACT SUMMARY	PROJECT LEVEL IMPACT BEFORE MITIGATION [1]	MITIGATION MEASURE	PROJECT LEVEL IMPACT AFTER MITIGATION (RELATIVE TO PREVIOUS EIRS IMPACT) [1]
		substantial adverse physical impacts associated with the provision of new or physically altered fire and emergency services and/or facilities, in order to maintain acceptable service ratios, response times, or performance objectives than would occur with implementation of the Fair Oaks Boulevard Corridor Plan.			
North Watt Avenue Corridor Plan	LTS	The proposed rezone on Sites 68 through 72 would result in a net increase in residential capacity of 230 units. In comparison to the total buildout studied in the North Watt Avenue Corridor Plan EIR, which includes 7,200 residential units, 1,170,000 square feet of new commercial-retail uses, and 714,700 square feet of new office uses, the potential increase of 230 residential units would not significantly impact acceptable service ratios, response times, or performance objectives within the applicable station response area. Any development on Sites 68 through 72 would be required to meet the existing regulations related to fire/emergency access requirements. The rezone of Sites 68 through 72 would not result new substantial adverse physical impacts associated with the provision of new or physically altered fire and emergency services and/or facilities, in order to maintain acceptable service ratios, response times, or performance objectives than would occur with implementation of the North Watt Avenue Corridor Plan.	LTS	No mitigation is required.	LTS
Old Florin Town SPA	LTS	The proposed rezone on Sites 73 through 79 would result in a net increase in residential capacity of 274 units. In comparison to the total buildout studied in the Old Florin Town SPA EIR, which includes 1,126 residential units, 391,500 square feet of new commercial-retail uses, and 1,888 new general industrial employees, the potential increase of 274 residential units would not significantly impact acceptable service ratios, response times, or performance objectives within the applicable station response area. Any development on Sites 73 through 79 would be required to meet the existing regulations related to fire/emergency access	LTS	No mitigation is required.	LTS

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		requirements. The rezone of Sites 73 through 79 would not result new substantial adverse physical impacts associated with the provision of new or physically altered fire and emergency services and/or facilities, in order to maintain acceptable service ratios, response times, or performance objectives than would occur with implementation of the Old Florin Town SPA.			
Impact PSR-2: Require Construction of New Police Protection Facilities					
General Plan	LTS	The Project would result in a potential maximum net increase of 4,081 new housing units. The candidate rezone sites would be provided law enforcement protection services by the Sacramento County Sheriff's Department. Future development allowed under Project could result in a population increase of approximately 11,264 residents (assuming 2.76 residents per dwelling unit [U.S 2020 Census]) in the County. The increased population would require approximately 11.3 additional law enforcement staff to meet the 1 officer per 1,000 person staffing goal as identified in the General Plan EIR. Growth would occur incrementally and may not be realized during the life of the General Plan. The General Plan contains policies (PF-50 through PF-52) for the planning and development of law enforcement services. The proposed Project would not result in new substantial adverse physical impacts associated with the provision of new or physically altered police protection services and/or facilities, in order to maintain acceptable service ratios, response times, or performance objectives than would occur with implementation of the General Plan.	LTS	No mitigation is required.	LTS
Fair Oaks Boulevard Corridor Plan	LTS	Candidate rezone Site 67 is located within the North District 2 service area of the Sheriff's Department. Depending on the buildout of the Fair Oaks Boulevard Corridor Plan and the candidate rezone Site 67, the Project could require up to 0.03 additional law enforcement officers and related services over the life of the Fair Oaks Boulevard Corridor Plan. The potential population growth identified in the Fair Oaks Corridor Plan from development allowed	LTS	No mitigation is required.	LTS

GENERAL PLAN/DISTINCT AREA PLAN	PREVIOUS EIR IMPACT CONCLUSION [1]	PROJECT LEVEL IMPACT SUMMARY	PROJECT LEVEL IMPACT BEFORE MITIGATION [1]	MITIGATION MEASURE	PROJECT LEVEL IMPACT AFTER MITIGATION (RELATIVE TO PREVIOUS EIRS IMPACT) [1]
		under the Project on Site 67 would be minimal and all policies of the General Plan would still be implemented to reduce impacts to services and future projects will be subject to security measures in the Zoning Code, Uniform Building Code, and Land Development Ordinances. The rezone of Site 67 would not result new substantial adverse physical impacts associated with the provision of new or physically altered police services and/or facilities, in order to maintain acceptable service ratios, response times, or performance objectives than would occur with implementation of the Fair Oaks Boulevard Corridor Plan.			
North Watt Avenue Corridor Plan	LTS	Candidate rezone Sites 68 through 72 are located within the Northwest District 1 service area of the Sheriff's Department. Depending on the buildout of the North Watt Avenue Corridor Plan and the candidate rezone on Sites 68 through 72, the Project could require up to 0.63 additional law enforcement officers and related services over the life of the North Watt Avenue Corridor Plan. The North Watt Avenue EIR noted that development/ redevelopment within the corridor would be subject to design requirements specified by the Sheriff's Department. Sheriff's Department review would occur at design review, grading plan and/or building permit submittal for individual projects. The rezone of Sites 68 through 72 would not result new substantial adverse physical impacts associated with the provision of new or physically altered police services and/or facilities, in order to maintain acceptable service ratios, response times, or performance objectives than would occur with implementation of the North Watt Avenue Corridor Plan.	LTS	No mitigation is required.	LTS
Old Florin Town SPA	LTS	Candidate rezone Sites 73 through 79 are located within the Central District 6 service area of the Sheriff's Department. Depending on the buildout of the Old Florin Town SPA and the candidate rezone Sites 73 through 79, the Project could require up to 0.76 additional law enforcement officers and related services over the life of the Old Florin Town SPA. The Old Florin Town SPA	LTS	No mitigation is required.	LTS

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		EIR noted that development/redevelopment within the corridor would be subject to design requirements specified by the Sheriff's Department. Sheriff's Department review would occur at design review, grading plan and/or building permit submittal for individual projects. The rezone of Sites 73 through 79 would not result new substantial adverse physical impacts associated with the provision of new or physically altered police services and/or facilities, in order to maintain acceptable service ratios, response times, or performance objectives than would occur with implementation of the Old Florin Town SPA.			
Impact PSR-3: Require Construction of New Schools					
General Plan	LTS	The proposed Project would result in the potential for 4,081 new residential units located within seven school districts within Sacramento County. All of the school districts will see a net increase in student population with the Project. While the school districts will see a net increase in student population, this will occur gradually as sites are developed and may take longer than the life of the housing element to fully develop. As noted, future development associated with the Project would require financing plans or participation in existing plans that include funding mechanisms for schools. Payment of levied or imposed fees pursuant to the California Government Code Section 65996(b) is considered full and complete school facilities mitigation. The proposed Project would not result in new substantial adverse physical impacts associated with the provision of new or physically altered school services and/or facilities than would occur with implementation of the General Plan.	LTS	No mitigation is required.	LTS
Fair Oaks Boulevard Corridor Plan	LTS	The Project would result in the rezone of one candidate site (Site 67) with a potential maximum net increase of 12 residential units within the Fair Oaks Boulevard Corridor area. This minor increase in residential units within the San Juan Unified School District (SJUSD) area may result in some additional student population within	LTS	No mitigation is required.	LTS

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		the district but because there is no development proposed with the Project, exact increases in student populations because of the Project is unknown at this time. Given the relatively small amount of new residential units that may result from development on Site 67 allowed under the Project, impacts to SJUSD would be minimal. In addition, development proposed on Site 67 would be required to pay school impact fees. Payment of levied or imposed fees pursuant to the California Government Code Section 65996(b) is considered full and complete school facilities mitigation. The rezone of Site 67 would not result new substantial adverse physical impacts associated with the provision of new or physically altered school services and/or facilities than would occur with implementation of the Fair Oaks Boulevard Corridor Plan.			
North Watt Avenue Corridor Plan	LTS	The Project would result in the rezone of five candidate sites (Sites 68 through 72) with a potential maximum net increase of 230 residential units within the North Watt Avenue Corridor area. Sites 68 through 72 are located in TRUSD and the increase in residential units would result in an additional student population. All new development in the North Watt Avenue Corridor area would be required to pay school impact fees. Payment of levied or imposed fees pursuant to the California Government Code Section 65996(b) is considered full and complete school facilities mitigation. The rezone of Sites 68 through 72 would not result new substantial adverse physical impacts associated with the provision of new or physically altered school services and/or facilities than would occur with implementation of the North Watt Avenue Corridor Plan.	LTS	No mitigation is required.	LTS
Old Florin Town SPA	LTS	The Project would result in the rezone of seven candidate sites (Sites 73 through 79) with a potential maximum net increase of 274 residential units within the Old Florin Town SPA. All new development on Sites 73 through 79 would be required to pay school impact fees. Payment of levied or imposed fees pursuant to the California	LTS	No mitigation is required.	LTS

GENERAL PLAN/DISTINCT AREA PLAN	PREVIOUS EIR IMPACT CONCLUSION [1]	PROJECT LEVEL IMPACT SUMMARY	PROJECT LEVEL IMPACT BEFORE MITIGATION [1]	MITIGATION MEASURE	PROJECT LEVEL IMPACT AFTER MITIGATION (RELATIVE TO PREVIOUS EIRS IMPACT) [1]
		Government Code Section 65996(b) is considered full and complete school facilities mitigation. The rezone of Sites 73 through 79 would not result new substantial adverse physical impacts associated with the provision of new or physically altered school services and/or facilities than would occur with implementation of the Old Florin Town SPA.			
Impact PSR-4: Require Construction of Library Facilities					
General Plan	LTS	No development is proposed or authorized with the proposed project; therefore, the extent of impacts to library branches is unknown; however, according to the General Plan EIR, Library Master Plan and County Library Plan Update, no new libraries are needed within the infill or commercial corridor areas where candidate rezone sites occur, but a new library is required in the Vineyard growth area. As noted in the General Plan EIR, funding for expansion or renovation of existing facilities and construction of new facilities is addressed in the Library Master Plan and County Library Plan Update. Funding mechanisms include but are not limited to: individual development projects paying impact fees at the time of development, grant funding, or funding from the County General Fund. The proposed Project would not result in new substantial adverse physical impacts associated with the provision of new or physically altered library services and/or facilities than would occur with implementation of the General Plan.	LTS	No mitigation is required.	LTS
Fair Oaks Boulevard Corridor Plan	Not Evaluated	The Fair Oaks Boulevard Corridor Plan is located within the Carmichael Library Service Area. It is assumed that all growth within the Fair Oaks Boulevard Corridor Plan from the proposed Project on Site 67 would result in increased use at the Carmichael Library. According to the County Library Plan Update, which considered potential growth as outlined in the General Plan EIR and adopted commercial corridor plans, the Carmichael Library does not need to expand, and operations are efficient to serve existing and planned population. The rezone of Site 67	LTS	No mitigation is required.	LTS

GENERAL PLAN/DISTINCT AREA PLAN	PREVIOUS EIR IMPACT CONCLUSION [1]	PROJECT LEVEL IMPACT SUMMARY	PROJECT LEVEL IMPACT BEFORE MITIGATION [1]	MITIGATION MEASURE	PROJECT LEVEL IMPACT AFTER MITIGATION (RELATIVE TO PREVIOUS EIRS IMPACT) [1]
		would not result new substantial adverse physical impacts associated with the provision of new or physically altered library services and/or facilities than would occur with implementation of the Fair Oaks Boulevard Corridor Plan			
North Watt Avenue Corridor Plan	Not Evaluated	The North Watt Avenue Corridor Plan is located within the North Highlands Library Service Area. According to the County Library Plan Update, which considered potential growth as outlined in the General Plan and adopted commercial corridor plans, the North Highlands Library does not need to expand, and operations are efficient to serve existing and planned population. The rezone of Sites 68 through 72 would not result new substantial adverse physical impacts associated with the provision of new or physically altered library services and/or facilities than would occur with implementation of the North Watt Avenue Corridor Plan.	LTS	No mitigation is required.	LTS
Old Florin Town SPA	Not Evaluated	The Old Florin Town SPA is located within the Southgate Library Service Area. According to the County Library Plan Update, which considered potential growth as outlined in the General Plan and adopted commercial corridor plans, the Southgate Library does not need to expand, and operations are efficient to serve existing and planned population. The rezone of Sites 73 through 79 would not result new substantial adverse physical impacts associated with the provision of new or physically altered library services and/or facilities than would occur with implementation of the Old Florin Town SPA.	LTS	No mitigation is required.	LTS
Impact PSR-5: Require Construction of Parks and Recreation Facilities					
General Plan	LTS	Future development associated with the Project would increase demand for parks and recreation facilities in the County. Existing parks may need to be updated to meet the additional demand resulting from the Project. As required by the Quimby Act and General Plan Policy PF-123, development associated with the Project would be required to pay park land dedication and/or in lieu fees to develop and maintain parks. The proposed Project would	LTS	No mitigation is required.	LTS

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		not result in new substantial adverse physical impacts associated with the provision of new or physically altered park and recreation services and/or facilities than would occur with implementation of the General Plan			
Fair Oaks Boulevard Corridor Plan	LTS	Site 67 is located within the Carmichael Recreation and Park District and at the time of future development associated with the Project, the developer would be required to pay park land dedication and/or in lieu fees to develop and maintain parks within the district. Compliance with the Quimby Act and General Plan would ensure that the existing parks would be maintained to meet the demand from future development on Site 67 as allowed under the Project.	LTS	No mitigation is required.	LTS
North Watt Avenue Corridor Plan	LTS	The North Watt Avenue Corridor continues to be provided with park and recreation services by the North Highlands Recreation and Park District (NHPD). At the time of future development associated with the Project on Sites 68 through 72, the developers would be required to dedicate parkland and/or pay in lieu fees to develop and maintain parks to the satisfaction of NHPD. Compliance with the Quimby Act and General Plan would ensure that existing parks would be maintained to meet the demand from the Project and/or if any additional parkland dedication is required by NHPD.	LTS	No mitigation is required.	LTS
Old Florin Town SPA	LTS	The Old Florin Town SPA continues to be provided with park and recreation services by Southgate Recreation and Park District (SouthgatePD). At the time of future development associated with the Project on Sites 73 through 79, the developers would be required to dedicate parkland and/or pay in lieu fees to develop and maintain parks to the satisfaction of SouthgatePD. Compliance with the Quimby Act and General Plan would ensure that existing parks would be maintained to meet the demand from the project and/or if any additional parkland dedication is required by SouthgatePD.	LTS	No mitigation is required.	LTS
TRANSPORTATION					

GENERAL PLAN/DISTINCT AREA PLAN	PREVIOUS EIR IMPACT CONCLUSION [1]	PROJECT LEVEL IMPACT SUMMARY	PROJECT LEVEL IMPACT BEFORE MITIGATION [1]	MITIGATION MEASURE	PROJECT LEVEL IMPACT AFTER MITIGATION (RELATIVE TO PREVIOUS EIRS IMPACT) [1]
Impact TRAN-1: Bicycle, Pedestrian, and Transit Facility Impacts					
General Plan	SU	Future development on candidate rezone sites would be subject to, and designed in accordance with, County plans, policies, and programs for transit, bicycle, and pedestrian facilities. Implementation of General Plan policies, Active Transportation Plan policies, and all applicable County guidelines, standards, and specifications would be required for future development allowed under the Project. Compliance with these regulations would ensure that there would be no new conflicts with adopted policies, plans, or programs for transit, bicycle, or pedestrian facilities. However, as detailed above, the General Plan EIR determined that there would not be adequate funding to support needed transportation facilities. The Project would result in an increase in residences in the unincorporated County; thus, associated transit ridership and demand for services would increase. The proposed Project would result in a more severe impact to transit than would occur with implementation of the General Plan.	SU	No feasible mitigation measure is available.	SU
Fair Oaks Boulevard Corridor Plan	LTS	Development on Site 67 could generate transit ridership; however, existing transit service in the area would have the capacity to accommodate anticipated demand. Additionally, Fair Oaks Boulevard Corridor Plan Policy CP 6 supports improved transit service through the enhancement of transit access. The proposed rezone of Site 67 would not result in a new or substantially more severe impacts to bicycle, pedestrian, or transit facilities.	LTS	No mitigation is required.	LTS
North Watt Avenue Corridor Plan	LTS	Future development on Sites 68 through 72 within the North Watt Avenue Corridor area would implement the North Watt Avenue Corridor Plan policies as well as General Plan policies, Active Transportation Plan polices, and all applicable County guidelines, standards, and specifications that would ensure that there would be no new conflicts with adopted policies, plans, or programs for transit, bicycle, or pedestrian facilities. The proposed rezone on Sites 68 through 72 would not	LTS	No mitigation is required.	LTS

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		exacerbate impacts to pedestrian and/or bicycle facilities as compared to what was evaluated in the North Watt Avenue EIR. The proposed rezone of Sites 68 through 72 would not result in a new or substantially more severe impact to bicycle, pedestrian, and transit facilities.			
Old Florin Town SPA	LTS	Development on Sites 73 through 79 within the Old Florin Town SPA would be consistent with General Plan policies, Active Transportation Plan polices, and all applicable County guidelines, standards, and specifications that would ensure that there would be no new conflicts with adopted policies, plans, or programs for transit, bicycle, or pedestrian facilities. The proposed rezone on Sites 73 through 79 would not exacerbate impacts to pedestrian, bicycle, and/or transit facilities as compared to what was evaluated in the Old Florin Town SPA EIR. The proposed rezone of Sites 73 through 79 would not result in a new or substantially more severe impact to bicycle, pedestrian, and transit facilities.	LTS	No mitigation is required.	LTS
Impact TRAN-2: VMT Impacts					
General Plan	Not Evaluated	Table TRAN-4 in Chapter 10 shows that the Project as a whole would have a significant VMT impact as compared to the regionwide average. In addition, as shown in Table TRAN-5, 18 of the 79 candidate rezone sites with development allowed under the Project would exceed the 85 percent threshold for VMT. The proposed Project would result in a new or substantially more severe impact from Project VMT.	S	**Mitigation Measure TRAN-1: Participate in the County of Sacramento VMT Mitigation Program** Applicants for individual development projects located on candidate rezone sites deemed to result in a significant VMT impact, as identified in Table TRAN-5 (Sites 2, 4, 6, 13, 14, 17, 18, 24, 25, 26, 27, 28, 56, 57, 62, 63, 65, and 66), shall compare their project to the VMT screening criteria below. If the applicant's individual project meets one of the screening criteria below, consistent with the County's Transportation Analysis Guidelines, the applicant shall submit a memo detailing the VMT screening consistency to the County's Environmental Coordinator for review and approval. • Small Projects ○ Projects generating less than 237 average daily traffic. • Projects Near Transit Stations ○ High-Quality Transit: Project is located within ½-mile of an existing major transit stop or an existing stop along a high-quality transit corridor; and ○ Parking: Project does not include substantially more parking than required, such that it discourages transit use by making it too convenient to drive; and ○ Affordable Housing: Project does not replace affordable residential units with a smaller number of moderate- or high-income residential units; and ○ Active Transportation: Project does not negatively impact transit, bike, or pedestrian infrastructure. • Affordable Residential Projects	SU

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				○ Affordability: Screening criteria only apply to the affordable units; and ○ Parking: Project does not include substantially more parking than required, such that it discourages transit use by making it too convenient to drive; and ○ Transit Access: Project has access to transit within a ½ mile walking distance; and ○ Active Transportation: Project does not negatively impact transit, bike, or pedestrian infrastructure. Individual development projects that do not meet any of the screening criteria shall first implement California Air Pollution Control Officers Association (CAPOCA) VMT reduction Measure T-16 to unbundle residential parking costs from property costs (i.e., require those who wish to purchase parking spaces to do so at an additional cost) (CAPCOA 2021). Individual project developers shall demonstrate if implementation of CAPCOA VMT reduction measure T-16 would reduce an individual project's VMT below applicable thresholds. Individual development projects that would continue to exceed the County's VMT thresholds following implementation of CAPCOA VMT reduction measure T-16 shall participate in the County of Sacramento's VMT Mitigation Program, when and if the program has been adopted prior to development of the individual project.	
Fair Oaks Boulevard Corridor Plan	Not Evaluated	Development allowed on Site 67 under the Project within the Fair Oaks Boulevard Corridor area would reduce VMT per capita by 0.39 (approximately 2.66 percent reduction). The proposed rezone of Site 67 would not result in a new or substantially more severe VMT impact.	LTS	No mitigation is required.	LTS
North Watt Avenue Corridor Plan	Not Evaluated	Development on Sites 68 through 72 would not exceed 85 percent of the regionwide VMT per capita (i.e., 17.17 VMT per capita) at the parcel level. The proposed rezone of Sites 68 through 72 would not result in a new or substantially more severe VMT impact.	LTS	No mitigation is required.	LTS
Old Florin Town SPA	Not Evaluated	Development allowed on Sites 73 through 79 under the Project within the Old Florin Town SPA would reduce VMT per capita by 2.17 (approximately 15.61 percent reduction). The proposed rezone of Sites 73 through 79 would not result in a new or substantially more severe VMT impact.	LTS	No mitigation is required.	LTS
Impact TRAN-3: Hazardous Design Feature Impacts					
General Plan	LTS	Future development on candidate rezone sites would be subject to, and designed in accordance with, the County's 2018 Improvement Standards or the most recent design standards available at the time of development. These standards address potential design hazards including sight	LTS	No mitigation is required.	LTS

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		distance, driveway placement, signage and striping. New transportation facilities, or improvements to such facilities associated with subsequent development as part of the Project would be constructed based on industry design standards and best practices consistent with the County's General Plan Circulation Element, which prioritizes the safety of all modes of transportation. The proposed Project would not result in a new or substantially more severe impact from hazardous design features.			
Fair Oaks Boulevard Corridor Plan	LTS	Similar to the discussion above for the General Plan, development on Site 67 would be required to comply with existing standards that address potential design hazards. The proposed rezone of Site 67 would not result in a new or substantially more severe impact from hazardous design features.	LTS	No mitigation is required.	LTS
North Watt Avenue Corridor Plan	LTS	Similar to the discussion above for the General Plan, development on Sites 68 through 72 would be required to comply with existing standards that address potential design hazards. The proposed rezone of Sites 68 through 72 would not result in a new or substantially more severe impact from hazardous design features.	LTS	No mitigation is required.	LTS
Old Florin Town SPA	LTS	Similar to the discussion above for the General Plan, development on Sites 73 through 79 would be required to comply with existing standards that address potential design hazards. The proposed rezone of Sites 73 through 79 would not result in a new or substantially more severe impact from hazardous design features.	LTS	No mitigation is required.	LTS
Impact TRAN-4: Emergency Access Impacts					
General Plan	LTS	Residential development implemented under the Project would be required to meet all State and local regulations related to emergency access during construction and operations. By virtue of being designed in accordance with City standards and specifications, future development under the Project would provide adequate emergency access. Future developments would be required to comply with the California Fire Code of Regulations (Title	LTS	No mitigation is required.	LTS

GENERAL PLAN/DISTINCT AREA PLAN	PREVIOUS EIR IMPACT CONCLUSION [1]	PROJECT LEVEL IMPACT SUMMARY	PROJECT LEVEL IMPACT BEFORE MITIGATION [1]	MITIGATION MEASURE	PROJECT LEVEL IMPACT AFTER MITIGATION (RELATIVE TO PREVIOUS EIRS IMPACT) [1]
		24, Part 9), adopted by reference in the Sacramento County Code, Section 17.04.010. This section of code requires the width of an unobstructed roadway to measure no less than 24 feet to provide adequate access for fire and emergency responders. The County requires coordination for all projects with Sacramento Metro Fire District and all applicable fire districts to ensure that the design of local roads would accommodate emergency vehicles. The proposed Project would not result in a new or substantially more severe impact on emergency access.			
Fair Oaks Boulevard Corridor Plan	Not Evaluated	Similar to the discussion above for the General Plan, development on Site 67 would be required to comply with existing standards that address emergency access. The proposed rezone of Site 67 would not result in a new or substantially more severe impact related to emergency access.	LTS	No mitigation is required.	LTS
North Watt Avenue Corridor Plan	Not Evaluated	Similar to the discussion above for the General Plan, development on Sites 68 through 72 would be required to comply with existing standards that address emergency access. The proposed rezone of Sites 68 through 72 would not result in a new or substantially more severe impact related to emergency access.	LTS	No mitigation is required.	LTS
Old Florin Town SPA	Not Evaluated	Similar to the discussion above for the General Plan, development on Sites 73 through 79 would be required to comply with existing standards that address emergency access. The proposed rezone of Sites 73 through 79 would not result in a new or substantially more severe impact related to emergency access.	LTS	No mitigation is required.	LTS
Impact TRAN-5: Airport Safety Impacts					
General Plan	LTS	There are candidate rezone sites located within the Rio Linda Airport and McClellan Airport safety zones. Any proposed new construction or expansion of existing structures would penetrate any of the imaginary surfaces for the Rio Linda Airport or McClellan Airport. Subsequent development allowed under the Project would be required to meet the regulations established in FAR 14 CFR Part 77 if individual development would have the	LTS	No mitigation is required.	LTS

GENERAL PLAN/DISTINCT AREA PLAN	PREVIOUS EIR IMPACT CONCLUSION [1]	PROJECT LEVEL IMPACT SUMMARY	PROJECT LEVEL IMPACT BEFORE MITIGATION [1]	MITIGATION MEASURE	PROJECT LEVEL IMPACT AFTER MITIGATION (RELATIVE TO PREVIOUS EIRS IMPACT) [1]
		potential to penetrate the height notification limits of FAR 14 CFR Part 77 and would be required to notify the FAA to undergo formal evaluation that would ensure the Project would not result in a safety hazard for people residing within the vicinity of the of the candidate rezone sites. The proposed Project would not result in a new or substantially more severe impact from airport hazards			
Fair Oaks Boulevard Corridor Plan	Not Evaluated	The Fair Oaks Boulevard Corridor area is located more than two miles away from the nearest airport. Therefore, Site 67 is not located within an airport land use plan. The proposed rezone of Site 67 would not result in a new or substantially more severe impact from airport hazards.	LTS	No mitigation is required.	LTS
North Watt Avenue Corridor Plan	SU	There are five candidate rezone sites located within the North Watt Avenue Corridor area, and two of the candidate rezone sites are located within the McClellan Overflight Zone (i.e., Site 68 and Site 69). Residential uses are identified as compatible uses within the Overflight Zone as identified in the McClellan Airport CLUP, and the Project obtained a letter of determination that states that the Project, including Sites 68 and 69 are consist with the McClellan Airport CLUP and California Airport Land Use Planning Handbook. The proposed rezone of Sites 68 through 72 would not result in a new or substantially more severe impact from airport hazards.	LTS	No mitigation is required.	SU
Old Florin Town SPA	LTS	The Old Florin Town SPA is located more than two miles from the nearest airport. Therefore, development under the Project on Sites 73 through 79 are not located within an airport land use plan. The proposed rezone of Sites 73 through 79 would not result in a new or substantially more severe impact from airport hazards.	LTS	No mitigation is required.	LTS
TRIBAL CULTURAL RESOURCES					
Impact TCR-1: Cause a Substantial Adverse Change in the Significance of a Tribal Cultural Resource					
General Plan	Not Evaluated	Future development that would not undergo discretionary review would have the potential to result in the loss of tribal resources during ground-disturbing	PS	**Mitigation Measure TCR-1: Inadvertent/Unanticipated Tribal Cultural Resources Discoveries** If any suspected tribal cultural resources (TCR) are discovered during ground disturbing construction activities, all work shall cease within 100 feet of the find, or an	LTS

GENERAL PLAN/DISTINCT AREA PLAN	PREVIOUS EIR IMPACT CONCLUSION [1]	PROJECT LEVEL IMPACT SUMMARY	PROJECT LEVEL IMPACT BEFORE MITIGATION [1]	MITIGATION MEASURE	PROJECT LEVEL IMPACT AFTER MITIGATION (RELATIVE TO PREVIOUS EIRS IMPACT) [1]
		activities if previous undiscovered tribal resources are present. In addition, even with adherence to the existing regulations and policies, future discretionary development under the Project could still permit the loss of tribal cultural resources and landscapes that may be of cultural or religious significance to California Native American tribes.		agreed upon distance based on the nature of the find. A Tribal Representative from a California Native American tribe that is traditionally and culturally affiliated with the geographic area shall be immediately notified and shall determine if the find is a TCR (PRC Section 21074). The Tribal Representative will make recommendations for further evaluation and treatment as necessary. Preservation in place is the preferred option for mitigation of TCRs, and every effort shall be made to preserve the resources in place, including through project redesign, if feasible. When avoidance is infeasible, culturally appropriate treatments may include, but are not limited to, processing materials for reburial, minimizing handling of cultural objects, leaving objects in place within the landscape, or returning objects to a location within the candidate rezone site where they will not be subject to future impacts. Permanent curation of TCRs shall not take place unless approved in writing by the California Native American Tribe that is traditionally and culturally affiliated with the candidate rezone site. The contractor shall implement any measures deemed by the County to be necessary and feasible to preserve in place, avoid, or minimize impacts to the resource, including, but not limited to, facilitating the appropriate tribal treatment of the find, as necessary. Treatment that preserves or restores the cultural character and integrity of a TCR may include Tribal Monitoring, culturally appropriate recovery of cultural objects, and reburial of cultural objects or cultural soil. Work at the discovery location shall not resume until all necessary investigation and evaluation of the discovery have been satisfied.	
Fair Oaks Boulevard Corridor Plan	Not Evaluated	The proposed rezone on Site 67 would result in minor development capacity increase in the Fair Oaks Boulevard Corridor area. Increased development could result in ground disturbance and impacts to tribal cultural resources similar to the discussion above for the General Plan.	PS	**Mitigation Measure TCR-1**	LTS
North Watt Avenue Corridor Plan	Not Evaluated	The proposed rezone on Sites 68 through 72 would result in increased development capacity in the North Watt Avenue Corridor area. Increased development could result in ground disturbance and impacts to tribal cultural resources similar to the discussion above for the General Plan.	PS	**Mitigation Measure TCR-1**	LTS
Old Florin Town SPA	Not Evaluated	The proposed rezone on Sites 73 through 79 would result in increased development capacity in the Old Florin Town SPA. Increased development could result in ground disturbance and impacts to tribal cultural resources similar to the discussion above for the General Plan.	PS	**Mitigation Measure TCR-1**	LTS
UTILITIES AND SERVICE SYSTEMS					
Impact UTL-1: Exceed Reasonable Foreseeable Future Water Service Capacity					
General Plan	SU	The proposed candidate rezone sites located in RLECWD and FCWD would have the potential to result in increased water	SU	None available beyond compliance with General Plan Policy CO-35 and Implementation Measure A.	SU

GENERAL PLAN/DISTINCT AREA PLAN	PREVIOUS EIR IMPACT CONCLUSION [1]	PROJECT LEVEL IMPACT SUMMARY	PROJECT LEVEL IMPACT BEFORE MITIGATION [1]	MITIGATION MEASURE	PROJECT LEVEL IMPACT AFTER MITIGATION (RELATIVE TO PREVIOUS EIRS IMPACT) [1]
		demand exceeding future water service capacity in these two water districts. The proposed Project would result in a more severe impact related to exceeding reasonably foreseeable future water service capacity over what was already disclosed in the General Plan EIR.			
Fair Oaks Boulevard Corridor Plan	LTS	Site 67 is located within the CWD. Development on Site 67 would not exceed reasonably foreseeable future water service capacity in CWD. The rezone of Site 67 would not result in new substantial adverse physical impacts associated with exceeding reasonably foreseeable future water service capacity than would occur with implementation of Fair Oaks Boulevard Corridor Plan.	LTS	No mitigation is required.	LTS
North Watt Avenue Corridor Plan	LTS with mitigation	The North Watt Avenue EIR indicated that cumulative development could result in significant impacts prior to mitigation. Although SSWD has verified that there is adequate water supply to support the increased density associated with development on Sites 68 through 72 under the Project within the North Watt Avenue Corridor Plan, development of candidate rezone sites within the Corridor would still need to study, plan, and construct necessary water infrastructure. Therefore, even though the Project may not result in substantially more severe impacts associated with water supply, impacts related to water infrastructure needs may be the same or slightly increased from what was disclosed in the North Watt Avenue EIR.	S	**Mitigation Measure UTL-1A (NW-PS-1: Public Service Infrastructure, Mitigation in North Watt Avenue EIR, Applies Only to North Watt Corridor Plan Sites)** Prior to Development Plan Review or issuance of building permits for projects resulting in intensification of use or increased square footage associated with development pursuant to the North Watt Avenue Corridor Plan, the Sacramento County Municipal Services Agency (MSA) shall prepare, or facilitate the preparation of, a phasing plan that identifies thresholds of development for when necessary improvements are required. The phasing plan shall also identify a mechanism to track when thresholds are met so infrastructure improvements are constructed when needed. If private applicants/developers wish to proceed with development ahead of MSA's phasing plan, project specific analyses (i.e. sewer study, water study, traffic study) will be required to ensure that the existing infrastructure can accommodate the proposed development. Infrastructure improvements that are needed to accommodate proposed development shall be constructed prior to issuing building permits. **Mitigation Measure UTL-1B (NW-PS-2: Water Supply, Mitigation in North Watt Avenue EIR, Applies Only to North Watt Corridor Plan Sites)** When water supply thresholds are met, as identified in the MSA phasing plan, no further development in accordance with the Corridor Plan shall occur until additional water supply is secured to support future Corridor Plan development and necessary fire flows	LTS
Old Florin Town SPA	SU	All seven sites located within the Old Florin Town SPA are served water from FCWD. Both the General Plan EIR and the Old Florin Town SPA EIR determined that FCWD had insufficient water supplies to construct the entire Old Florin Town SPA area. Though the FCWD GM has indicated that the additional demand of the Project would be adequately served by the District,	SU	**Mitigation Measure UTL-1C (OFT-PS-1: Public Service Infrastructure, Mitigation in Old Florin Town SPA EIR, Applies Only to Old Florin Town SPA Sites)** Prior to Development Plan Review or issuance of building permits for projects resulting in intensification of use or increased square footage associated with development pursuant to the Old Florin Town Special Planning Area Ordinance, the Sacramento County Municipal Services Agency (MSA) shall prepare, or facilitate the preparation of, a phasing plan that identifies thresholds of development for when necessary improvements are required. The phasing plan shall also identify a	SU

GENERAL PLAN/DISTINCT AREA PLAN	PREVIOUS EIR IMPACT CONCLUSION [1]	PROJECT LEVEL IMPACT SUMMARY	PROJECT LEVEL IMPACT BEFORE MITIGATION [1]	MITIGATION MEASURE	PROJECT LEVEL IMPACT AFTER MITIGATION (RELATIVE TO PREVIOUS EIRS IMPACT) [1]
		the additional water supply to meet increased demand, is uncertain at this time. The mitigation measure in the Old Florin Town SPA EIR would apply to the proposed Project; however, because increased development density could result in additional water demand, the Project could result in a substantially more severe impact than what would have been addressed in the Old Florin Town SPA EIR.		mechanism to track when thresholds are met so infrastructure improvements are constructed when needed. If private applicants/developers wish to proceed with development ahead of MSA's phasing plan, project specific analyses (i.e. sewer study, water study, traffic study) will be required to ensure that the existing infrastructure can accommodate the proposed development. Infrastructure improvements that are needed to accommodate proposed development shall be constructed prior to issuing building permits.	
Impact UTL-2: Exceed the Capacity of the Wastewater Treatment Provider or Adverse Effects Associated with Construction of Wastewater Treatment and Disposal Infrastructure					
General Plan	SU	The Project would rezone parcels and redesignate General Plan land uses and would result in an increase in water demand of 681 AFY. Based on the additional water demand, the Project could result in an increase in wastewater generated by approximately 607,306 gpd or 0.61 mgd. Planned facility expansion is based on projected growth rates provided by the Sacramento County Council of Governments. The construction of future treatment facilities would occur in incremental stages to best accommodate the growth rates. If the actual growth rate is slower than projected, construction of the next increment of treatment capacity can be delayed. As a result, additional wastewater generation associated with the Project would not exceed the capacity of the treatment plant. Projects developed as part of the proposed rezone would be required to adhere to General Plan Policy PF-18, which requires new development projects that need extension or modification of the trunk or interceptor sewer system to be consistent with sewer facility plans, through a sewer study, and establish funding mechanisms. All new development projects would be required to pay sewer impact fees identified in the General Plan and would be required to be in compliance with sewer facility plans. The Project would result in minimal additional demand for wastewater treatment and would not result in new or substantially more severe impact regarding wastewater capacity than was evaluated in the General Plan EIR.	LTS	No mitigation is required.	SU

GENERAL PLAN/DISTINCT AREA PLAN	PREVIOUS EIR IMPACT CONCLUSION [1]	PROJECT LEVEL IMPACT SUMMARY	PROJECT LEVEL IMPACT BEFORE MITIGATION [1]	MITIGATION MEASURE	PROJECT LEVEL IMPACT AFTER MITIGATION (RELATIVE TO PREVIOUS EIRS IMPACT) [1]
Fair Oaks Boulevard Corridor Plan	LTS	the Project would rezone one site (Site 67) in the Fair Oaks Boulevard Corridor Plan and would result in a potential increase in water demand of 1.68 AFY. Based on the additional water demand, development on Site 67 as part of the Project could result in an increase in wastewater generated by approximately 1,499.82 gpd or 0.001 mgd. This represents a minor and unsubstantial portion of the total Fair Oaks Boulevard Corridor Plan contribution to wastewater effluent. The rezone of Site 67 as part of the Project would result in minimal additional demand for wastewater treatment and would not result in new substantial adverse physical impacts associated with wastewater treatment or construction of wastewater facilities than would was evaluated in the Fair Oaks Boulevard EIR.	LTS	No mitigation is required.	LTS
North Watt Avenue Corridor Plan	LTS with mitigation	The Project would rezone five sites in the North Watt Avenue Corridor Plan (Sites 68 through 72) and would result in a potential increase in water demand of 46.51 AFY. Based on the additional water demand, the development on Sites 68 through 72 could result in an increase in wastewater generated by approximately 41,521.45 gpd or 0.04 mgd. This represents a minor and unsubstantial portion of the total North Watt Avenue Corridor Plan contribution to wastewater effluent. Sites 68 through 72 are located in areas of the Corridor Plan that were identified in the sewer study as needing substantial wastewater collection and conveyance infrastructure. Increased development density on these sites would slightly worsen impacts that were already described in the North Watt Avenue EIR.	PS	**Mitigation Measures NW-PS-1**	LTS
Old Florin Town SPA	S	The Project would rezone seven sites (Sites 73 through 79) in the Old Florin Town SPA and would result in a potential increase in water demand of 46.58 AFY. Based on the additional water demand, development under the Project on Sites 73 through 79 could result in an increase in wastewater generated by approximately 41,584.17 gpd or 0.04 mgd. This represents a minor and unsubstantial portion of the total Old Florin Town SPA contribution to wastewater effluent. Development on the seven	S	**Mitigation Measure OFT-PS-1**	LTS

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		candidate rezone sites would require infrastructure analysis and improvements with or without the proposed Project. Increased development density on these sites would slightly worsen impacts that were already described in the Old Florin Town SPA EIR.			
Impact UTL-3: Solid Waste Services and Landfill Capacity					
General Plan	LTS	Implementation of the Project would result in an estimated 27.6 tons of solid waste per day upon buildout of the candidate rezone sites. This represents an increase beyond those discussed in the General Plan EIR. However, this increase represents approximately 0.25 percent of the maximum permitted throughput (10,815 tons per day) of Kiefer Landfill. Development proposed by the Project would be subject to local and state requirements related to solid waste. This would include compliance with General Plan policies and the County's Municipal Code. The rezone of candidate sites would not result in new substantial adverse physical impacts associated with the provision of solid waste services and facilities than would occur with implementation of General Plan.	LTS	No mitigation is required.	LTS
Fair Oaks Boulevard Corridor Plan	LTS	Development on Site 67 would result in an estimated 0.08 ton of solid waste per day upon buildout of the candidate rezone site. This represents a potential increase in solid waste produced on the Corridor because there was an assumption of solid waste produced on Site 67 if it was built out with Business Professional uses. Either way, the total increase represents approximately 0.0007 percent of the maximum permitted throughput (10,815 tons per day) of Kiefer Landfill. As addressed above for the General Plan, the Project would result in construction debris waste and residential waste during the operational period; however, the Project would result in minor increases (if any) in waste over what was analyzed and assumed for the entire Corridor Plan. The rezone of Site 67 would not result new substantial adverse physical impacts associated with the provision of solid waste services and facilities than	LTS	No mitigation is required.	LTS

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		would occur with implementation of Fair Oaks Boulevard Corridor Plan.			
North Watt Avenue Corridor Plan	LTS	Development on Sites 68 through 72 would result in an estimated 1.56 tons of solid waste per day upon buildout of the candidate rezone sites. This represents a potential increase in solid waste produced on the Corridor on Sites 68 through 72. The total increase represents approximately 0.01 percent of the maximum permitted throughput (10,815 tons per day) of Kiefer Landfill. As addressed above for the General Plan, the Project would result in construction debris waste and residential waste during the operational period; however, the Project would result in minor increases in waste over what was analyzed and assumed for the entire Corridor Plan. The rezone of Sites 68 through 72 would not result new substantial adverse physical impacts associated with the provision of solid waste services and facilities than would occur with implementation of North Watt Avenue Corridor Plan.	LTS	No mitigation is required.	LTS
Old Florin Town SPA	LTS	Development on Sites 73 through 79 would result in an estimated 1.85 tons of solid waste per day upon buildout of the candidate rezone sites. This represents a potential increase in solid waste produced on the SPA on Sites 73 through 79. The total increase represents approximately 0.017 percent of the maximum permitted throughput (10,815 tons per day) of Kiefer Landfill. As addressed above for the General Plan, the Project would result in construction debris waste and residential waste during the operational period; however, the Project would result in minor increases in waste over what was analyzed and assumed for the entire SPA. The rezone of Sites 73 through 79 would not result new substantial adverse physical impacts associated with the provision of solid waste services and facilities than would occur with implementation of Old Florin Town SPA.	LTS	No mitigation is required.	LTS
WILDFIRE					

GENERAL PLAN/DISTINCT AREA PLAN	PREVIOUS EIR IMPACT CONCLUSION [1]	PROJECT LEVEL IMPACT SUMMARY	PROJECT LEVEL IMPACT BEFORE MITIGATION [1]	MITIGATION MEASURE	PROJECT LEVEL IMPACT AFTER MITIGATION (RELATIVE TO PREVIOUS EIRS IMPACT) [1]
Impact WF-1: Impair an Adopted Emergency Response Plan or Emergency Evacuation Plan					
General Plan	Not Evaluated	Thirteen proposed candidate rezone sites are located in or near Wildland Urban Interface (WUI). Future development under the Project would adhere to established zoning code standards, including street design confirmation with fire districts and providing adequate widths for internal streets. Additionally, compliance with the California Fire Code ensures that the Project would not interfere with emergency responses or evacuation plans.	LTS	No mitigation is required.	LTS
Fair Oaks Boulevard Corridor Plan	Not Evaluated	Site 67 is not located in an area that is prone to wildfire. Development on Site 67 would be subject to the existing General Plan policies and regulations as discussed above for the General Plan to ensure that interfering with emergency responses and evacuation plans would not occur	LTS	No mitigation is required.	LTS
North Watt Avenue Corridor Plan	Not Evaluated	Sites 68 and 69 are located in areas containing susceptible vegetation that are prone to wildfire. However, compliance with existing General Plan policies and regulations as discussed above for the General Plan to ensure that interfering with emergency responses and evacuation plans would not occur.	LTS	No mitigation is required.	LTS
Old Florin Town SPA	Not Evaluated	Sites 73 through 79 are not located in areas that are prone to wildfire. Development on Sites 73 through 79 would be subject to the existing General Plan policies and regulations as discussed above for the General Plan to ensure that interfering with emergency responses and evacuation plans would not occur.	LTS	No mitigation is required.	LTS
Impact WF-2: Due to Slope, Prevailing Winds, and Other Factors, Exacerbate Wildfire Risks, and Thereby Expose Project Occupants to Pollutant Concentrations from a Wildfire or the Uncontrolled Spread of a Wildfire					
General Plan	Not Evaluated	Thirteen proposed candidate rezone sites are located in or near WUI. The proposed candidate rezone sites are located in already dense development areas, the Project would not result in increased fire spread or structure loss. Compliance with existing regulations and General Plan policies would ensure that future development under the Project would not exacerbate wildfire risk due to slope, prevailing winds, or other factors and, thereby, would not expose future occupants	LTS	No mitigation is required.	LTS

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		to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.			
Fair Oaks Boulevard Corridor Plan	Not Evaluated	Site 67 is not located in an area that is prone to wildfire. Compliance with existing regulations and General Plan policies would ensure that future development on Site 67 would not exacerbate wildland fire risks and would not exacerbate the exposure of future occupants to pollutant concentrations from a wildfire or uncontrolled spread of a wildfire	LTS	No mitigation is required.	LTS
North Watt Avenue Corridor Plan	Not Evaluated	Sites 68 and 69 are located in areas containing susceptible vegetation that are prone to wildfire. However, compliance with existing regulations and General Plan policies would ensure that future development on Sites 68 through 72 would not exacerbate wildland fire risks and would not exacerbate the exposure of future occupants to pollutant concentrations from a wildfire or uncontrolled spread of a wildfire	LTS	No mitigation is required.	LTS
Old Florin Town SPA	Not Evaluated	Sites 73 through 79 are not located in areas that are prone to wildfire. Compliance with existing regulations and General Plan policies would ensure that future development on Sites 73 through 79 would not exacerbate wildland fire risks and would not exacerbate the exposure of future occupants to pollutant concentrations from a wildfire or uncontrolled spread of a wildfire.	LTS	No mitigation is required.	LTS
Impact WF-3: Require the Installation or Maintenance of Associated Infrastructure (such as Roads, Fuel Breaks, Emergency Water Sources, Power Lines, or Other Utilities) That Exacerbates Fire Risk or That May Result in Temporary or Ongoing Impacts to the Environment					
General Plan	Not Evaluated	Thirteen proposed candidate rezone sites are located in or near WUI. Future development under the Project would be required to comply with the California Fire Code's specifications for access and building materials, comply with the Sacramento County Fire Prevention Ordinance, and comply with applicable utilities providers' Wildfire Mitigation Plan. Implementation of the Project would not result in new or more severe significant impacts related to exacerbating wildfire due to installation or maintenance of infrastructure than would occur with implementation of the General Plan.	LTS	No mitigation is required.	LTS

GENERAL PLAN/DISTINCT AREA PLAN	PREVIOUS EIR IMPACT CONCLUSION [1]	PROJECT LEVEL IMPACT SUMMARY	PROJECT LEVEL IMPACT BEFORE MITIGATION [1]	MITIGATION MEASURE	PROJECT LEVEL IMPACT AFTER MITIGATION (RELATIVE TO PREVIOUS EIRS IMPACT) [1]
Fair Oaks Boulevard Corridor Plan	Not Evaluated	The Project would increase the development density on Site 67 but would not result in additional installation or maintenance of new infrastructure beyond that discussed in the Fair Oaks Boulevard EIR. The rezone on Site 67 would not result in new or more severe significant impacts related to exacerbating wildfire due to installation or maintenance of infrastructure than would occur with implementation of the Fair Oaks Boulevard Corridor Plan	LTS	No mitigation is required.	LTS
North Watt Avenue Corridor Plan	Not Evaluated	The proposed rezone on Sites 68 through 72 does not include infrastructure improvements. Future infrastructure improvements associated with Sites 68 through 72 would be subject to the same County Ordinance and PRC requirements as discussed above for the General Plan. The proposed rezone on Sites 68 through 72 would not result in new or more severe significant impacts related to exacerbating wildfire due to installation or maintenance of infrastructure than would occur with implementation of the North Watt Avenue Corridor Plan.	LTS	No mitigation is required.	LTS
Old Florin Town SPA	Not Evaluated	The proposed rezone on Sites 73 through 79 does not include infrastructure improvements. Future infrastructure improvements associated with Sites 73 through 79 would be subject to the same County Ordinance and PRC requirements as discussed above for the General Plan. The proposed rezone on Sites 73 through 79 would not result in new or more severe significant impacts related to exacerbating wildfire due to installation or maintenance of infrastructure than would occur with implementation of the Old Florin Town SPA.	LTS	No mitigation is required.	LTS
Impact WF-4: Expose People or Structures to Post-Fire Risks, Including Downslope or Downstream Flooding or Landslides, as a Result of Runoff, Post-Fire Slope Instability, or Drainage Change					
General Plan	Not Evaluated	The proposed candidate rezone sites are not located near this landslide prone area. Future buildout associated with the Project would be required to comply with the Sacramento County Floodplain Management Ordinance, and General Plan Safety Element Policy SA-22a and Policy SA-22b related to flooding protection. Compliance with these General Plan policies would ensure that future	LTS	No mitigation is required.	LTS

GENERAL PLAN/DISTINCT AREA PLAN	PREVIOUS EIR IMPACT CONCLUSION [1]	PROJECT LEVEL IMPACT SUMMARY	PROJECT LEVEL IMPACT BEFORE MITIGATION [1]	MITIGATION MEASURE	PROJECT LEVEL IMPACT AFTER MITIGATION (RELATIVE TO PREVIOUS EIRS IMPACT) [1]
		development associated with the Project would not expose people or structures to significant flood risk, including downslope or downstream flooding or landslides, as a result of runoff, post-fire instability, or drainage changes.			
Fair Oaks Boulevard Corridor Plan	Not Evaluated	Site 67 in the Fair Oaks Boulevard Corridor area is not located in an area prone to landslides. Future development on Site 67 would be subject to the same General Plan policies and County ordinances as discussed above for the General Plan. The proposed rezone on Site 67 would not result in new or more severe significant impacts related to exposing people or structure to post-fire risks than would occur with implementation of the Fair Oaks Boulevard Corridor Plan	LTS	No mitigation is required.	LTS
North Watt Avenue Corridor Plan	Not Evaluated	Sites 68 through 72 in the North Watt Avenue Corridor area are not located in an area prone to landslides. Future development on Sites 68 through 72 would be subject to the same General Plan policies and County ordinances as discussed above for the General Plan. The proposed rezone on Sites 68 through 72 would not result in new or more severe significant impacts related to exposing people or structure to post-fire risks than would occur with implementation of the North Watt Avenue Corridor Plan.	LTS	No mitigation is required.	LTS
Old Florin Town SPA	Not Evaluated	Sites 73 through 79 in the Old Florin Town SPA are not located in an area prone to landslides. Future development on Sites 73 through 79 would be subject to the same General Plan policies and County ordinances as discussed above for the General Plan. The proposed rezone on Sites 73 through 79 would not result in new or more severe significant impacts related to exposing people or structure to post-fire risks than would occur within implementation of the Old Florin Town SPA.	LTS	No mitigation is required.	LTS

Note:

1. LTS = Less Than Significant; S = Significant; PS = Potentially Significant; and SU = Significant and Unavoidable.

TERMINOLOGY USED IN THIS EIR

This SEIR uses the following terminology to describe environmental effects of the project.

Significance Criteria. A set of criteria used by the lead agency to determine at what level, or "threshold," an impact would be considered significant. Significance criteria used in this EIR include those that are set forth in the CEQA Guidelines, or can be discerned from the CEQA Guidelines; criteria based on factual or scientific information; criteria based on regulatory standards of local, state, and federal agencies; and criteria based on goals and policies identified in the Sacramento County General Plan.

Less-than-Significant Impact. An impact is considered less than significant when it does not reach the standard of significance and would therefore cause no substantial change in the environment. No mitigation is required for less-than-significant impacts.

Potentially Significant Impact. A potentially significant impact is a substantial, or potentially substantial, adverse change in the environment. Physical conditions which exist within the area will be directly or indirectly affected by the Project. Impacts may also be short-term or long-term. An impact is considered significant if it reaches the threshold of significance identified in the SEIR. Mitigation measures may reduce a potentially significant impact to less than significant.

Significant Unavoidable Impact. An impact is considered significant and unavoidable if it is significant and cannot be avoided or mitigated to a less-than-significant level once the Project is implemented.

Cumulative Significant Impact. A cumulative impact can result when a change in the environment results from the incremental impact of a project when added to other related past, present or reasonably foreseeable future projects. Significant cumulative impacts may result from individually minor but collectively significant projects.

Mitigation. Mitigation measures are revisions to the project that would minimize, avoid, or reduce a significant effect on the environment. State CEQA Guidelines Section 15370 identifies five types of mitigation:

a) Avoiding the impact altogether by not taking a certain action or parts of an action.

b) Minimizing impacts by limiting the degree or magnitude of the action and its implementation.

c) Rectifying the impact by repairing, rehabilitating, or restoring the impacted environment.

d) Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.

e) Compensating for the impact by replacing or providing substitute resources or environments.

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1 INTRODUCTION

SUMMARY OF THE PROPOSED PROJECT

California Government Code Sections 65583 and 65583.2 require cities and counties to provide a parcel-specific inventory of appropriately zoned, available, and suitable sites to provide housing opportunities for all income levels. The Regional Housing Needs Allocation (RHNA) for the *Sacramento County Housing Element of 2021-2029* (Housing Element) (adopted by the Sacramento County Board of Supervisors on March 8, 2022) includes 21,272 new housing units, of which 7,158 units are extremely low income, very low income, and low income housing units (referred to collectively as lower-income units). While the County's Housing Element demonstrates that the County has sufficient residential capacity to accommodate its RHNA for moderate and above moderate income housing units, there is a current shortfall of 142 acres to accommodate 2,884 lower-income units.

To meet the RHNA for the County's Housing Element, the County is required to rezone sufficient sites at a density of 30 dwelling units per acre or greater for 2,884 lower-income units for those with incomes ranging from $0 to $69,050 annually. The County intends to rezone additional sites beyond those needed to meet the RHNA obligation for the lower income category in order to provide a buffer of lower-income sites in the event those sites are lost from the inventory (i.e., lower-income sites are developed units for moderate or above moderate income categories). Additionally, the County also intends to rezone sites to increase the buffer for the moderate income category. A detailed description of the Project is included in Chapter 2, "Project Description."

It should be noted that while development on the candidate rezone sites under the Project would increase the residential capacity throughout the County, there is no development proposed at this time and it is uncertain to what intensity the rest of the County will develop. Therefore, this subsequent environmental impact report (SEIR) conservatively assumes that there would be an additional 4,081 net new residential units added to the unincorporated County as part of the Project.

ENVIRONMENTAL IMPACT REPORT SCOPE AND PROCESS

PURPOSE OF THIS ENVIRONMENTAL IMPACT REPORT

This SEIR to the Sacramento County General Plan Update Final EIR (General Plan EIR), Fair Oaks Boulevard Corridor Plan and Roadway Project EIR (Fair Oaks Boulevard EIR), North Watt Avenue Corridor Plan EIR (North Watt Avenue EIR), and Old Florin Town Special Planning Area (SPA) EIR (Old Florin Town SPA EIR) has been prepared in compliance with the California Environmental Quality Act (CEQA) to evaluate the potential environmental impacts associated with the development and implementation of the Sacramento County RHNA Rezone Project (herein after referred to as the Project). An EIR discloses known or possible impacts on the environment that may result from a

project and measures to mitigate those impacts to decision makers (e.g., the Sacramento County Board of Supervisors), public agencies, and the general public. The intent of the SEIR is to provide objective information to allow the Sacramento County Board of Supervisors to make an informed decision when considering whether to approve or deny the Project. The SEIR does not comment on the merits of the Project and does not make a recommendation for or against its approval.

LEAD, RESPONSIBLE, AND TRUSTEE AGENCIES

Sacramento County is the Lead Agency under CEQA for this SEIR because it has discretionary authority to determine whether or how to approve the Project. Responsible Agencies are other public agencies, other than the lead agency, which have responsibility for carrying out or approving a project. Trustee agencies have jurisdiction over certain resources held in trust for the people of California. There are no agencies other than Sacramento County that have approval or permitting authority for the Project. However, implementation of the Project could involve responsible agencies, depending on the details of future development under the Project. The following are some of the agencies that could be required to act as responsible agencies for future development under the Project:

- California Department of Fish and Wildlife,
- Central Valley Regional Water Quality Control Board,
- Sacramento Metropolitan Air Quality Management District, and
- Sacramento Municipal Utilities District.

TYPE OF ENVIRONMENTAL IMPACT REPORT

An EIR is a public informational document used in the planning and decision-making process. An EIR assesses the environmental effects related to the planning, construction, and operation of a project and indicates ways to reduce or avoid significant environmental impacts. An EIR also discloses significant environmental impacts that cannot be avoided; any growth-inducing impacts of a project; effects found not to be significant; and significant cumulative impacts of past, present, and reasonably foreseeable future projects in combination with the impacts of a project.

Pursuant to State CEQA Guidelines Section 15162, a SEIR should be prepared if an EIR has been certified for a project, but one of the following conditions are met:

1) Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;

2) Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or Negative Declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or,

3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the Negative Declaration was adopted, shows any of the following:

    A. The project will have one or more significant effects not discussed in the previous EIR or negative declaration;

    B. Significant effects previously examined will be substantially more severe than shown in the previous EIR;

    C. Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or

    D. Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

As discussed below, the proposed Project represents a revision to the General Plan and three distinct area plans (Fair Oaks Boulevard Corridor Plan, North Watt Avenue Corridor Plan, and Old Florin Town SPA). The General Plan EIR, Fair Oaks Boulevard EIR, North Watt Avenue EIR, and Old Florin Town SPA EIR analyzed the candidate rezone sites based on the adopted land use designations in the General Plan and the three distinct area plans. The Project would result in changes to land use designations evaluated in the General Plan EIR and district area plan EIRs. Therefore, this document serves as a SEIR to the General Plan EIR, as well as the EIRs prepared for the three distinct area plans within which a portion of the candidate rezone sites are located.

Additional environmental review under CEQA may be required for subsequent discretionary projects (e.g., projects that would not be consistent with the Sacramento County Zoning Code and/or require substantial off-site improvements not covered in this SEIR) and would be generally based on the subsequent project's consistency with the Project and the analysis in this SEIR, as required under CEQA. Individual projects would be required to implement mitigation measures from the Project mitigation monitoring and reporting program and be consistent with applicable zoning ordinances including the Sacramento County Zoning Code. It may be determined that some future projects or activities under the Project may be exempt from further environmental review. When subsequent projects or activities under the Project are proposed, the County will examine the projects or activities to determine whether their effects were adequately analyzed in the General Plan EIR, Fair Oaks Boulevard EIR, North Watt Avenue EIR, Old Florin Town SPA EIR, and this SEIR (CEQA Guidelines Section 15168(c)). If the projects or activities would have no effects beyond those disclosed in this SEIR, no further CEQA compliance would be required.

SACRAMENTO COUNTY GENERAL PLAN

The County certified the General Plan EIR (State Clearinghouse Number 2007082086) and adopted the updated General Plan on November 9, 2011, pursuant to Government Code Section 65300. The General Plan acts as the official policy statement of the County and guides public and private development within the unincorporated County in a manner that maximizes the social and economic benefits for all citizens. In addition, the General Plan provides policy direction that guides land use development within the unincorporated County, as well as provides protection for existing natural resources.

This Project represents a revision to the General Plan. The General Plan EIR analyzed the Project candidate rezone sites based on the adopted General Plan land use designations such as Low Density Residential (LDR) and Medium Density Residential (MDR). Because the Project consists of changes to General Plan land use designations (and, by extension, the zoning based on those designations) evaluated in the General Plan EIR that could involve new significant environmental effects or a substantial increase in the severity of previously identified significant effects, the County determined that the preparation of a SEIR is the appropriate environmental review document for the Project, pursuant to the requirements of State CEQA Guideline Section 15162. The analysis in this SEIR describes the Project conditions as compared to the General Plan EIR, including legal and regulatory framework relevant to the Project, standards of significance to be used in the analysis, and analysis methodologies. The SEIR evaluates whether implementing the Project would potentially result in one or more new or more severe significant environmental effects compared to the impacts identified in the General Plan EIR.

The program-level analysis in this SEIR considers the broad environmental effects of the Project. This SEIR is intended to provide the information and environmental analysis necessary to assist public agency decision-makers in considering approval of the Project. Mitigation has been recommended where feasible to reduce or avoid the Project's significant impacts. Mitigation measures from the General Plan EIR that are adopted and apply to the Project are identified.

The General Plan and Final EIR are available for review at the County's Planning and Environmental Review (PER) Division offices (827 7th Street, Room 225, Sacramento, CA 95814) and online at the following location: https://planning.saccounty.gov/PlansandProjectsIn-Progress/Pages/GeneralPlan.aspx.

SACRAMENTO COUNTY DISTINCT AREA PLANS

Several proposed candidate rezone sites are located in three County distinct area plans. The distinct area plans with proposed candidate rezone sites include the Fair Oaks Boulevard Corridor Plan, North Watt Avenue Corridor Plan, and Old Florin Town SPA. The candidate rezone sites within these distinct area plans would be rezoned to be consistent with the State requirements for density (30 units per acre). The EIR approach for each of the three distinct area plans is described below.

FAIR OAKS BOULEVARD EIR

Site 67 is located in the Fair Oaks Boulevard Corridor Plan. Previous environmental review for Site 67 within the Fair Oaks Boulevard Corridor Plan was included in the Fair Oaks Boulevard EIR (State Clearinghouse Number 2009042112). That Fair Oaks Boulevard EIR analyzed Site 67 within the Fair Oaks Boulevard Corridor Plan based on the existing zoning designation of Business Professional Office (BP). The Fair Oaks Boulevard EIR was certified by the Board of Supervisors and the Fair Oaks Boulevard Corridor Plan was adopted in October 2011.

This Project represents a revision to the Fair Oaks Boulevard Corridor Plan because the Project would rezone Site 67 from BP to RD-30 resulting in an amendment to the plan. Because the Project changes the zoning evaluated in the Fair Oaks Boulevard EIR the Project could involve new significant environmental effects or a substantial increase in the severity of previously identified significant effects. Therefore, the County determined that the preparation of a SEIR for the Fair Oaks Boulevard EIR is the appropriate environmental review document to determine environmental impacts associated with rezoning of Site 67, pursuant to the requirements of State CEQA Guidelines Section 15162. The analysis in this SEIR describes the conditions on Site 67 as compared to the Fair Oaks Boulevard EIR, including legal and regulatory framework, standards of significance to be used in the analysis, and analysis methodologies. The SEIR evaluates whether a rezone of Site 67 would potentially result in one or more new or more severe significant environmental effects compared to the impacts identified in the Fair Oaks Boulevard EIR. Mitigation specific to the Fair Oaks Boulevard Corridor Plan has been recommended where feasible to reduce or avoid the Project's significant impacts. Mitigation measures from the Fair Oaks Boulevard EIR that are adopted and apply to the Project are identified.

The Fair Oaks Boulevard Corridor Plan and Fair Oaks Boulevard Corridor Plan Final EIR are available for review at the County's PER Division offices (827 7th Street, Room 225, Sacramento, CA 95814) and online at the following location: https://planning.saccounty.gov/LandUseRegulationDocuments/Pages/SPAandNPAs.aspx.

NORTH WATT AVENUE EIR

Sites 68 through 72 are located in the North Watt Avenue Corridor Plan. Previous environmental review for the proposed candidate rezone sites within the North Watt Avenue Corridor Plan was included in the North Watt Avenue EIR (State Clearinghouse Number 2009092067). That North Watt Avenue EIR analyzed Sites 68 through 72 within the North Watt Avenue Corridor Plan based on the existing zoning designations of Residential Mixed-Use 1 (RMU-1) and Residential Mixed-Use 2 (RMU-2). The North Watt Avenue EIR was certified by the Board of Supervisors and the North Watt Avenue Corridor Plan was adopted in August 2012.

This Project represents a revision to the North Watt Avenue Corridor Plan because the Project would rezone Sites 68 thorough72 from RMU-1 to RD-40 and RMU-2 to RD-30 resulting in an amendment to the plan. Note the candidate rezone sites in the North Watt Avenue Corridor Plan would maintain their existing subzoning designation (i.e., RMU-1 or RMU-2); however, the minimum densities permitted on the candidate rezone sites would be amended to correspond with the proposed subzones (i.e., RD-30 or RD-40).

For the purposes of this SEIR, this is described as a rezone to the RD-30 and/or RD-40 subzone. Because the Project changes the zoning evaluated in the North Watt Avenue EIR the Project could involve new significant environmental effects or a substantial increase in the severity of previously identified significant effects. Therefore, the County determined that the preparation of a SEIR for the North Watt Avenue EIR is the appropriate environmental review document to determine environmental impacts associated with rezoning of Sites 68 through 72, pursuant to the requirements of State CEQA Guidelines Section 15162. The analysis in this SEIR describes the conditions on Sites 68 through 72 as compared to the North Watt Avenue EIR, including legal and regulatory framework relevant, standards of significance to be used in the analysis, and analysis methodologies. The SEIR evaluates whether rezoning Sites 68 through 72 would potentially result in one or more new or more severe significant environmental effects compared to the impacts identified in the North Watt Avenue EIR. Mitigation specific to the North Watt Avenue Corridor Plan has been recommended where feasible to reduce or avoid the Project's significant impacts. Mitigation measures from the North Watt Avenue EIR that are adopted and apply to the Project are identified.

The North Watt Avenue Corridor Plan and North Watt Avenue Corridor Plan Final EIR are available for review at the County's PER Division offices (827 7th Street, Room 225, Sacramento, CA 95814) and online at the following location: https://planning.saccounty.gov/LandUseRegulationDocuments/Pages/SPAandNPAs.aspx.

OLD FLORIN TOWN EIR

Sites 73 through 79 are located in the Old Florin Town SPA. Previous environmental review for the proposed candidate rezone sites within the Old Florin Town SPA were included in the Old Florin Town SPA EIR (State Clearinghouse Number 2007072051). That Old Florin Town SPA EIR analyzed Sites 73 through 79 within the Old Florin Town SPA based on the existing zoning designations of Mixed Use Residential (MUR) and Mixed Use Commercial (MUC). The Old Florin Town SPA EIR was certified by the Board of Supervisors and the Old Florin Town SPA was adopted in July 2011. This Project represents a revision to the Old Florin Town SPA because the Project would rezone Sites 73 through 79 from MRU and MUC to RD-30 and RD-40. Because the Project changes the zoning evaluated in the Old Florin Town SPA EIR, the Project could involve new significant environmental effects or a substantial increase in the severity of previously identified significant effects. Therefore, the County determined that the preparation of a SEIR to the Old Florin Town SPA EIR is the appropriate environmental review document to determine environmental impacts associated with rezoning of Sites 73 through 79, pursuant to the requirements of State CEQA Guidelines Section 15162. The analysis in this SEIR describes the conditions on Sites 73 through 79 as compared to the Old Florin Town SPA EIR, including legal and regulatory framework, standards of significance to be used in the analysis, and analysis methodologies. The SEIR evaluates whether rezoning Sites 73 through 79 would potentially result in one or more new or more severe significant environmental effects compared to the impacts identified in the Old Florin Town SPA EIR. Mitigation specific to the Old Florin Town SPA has been recommended where feasible to reduce or avoid the Project's significant impacts. Mitigation measures from the Old Florin Town SPA EIR that are adopted and apply to the Project are identified.

The Old Florin Town SPA and Old Florin Town SPA Final EIR are available for review at the County's PER Division offices (827 7th Street, Room 225, Sacramento, CA 95814) and online at the following location: https://planning.saccounty.gov/LandUseRegulationDocuments/Pages/SPAandNPAs.aspx.

SCOPE OF THIS ENVIRONMENTAL IMPACT REPORT

This SEIR includes an evaluation of the following 10 environmental issues areas as well as other CEQA-mandated issues (e.g., cumulative impacts, irreversible environmental changes, significant and unavoidable impacts):

- Aesthetics,
- Air Quality,
- Climate Change,
- Energy,
- Noise and Vibration,
- Public Services and Recreation,
- Transportation,
- Tribal Cultural Resources,
- Utilities; and,
- Wildfire.

Under the CEQA statutes and the State CEQA Guidelines, a lead agency may limit an EIR's discussion of environmental effects when such effects are not considered potentially significant (PRC Section 21002.1[e]; State CEQA Guidelines Sections 15128, 15143). Information used to determine which impacts would be potentially significant was derived from review of the Project; review of applicable planning documents and CEQA documentation; feedback from public and agency consultation; and comments received on the notice of preparations (NOPs) (see Appendix INTRO-1 of this SEIR).

The first NOP was distributed on June 12, 2023 to agencies, interested parties, organizations, and individuals that may have an interest in the Project. Two web-based scoping meetings (one for public agencies in the morning at 10:00 a.m. and one for the general public in the evening at 6:00 p.m.) were conducted on June 27, 2023. A second NOP for the Project was released on December 22, 2023 describing changes to the Project description. A web-based scoping meeting was held on January 4, 2024 at 10:00 a.m. The purpose of the NOPs and the scoping meetings was to provide notification that a SEIR for the Project was being prepared and to solicit input on the scope and content of the environmental document. A presentation was provided during each scoping meeting to introduce the Project, outline the CEQA process, and provide a method for directly commenting on the scope of the SEIR. Comments were also received in writing via postal service and email. As a result of review of existing information and the scoping process, it was determined that each of the issue areas listed above should be evaluated fully in this SEIR. Two comment letters were received during the first NOP public review

period, one from the Native American Heritage Commission and one from the Central Valley Regional Water Quality Control Board. There were no comment letters received during the second NOP public review period. All NOP comments were considered by the SEIR preparers. The introduction of each environmental resource area chapter (Chapters 4 through 13) identifies NOP comment topics addressed in the respective chapter.

Environmental Effects Adequately Addressed in the General Plan EIR, Fair Oaks Boulevard EIR, North Watt Avenue EIR, and Old Florin Town SPA EIR and Excluded from this SEIR

The Project involves changes to existing zoning and General Plan land use designations for sites that are currently designated and zoned for development. The General Plan EIR, Fair Oaks Boulevard EIR, North Watt Avenue EIR, and Old Florin Town SPA EIR covered the entire unincorporated portion of Sacramento County and the three distinct area plans and assumed development on the proposed candidate rezone sites consistent with the existing land use and zoning designations, which would result in ground disturbance. Therefore, implementation of the Project would result in development on sites that were previously analyzed for development. The Project does not propose expansion of the development footprint in the unincorporated County on sites that were not assumed for development in previous environmental documents. Implementation of the Project would not alter the analysis and conclusion of the respective EIRs that evaluated the potential for ground disturbance to result in physical adverse effects to natural resources in the unincorporated County, Fair Oaks Boulevard Corridor area, North Watt Avenue Corridor area, and Old Florin Town SPA. The environmental issue areas that have been adequately addressed in the General Plan EIR, Fair Oaks Boulevard EIR, North Watt Avenue EIR, and Old Florin Town SPA EIR and would not be analyzed in the SEIR are included below.

Standard mitigation measures and mitigation measures that are applicable to the Project would apply to development on individual candidate rezone sites to ensure significant impacts would not occur. Where a distinct area plan identifies specific mitigation applicable to a resource area topic (i.e., trees in biological resources), those mitigation measures would remain applicable to subsequent development on candidate rezone sites. However, where standard mitigation measures are absent in a distinct area plan for a resource topic area (i.e., species-specific mitigation in biological resources), standard mitigation measures described in Table INT-2 would apply to candidate rezone sites in distinct area plans. These measures are identified in the discussion below. The full text of the mitigation measures is shown in Table INT-2.

Agriculture and Forestry Resources

General Plan

The General Plan EIR evaluated impacts to agricultural resources and determined that development under the General Plan would impact over 8,500 acres of designated farmlands. Impacts were determined to be significant and unavoidable.

There are no designated forestry resources in unincorporated Sacramento County (Sacramento County 2011). None of the proposed candidate rezone sites are located on

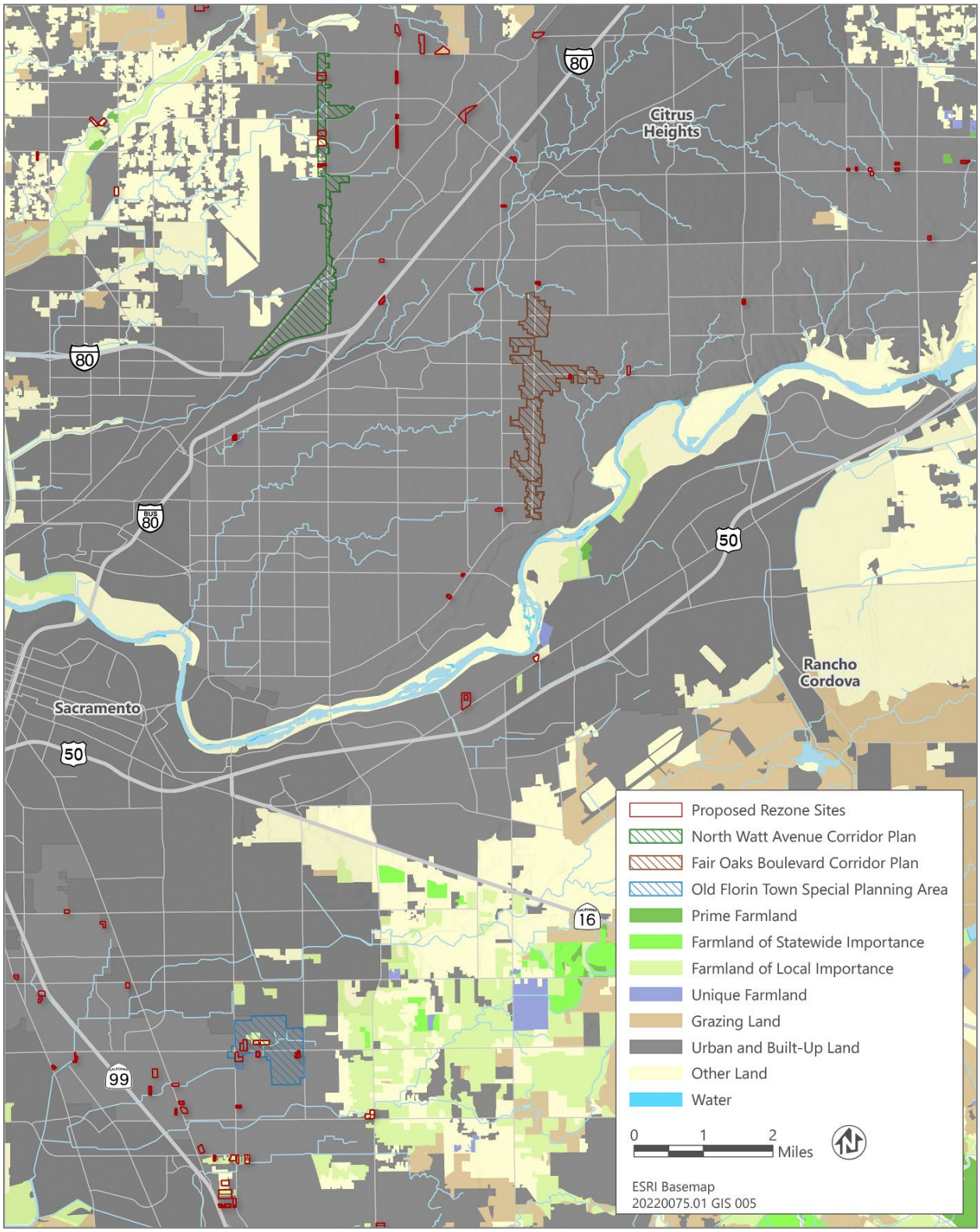
lands with an active Williamson Act Contract (Sacramento County 2023). Additionally, there are no proposed candidate rezone sites located on areas designated as Farmland (i.e., Prime Farmland, Farmland of Statewide Importance, and Unique Farmland) (DOC 2024). However, several candidate rezone sites, as shown in Plate INT-1, are located in areas designated as Farmland of Local Importance. The County considers Farmland of Local Importance an agricultural resource and defines Farmland of Local Importance as:

> *either currently producing crops or has the capability of production. This farmland category is determined by each County's board of supervisors and a local advisory committee. For Sacramento County, this classification refers to lands which do not qualify as Prime, Statewide, or Unique designation but are currently irrigated crops or pasture or nonirrigated crops; lands that would be Prime or Statewide designation and have been improved for irrigation but are now idle; and lands which currently support confined livestock, poultry operations, and aquaculture.*

Candidate rezone sites 27 and 28 have an existing General Plan land use designation of Agricultural Residential (AG-RES) and are zoned Agricultural Residential 5 (AR-5) and interim Agricultural Holding 10 (A-10). Pursuant to Title IV of the Sacramento County Zoning Code, uses in the interim A-10 zone shall be the uses specific for the Agricultural Residential 10 (AR-10) zone. The AG-RES land use designation is for lots from 1 to 5 acres and allows for residential development of 0.25 to 2.58 residential units per acre. The County's Agricultural Residential zoning districts are designed to establish living areas within the County where development is limited to low density and single-family residences. Therefore, candidate rezone sites 27 and 28 were analyzed in the General Plan EIR as being developed for residential land uses.

Additionally, eleven candidate rezone sites (Table INT-1) located on Farmland of Local Importance have existing General Plan land use designations of Low Density Residential (LDR) or Medium Density Residential (MDR) and existing zoning designations of Residential 5 (RD-5) or Old Florin Town SPA. The LDR land use designation provides for areas of predominantly single family housing with some attached housing unit; while MDR designation provides for areas of attached units, including apartments and condominiums along transit corridors and throughout the urban area. The proposed candidate rezone sites that contain Farmland of Local Importance were analyzed in the General Plan EIR as being developed with single family residential or multifamily residential structures. Although future development under the Project may result in an increased development density on Farmland of Local Importance, development would be subject to General Plan EIR Policies CO-51 and AG-5 that require a 1:1 mitigation ratio for projects resulting in the conversion of more than 50 acres of farmland loss of agricultural lands and implementation of a farmland mitigation fund to preserve farmlands. As shown in Table INT-1, development on the proposed candidate rezone sites would have the potential to convert a total of 24.23 acres of Farmland of Local Importance to residential use. Therefore, implementation of the Project would not require implementing the 1:1 mitigation ratio due to conversion of farmland to nonagricultural use. Because impacts, including cumulative impacts, related to agriculture and forestry resources associated with the Project have been adequately addressed in the General Plan EIR, no new or more severe effects compared to the impacts identified in the General Plan EIR would occur. This issue will not be discussed further in the SEIR.

Plate INT-1: Farmland Designations



Source: Data received from Sacramento County in 2024 and download from CAS Department of Conservation in 2022; adapted by Ascent in 2024.

Table INT-1: Candidate Rezone Sites with Farmland of Local Importance

Site No.	General Plan Designation/ Zoning Designation	Farmland of Local Importance (Acres)
44	LDR/RD-5	1.2
45	LDR/RD-5	3.47
46	LDR/RD-5	1.76
47	LDR/RD-5	0.6
48	LDR/RD-5	0.84
49	LDR/RD-5	0.86
50	LDR/RD-5	1.72
51	LDR/RD-5	1.49
52	LDR/RD-5	6.73
75	MDR/Old Florin Town SPA	1.66
76	MDR/Old Florin Town SPA	3.9
	Total	**24.23**

Notes: LDR = Low Density Residential, MDR – Medium Density Residential, RD-5 = Residential 5, Old Florin Town SPA = Old Florin Town Special Planning Area

Source: Source: Data received from Sacramento County in 2024 and download from CAS Department of Conservation in 2022; adapted by Ascent in 2024.

DISTINCT AREA PLANS

The proposed candidate rezone sites within the Fair Oaks Boulevard Corridor Plan area (Fair Oaks Boulevard Corridor area) and North Watt Avenue Corridor Plan area (North Watt Avenue Corridor area) do not have a land use or zoning designation for agriculture or forestry. There are two candidate rezone sites, Sites 75 and 76, in the Old Florin Town SPA that are designated as Farmland of Local Importance (Table INT-1). These candidate rezone sites are zoned as MUR in the Old Florin Town SPA. Therefore, Sites 75 and 76 were analyzed for development as part of the Old Florin Town SPA EIR. Development on Sites 75 and 76 would not result in increased impacts to agricultural resources beyond what was analyzed in the Old Florin Town SPA EIR. In addition, there are less than 50 acres of Farmland of Local Importance located within Sites 75 (1.66 acres) and 76 (3.9 acres), see Table INT-1. The proposed rezone on Sites 75 and 76 would not result in conversion of substantial Farmland of Local Importance to a non-agricultural use that would require mitigation per General Plan Policies CO-51 and AG-5. Therefore, impacts related to agriculture and forestry resources associated with development in the distinct planning areas have been adequately addressed in the distinct area plan EIRs. No new or more severe effects compared to the impacts identified in those EIRs would occur. This issue will not be discussed further in the SEIR.

BIOLOGICAL RESOURCES

GENERAL PLAN

The General Plan EIR evaluated impacts to biological resources, including wetlands and riparian areas, special-status species, and native trees. With implementation of policies

in the General Plan EIR impacts to wetlands and riparian habitats, special status species, native trees and tree canopies were determined to remain significant and unavoidable.

Implementation of the Project would allow for development in portions of the planning area that may contain sensitive biological resources, such as special-status and sensitive plant and wildlife species, and sensitive habitats (including wetlands). Oak woodlands in the eastern portion of the County and isolated oak trees throughout the County may be impacted by development under the Project. Additionally, development on candidate rezone sites may impact lands located in the South Sacramento Habitat Conservation Plan.

Increased density as part of the Project would increase the potential number of dwelling units in the unincorporated County but would not result in development on sites not previously identified for development in the General Plan EIR. Therefore, Project would not change the extent of land disturbance from what was evaluated in the General Plan EIR. General Plan Policies CO-72, CO-80, CO-106, CO-117, CO-120, CO-121, CO-122, CO-149, CO-152, CO-153, CO-154, CO-155, and CO-156 require retaining the existing natural habitats of special status species where possible, improving habitat function, requiring in kind mitigation, and restoring natural habitats. Additionally, future development under the Project would be subject to local, State, and federal regulations related to protection of special status species.

Development activities associated with the implementation of the Project could result in the disturbance or loss of wetlands and riparian areas. General Plan Policy CO-71 requires no net loss of wetland and riparian habitats. Development would be required to adhere to local, State, and Federal regulations for protection of wetlands. Future projects would also be subject to the requirements from the South Sacramento Habitat Conservation Plan, US Fish and Wildlife Service, Army Corps of Engineers, and California Department of Fish and Wildlife for protection of wetlands and riparian areas.

Oak trees and other protected tree species would be subject to Sacramento County Code Section 19.12, Tree Preservation and Protection. General Plan Policies CO-152, CO-153, CO-154, CO-155, and CO-156 require developers to determine proper placement of mitigation areas, a 2:1 replacement ratio for the loss of mitigation areas, evaluation prior to development to determine if areas require preservation, protection of cottonwoods along riparian areas, and protection of oaks in all land uses. Mitigation Measures BIO-1 through BIO-16 as described in Table INT-2 would ensure that future development on candidate rezone sites would comply with the above-identified local, State, and federal regulations and General Plan policies pertaining to preserving or minimizing impact to Waters of the State and/or U.S. and biological resources.

The South Sacramento Habitat Conservation Plan (SSHCP) provides a comprehensive framework for managing biological resources. SSHCP provides a conservation strategy to preserve and enhance large tracts of land and intact watersheds intended to enhance habitats. Proposed candidate rezone sites are located in infill areas and the County's designated commercial corridor. However, there are 37 candidate rezone sites (Sites 30 through 59 and 73 through 79) located within SSHCP. Future development within these

candidate rezone sites would be subject to Mitigation Measure BIO-17 (Table INT-2), which would require compliance with SSHCP.

Subsequent development would be required to comply with standard Mitigation Measures BIO-1 through BIO-17, applicable General Plan policies, and applicable regulations related to biological resources. Impacts to sensitive species would remain significant and unavoidable, as analyzed in the General Plan EIR. As discussed above, development under the Project would be subject to General Plan policies and local, regional, state, and federal regulations related to protection of biological resources. Similar to the findings of the General Plan EIR, no feasible mitigation measures are available beyond compliance with policies listed above and applicable regulations. There is no new significant effect, and the impact is not more severe than the impact identified in the General Plan EIR. Impacts to biological resources would remain significant and unavoidable.

DISTINCT AREA PLANS

The three distinct area plan EIRs analyzed impacts to biological resources and impacts were determined to be less than significant with mitigation in the Fair Oaks Boulevard EIR, North Watt Avenue EIR, and Old Florin Town SPA EIR. Development in the distinct planning areas would not result in development on sites that were not previously analyzed as developed in the respective EIRs. However, proposed development on Sites 67 through 79 would be denser than assumed in the distinct area plan EIRs.

Future development on Site 67 in the Fair Oaks Corridor area may have impacts on native trees but would be required to implement Mitigation Measure FO-BR-3: SPA Development and Redevelopment Oak Tree Protection and Compensation from the Fair Oaks Boulevard EIR. Mitigation Measure FO-BR-3 would require an arborist report for native trees that would be impacted by future development under the Project and include measures to reduce impacts to trees that would remain on Site 67. Development as part of the Project in the Fair Oaks Boulevard Corridor area may also have impacts on waters of the U.S. and/or riparian habitat. However, development would be required to implement Mitigation Measure FO-BR-4: Waters of the U.S. to prepare a wetland delineation to identify impact areas and Mitigation Measure FO-BR-5: Riparian Habitat for preparation of a biological resources report delineating the extent of riparian habitat and preserving habitat as feasible. Finally, future development on Site 67 would be required to implement Mitigation Measure FO-BR-6: Raptor Nesting Habitat to conduct construction during the non-breeding season, if feasible, and conduct a focused survey for raptor nests if construction would occur during the breeding season.

Development on Sites 68 through 72 would have the potential to impact biological resources, including native trees, streams, wetlandas and other surface waters, riparian habitat, and special-status species. However, future development would be subject to mitigation measures contained in the North Watt Avenue EIR to reduce potential impacts to biological resources. Specifically, future development on Sites 68 through 72 would be required to implement Mitigation Measure NW-BR-1: Oak Tree Protection for protection of oak trees; Mitigation Measure NW-BR-2: Potential Wetland Features to prepare a wetland delineation; Mitigation Measure NW-BR-3: Riparian Habitat to submit a biological

assessment for sites where riparian habitat is present; and Mitigation Measure NW-BR-4: Raptor Nesting Habitat.

Development on Sites 73 through 79 would have the potential to impact biological resources in the Old Florin Town SPA, such as native oaks trees, wetlands, vernal pools, and special-status species. However, future development on Sites 73 through 79 would be subject to mitigation measures contained in the Old Florin Town SPA EIR to reduce potential impacts to biological resources. Specifically, future development on Sites 73 through 79 would be subject to Mitigation Measure OFT-BR-1 for preparation of an arborist report to identify and protect native and landmark trees; Mitigation Measure OFT-BR-2 to submit a wetland delineation for areas with potential waters of the US; and Mitigation Measure OFT-BR-3 to compensate for impacts to vernal pools. Additionally, Sites 73 through 79 are located in the South Sacramento Habitat Conservation Plan (SSHCP) and would be subject to the requirements of that plan. For Sites 73 through 79 in the SSHCP, a biological resources report consistent with the SSHCP protocols is required (see Mitigation Measure BIO-17). In addition to Mitigation Measure BIO-17 development on Sites 73 through 79 within the SSHCP would be subject to the project specific avoidance and minimization measures in the SSHCP, such as implementing construction BMPs and minimizing impacts to streams and creeks. The full list of avoidance and minimization measures is included in Appendix INTRO-2.

Given the passing of time and changes to existing conditions on Sites 67 through 79 since the approval of their respective distinct area plan EIRs, the standard mitigation measures as described in Table INT-2 would ensure that future development on candidate rezone sites within the distinct area plans would comply with the above-identified local, State, and federal regulations and General Plan policies pertaining to preserving or minimizing impact to Waters of the State and/or U.S. and biological resources. Where a distinct area plan identifies specific mitigation applicable to a biological resource area, those mitigation measures would remain applicable to subsequent development on candidate rezone sites in distinct area plans. The standard mitigation measures described in Table INT-2 would apply to candidate rezone sites in distinct area plans only when no mitigation was identified for a given biological resource area in the distinct area plan EIRs.

With implementation of mitigation measures contained in the distinct area plan EIRs, increased residential density from future development on Sites 67 through 79 would not result in any substantial changes in the impacts related to biological resources. No new or more severe biological resources effects than those identified in the distinct area plan EIRs would occur. This issue will not be discussed in the SEIR.

CULTURAL RESOURCES

GENERAL PLAN

The General Plan EIR evaluated the potential impacts related to cultural, historical, and architectural resources and determined that impacts would be significant and unavoidable. Implementation of the Project would not result in development on sites that were not previously analyzed as developed in the General Plan EIR. As analyzed in the General Plan EIR, development throughout the County would be subject to State

regulations including Assembly Bill 2641 that details the process for when human remains are discovered and Assembly Bill 52 and Senate Bill 18 for Native American Consultation. Additionally, development as part of the Project would be subject to General Plan Policies CO-160, CO-167, CO-168, and CO-175 (these policies have been adopted as required by the General Plan EIR Mitigation Measure CR-1) that would require determining the significance of cultural finds, protection of prehistoric and historic sites, construction monitoring, and procedures for potential discovery of archaeological resources. Development under the Project would also be subject to General Plan Implementation Measures related to notification and consultation with the California Native Heritage Commission and appropriate Native American tribes and conducting periodic training for Municipal Services Agency. Mitigation Measures CULT-1 through CULT-5 would require conducting cultural resources survey, conducting cultural resources subsequent assessment, stopping work if potential resources are discovered, evaluation of historic resources, and preparing historic documentation report to ensure that future development on candidate rezone sites would comply with the above-identified General Plan policies pertaining to preserving or minimizing impact to cultural resources.

Therefore, increased residential density as part of the Project would not result in any substantial changes in the impacts related to cultural resources with implementation of Mitigation Measures CULT-1 through CULT-5 (as described in Table INT-2). No new or more severe cultural effects than those identified in the General Plan EIR would occur. This issue will not be discussed in the SEIR.

DISTINCT AREA PLANS

The three distinct area plan EIRs analyzed impacts to cultural resources, and impacts were determined to be significant and unavoidable for historic resources and less than significant with mitigation for archaeological resources in the Fair Oaks Boulevard EIR, North Watt Avenue EIR, and Old Florin Town SPA EIR. Development in the distinct planning areas would not result in development on sites that were not previously analyzed as developed in the respective EIRs. However, proposed development on Sites 67 through 79 would be denser than assumed in the distinct area plan EIRs.

Future development on Site 67 in the Fair Oaks Boulevard Corridor area has the potential to impact cultural resources. However, future development on Site 67 would be subject to Mitigation Measure FO-CR-1: Evaluated Historical Architectural Resources to preserve historic resources as feasible; Mitigation Measure FO-CR-2: Unevaluated Historical Architectural Resources to evaluate historic resources that have not previously been evaluated; Mitigation Measure FO-CR-3: Prehistoric and Historic Archaeological Resources to perform a cultural survey prior to development; and Mitigation Measure FO-CR-4: Undiscovered Cultural Resources. These mitigation measures are described in Table INT-2.

Development on Sites 68 through 72 would have the potential to impact cultural resources. However, future development on Sites 68 through 72 would be subject to mitigation measures contained in the North Watt Avenue EIR to reduce potential impacts to cultural resources. Specifically, future development on Sites 68 through 72 would be required to implement Mitigation Measure NW-CR-1: Evaluated Historical Architectural Resources to

preserve historic resources as feasible; Mitigation Measure NW-CR-2: Unevaluated Historical Architectural Resources to evaluate historic resources that have not previously been evaluated; and Mitigation Measure NW-CR-3: Unanticipated Discoveries of Cultural Resources to halt work if an unanticipated cultural deposit is uncovered and to evaluate the find. These mitigation measures are described in Table INT-2.

Development on Sites 73 through 79 would have the potential to impact cultural resources in the Old Florin Town SPA. However, future development on Sites 73 through 79 would be subject to mitigation measures contained in the Old Florin Town SPA EIR to reduce potential impacts to cultural resources. Specifically, future development on Sites 73 through 79 would be subject to Mitigation Measure OFT-CR-1 to perform a cultural resources survey for areas not previously investigated; Mitigation Measure OFT-CR-2 to halt work if an unanticipated cultural deposit is uncovered and to evaluate the find; Mitigation Measure OFT-CR-3 to preserve significant historical architectural resources; and Mitigation Measure OFT-CR-4 to evaluate historic resources that have not previously been evaluated. These mitigation measures are described in Table INT-2.

With implementation of mitigation measures contained in the distinct area plan EIRs, increased residential density from future development on Sites 67 through 79 would not result in any substantial changes in the impacts related to cultural resources. No new or more severe cultural resources effects than those identified in the distinct area plan EIRs would occur. This issue will not be discussed in the SEIR.

GEOLOGY AND SOILS

GENERAL PLAN

The General Plan EIR evaluated the potential impacts related to geology and soils and determined that impacts would be less than significant. Implementation of the Project would not result in development on sites that were not previously analyzed as developed in the General Plan EIR. As analyzed in the General Plan EIR, development throughout the County would be subject to County Ordinances and State laws to ensure that future projects would not result in erosion, seismicity hazards, or unstable soils. For example, future development under the Project would be subject to Chapter 16.44 of the Sacramento County Code for land grading and erosion control. Pursuant to Title 16 of the Sacramento County Code Uniform Building Code, a soils report would be required prior to building construction and recommendations from the report would be incorporated into the design of development under the Project. Future development would adhere to the requirements of the California Building Code to minimize the risk of structural failure in areas with unstable soils. Additionally, the California Building Code identifies seismic factors that must be considered in structural design. Sacramento County is not within an Alquist-Priolo Earthquake Fault Zone and there are no known active faults (Sacramento County 2011). Increased density on proposed candidate rezone sites would not result in any substantial changes in the impacts related to geology and soils identified in the General Plan EIR. All impacts related to geology and soils associated with the Project have been adequately addressed in the General Plan EIR. No new or more severe geology and soils effects compared to the impacts identified in the General Plan EIR would occur. This issue will not be discussed further in the SEIR.

DISTINCT AREA PLANS

The three distinct area plan EIRs analyzed impacts to geology and soils and concluded that there would be no impacts in the Fair Oaks Boulevard EIR, North Watt Avenue EIR, and Old Florin Town SPA EIR. As included in the distinct area plan EIRs, future development on Sites 67 through 79 would be subject to County Ordinances and State laws to ensure that development would not result in erosion, seismicity hazards, or unstable soils. Future development on Sites 67 through 79 in the three distinct planning areas would be subject to Chapter 16.44 of the Sacramento County Code for land grading and erosion control and Title 16 of the Sacramento County Uniform Building Code, as described above. Additionally, development on Sites 67 through 79 in the distinct planning areas would adhere to the requirements of the California Building Code to minimize the risk of structural failure in areas with unstable soils. Therefore, no new or more severe geology and soils effects than those identified in the distinct area plan EIRs would occur. This issue will not be discussed in the SEIR.

HAZARDS AND HAZARDOUS MATERIALS

GENERAL PLAN

The General Plan EIR evaluated the potential for impacts related to hazards and hazardous materials in the County and determined that impacts would be less than significant. Implementation of the Project would not result in development on sites that were not previously analyzed as developed in the General Plan EIR. As analyzed in the General Plan EIR, cleanup on sites identified as having potential hazardous materials in the General Plan EIR would be required prior to development. Cleanup on these sites would be subject to local, State, and federal regulations regarding cleanup and remediation. Mitigation Measure HAZ-1 would require applicant of subsequent development on candidate rezone sites to prepare Phase I Environmental Site Assessment and/or Phase II Environmental Site Assessment to ensure that future development on candidate rezone sites would not be located on previously-contaminated sites.

Implementation of Mitigation Measure HAZ-1(as described in Table INT-2) would ensure that future development under the Project would comply with existing regulations and would not result in new or more severe hazardous effects. This issue will not be discussed further in the SEIR.

DISTINCT AREA PLANS

The three distinct area plan EIRs analyzed impacts to hazards and hazardous materials and impacts were determined to be less than significant with mitigation in the Fair Oaks Boulevard EIR, North Watt Avenue EIR, and Old Florin Town SPA EIR. A database search in 2024 of Sites 67 through 79 did not identify the presence or likely presence of hazardous substances (SWRCB 2024, DTSC 2024). Development on Sites 67 through 79 in the distinct planning areas would not result in development on sites that were not previously analyzed as developed in the respective EIRs. Previous development in the Fair Oaks Boulevard Corridor area has resulted in aerial deposited lead and contaminated groundwater. Table HM-1 of the Fair Oaks Boulevard EIR identities hazardous materials sites within the Fair oaks Boulevard Corridor area. Site 67 is not identified in Table HM-1 as a hazardous

materials site. There are hazardous materials sites within the North Watt Avenue Corridor area. However, as determined in the North Watt Avenue EIR, Sites 68 through 72 are not located in areas identified with hazardous materials. Similarly, there are known hazardous materials sites within the Old Florin Town SPA area. However, as determined in the Old Florin Town SPA EIR, Sites 73 through 79 are not located in areas identified with hazardous materials. Therefore, increased residential density from future development on Sites 67 through 79 would not result in any substantial changes in the impacts related to hazards or hazardous materials. Proposed residential development on Sites 67 through 79 would not result in an increased use of hazardous materials greater than previously analyzed. No new or more severe hazard and hazardous material effects than those identified in the distinct area plan EIRs would occur. This issue will not be discussed in the SEIR.

HYDROLOGY AND WATER QUALITY

GENERAL PLAN

The General Plan EIR evaluated the potential impacts related to hydrology and water quality and determined that impacts on floodplains would be less than significant and water quality impacts would be significant and unavoidable. Implementation of the Project would not result in development on sites that were not previously analyzed as developed in the General Plan EIR. In addition, the proposed candidate rezone sites are located in infill and commercial corridor areas. All infill projects would be subject to the Sacramento County Floodplain Management Ordinance that requires an analysis of how grading impacts the surrounding area, including identification and preservation of floodplain storage. Development as part of the Project would be subject to Chapter 16.44 of the Sacramento County Code for land grading and erosion control, as well as the Statewide Construction General National Pollutant Discharge Elimination System Permit from the Central Valley Regional Water Quality Control Board. Therefore, increased residential density as part of the Project would not result in any substantial changes in the impacts related to stormwater runoff, water quality, or flooding. No new or more severe hydrology and water quality effects than those identified in the General Plan EIR would occur. This issue will not be discussed in the SEIR.

Impacts related to water supply and storm drainage are evaluated in this SEIR in Chapter 10, “Utilities.” As discussed in Chapter 10, “Utilities,” impacts related to storm drainage would not result in new or more severe effects than those identified in the General Plan EIR or distinct area plan EIRs, and this issue will not be discussed in the SEIR.

DISTINCT AREA PLANS

The three distinct area plan EIRs analyzed impacts to hydrology and water quality in Sacramento County. Impacts to drainage and water quality were determined to be less than significant in the Fair Oaks Boulevard EIR, North Watt Avenue EIR, and Old Florin Town SPA EIR. Development in the distinct planning areas would not result in development on sites that were not previously analyzed as developed in the respective EIRs. In addition, Sites 67 through 79 are located in infill and commercial corridor areas. As analyzed in the three EIRs for the distinct area plans, development in infill and commercial corridor areas would be subject to coordination with the Department of Water

Resources to meet the specifications of the Sacramento County Improvement Standards and the Sacramento County Floodplain Management Ordinance to ensure drainage and stormwater quality impacts would be reduced. Therefore, increased residential density from future development on Sites 67 through 79 would not result in any substantial changes in the impacts related to stormwater runoff, water quality, or flooding. No new or more severe hydrology and water quality effects than those identified in the distinct area plan EIRs would occur. This issue will not be discussed in the SEIR.

Land Use

General Plan

The General Plan EIR determined that impacts related to plan compatibility would be significant and unavoidable and impacts related to policy compatibility would be less than significant with mitigation to revise General Plan policies.

Increased density from the Project would increase the potential number of dwelling units in the unincorporated County, but would not create structures, such as roadways, that could physically divide an established community. The Project would amend the General Plan and revise the Zoning Code for consistency with the goals and policies in the 2021-2029 Housing Element. Specifically, Policy HE 1.1.1 to provide an adequate supply of land for housing affordable to all income groups; Policy HE 1.2.1 to promote and facility buildout of vacant and infill parcels; and Policy HE 1.2.3 to integrate housing with compatible non-residential uses to locate affordable housing near employment opportunities and take advantage of infill sites. Proposed amendments would ensure compliance with State law requirements for the Housing Element and meet RHNA allocations for the unincorporated County. Therefore, no conflict with other land use plan, policy, or regulation would occur. With the land use and zoning updates, the Project would inherently be consistent with County policies and land use regulations. The potential environmental effects related to the Project are discussed in Chapters 4 through 13 of this SEIR. Please refer to the individual SEIR chapters for a discussion of Project consistency with General Plan policies designed to protect the environment. Therefore, no new or more severe land use effects compared to the impacts identified in the General Plan EIR would occur. This impact will not be discussed further in the SEIR.

Distinct Area Plans

Increased density in the Fair Oaks Boulevard Corridor area, North Watt Avenue Corridor area, and Old Town Florin SPA would increase the potential number of dwelling units in each of these distinct area plans. However, development on Sites 67 through 79 would not physically divide an established community. Additionally, proposed land use and zoning changes for Sites 67 through 79 would ensure compliance with State law for the Housing Element and meet RHNA allocations for the unincorporated County. Therefore, no conflict with other land use plan, policy, or regulation would occur. With the land use and zoning updates, the Project would inherently be consistent with County policies and land use regulations. The potential environmental effects related to increased development potential on Sites 67 through 79 are discussed in Chapters 4 through 13 of this SEIR. Therefore, no new or more severe land use effects compared to the impacts

identified in the distinct area plan EIRs would occur. This impact will not be discussed further in the SEIR.

Mineral Resources

General Plan

The General Plan EIR concluded that development within the Jackson Highway Corridor would result in significant and unavoidable impacts related to mineral resources due to obstruction of access to and removal of mineral resources (Sacramento County 2010). However, there are no proposed candidate rezone sites located within the Jackson Highway Corridor. In addition, the Project would not change the extent or character of land disturbance from what was evaluated in the General Plan EIR (no change in the overall area of development). Development under the Project would be subject to General Plan policies and regulations designed to encourage the protection of mineral resources. Specifically, Policy CO-44 to avoid the loss of mineral resources. Therefore, no new or more severe mineral resources effects compared to the impacts identified in the General Plan EIR would occur. This impact will not be discussed further in the SEIR.

District Area Plans

None of the candidate rezone sites in the Fair Oaks Boulevard Corridor area, North Watt Avenue Corridor area, or Old Florin Town SPA are in areas of known mineral resources. Therefore, no new or more severe mineral resources effects compared to the impacts identified in the district area plan EIRs would occur. This impact will not be discussed further in the SEIR.

Population and Housing

General Plan

The Project would increase the potential number of dwelling units in the unincorporated County and would not remove housing or otherwise displace substantial numbers of people or homes. The purpose of the Project is to meet the RHNA for the County's Housing Element approved by the State Department of Housing and Community Development (HCD). Therefore, the Project would not induce substantial unplanned growth in the unincorporated County. The Project would result in beneficial effects related to population and housing by providing additional housing during a state-wide housing crisis. Therefore, no new or more severe population and housing effects compared to the impacts identified in the General Plan EIR would occur. This issue will not be discussed further in the SEIR.

Distinct Area Plans

The purpose of development within the district plan areas is to meet the RHNA for the County's Housing Element approved by HCD and would not induce substantial unplanned growth. Development on Sites 67 through 79 would increase the number of potential dwelling units and would not remove housing or otherwise displace substantial numbers of people or homes. Therefore, no new or more severe population and housing effects compared to the impacts identified in the district area plan EIRs would occur. This issue will not be discussed further in the SEIR.

Public and Environmental Review Process

As identified above in the "Scope of This Environmental Impact Report" Section, in accordance with CEQA regulations, an NOP was distributed on June 12, 2023, to agencies, interested parties, organizations, and individuals that may have interest in the Project. Two scoping meetings were held on June 27, 2023. A second NOP was released on December 22, 2023 and a scoping meeting was held on January 4, 2023. The NOPs and copies of the comments received in response to the NOPs are provided in Appendix INTRO-1.

The SEIR is being circulated for public review and comment for a period of 45 days. During the 45-day public review period, the SEIR is available for review between 8:30 am and 4:30 pm Monday through Friday at the County's PER office located at:

827 7th Street, Room 225
Sacramento, CA 95814

The SEIR is also available online at the Project website: https://planning.saccounty.gov/PlansandProjectsIn-Progress/Pages/Countywide-Rezone-Program.aspx

All agencies, organizations, interested parties and individuals, have the opportunity to comment on the SEIR during the public review period.

Written comments on the SEIR should be addressed to:

Jessie Shen, Senior Planner
Department of Community Development
Planning and Environmental Review
827 7th Street, Room 225
Sacramento, CA 95814

Written comments may also be submitted to CEQA@saccounty.gov.

Following the close of the public comment period, the County will prepare a Final SEIR, which will include written responses to comments on the SEIR and will identify any changes to the SEIR that may be required to address comments or new information, if applicable. Once the Final SEIR is completed, the Sacramento County Board of Supervisors must certify the SEIR and adopt Findings of Fact before it can approve the Project. If the SEIR finds that the Project would result in any significant and unavoidable impacts, then the Board of Supervisors must also adopt a Statement of Overriding Considerations.

Intended Uses of the EIR

The SEIR will serve as an informational document for the general public. The Sacramento County Board of Supervisors will use the information contained in this SEIR to evaluate the Project and render a decision to approve or deny the Project (as described further in Chapter 2, "Project Description").

Table INT-2: Mitigation Measures Identified for Environmental Effects Excluded from Detailed Discussion in the SEIR

Mitigation Measure
Biological Resources
Mitigation Measure BIO-1: Biological Resources Report and Mitigation Plan If appropriate habitat (such as native trees, grasslands, wetlands, water features, or any other features that may support special-status plant/animal species, raptors, and nesting birds) is present on a candidate rezone site, the applicant of subsequent development on the candidate rezone site shall retain a qualified biologist to prepare a biological resources report identifying all biological resources onsite. This report shall also constitute as a mitigation plan detailing avoidance, replacement, or otherwise mitigates identified biological impacts. The mitigation plan aspect of the report shall consist of identifying mitigation applicable to subsequent development on a candidate rezone site, as stipulated in Mitigation Measures BIO-2 through BIO-16, which will be submitted to the Environmental Coordinator for review and approval. **Mitigation Measure BIO-2: Native Tree Protection** Prior to any ground disturbing activities associated with subsequent development on candidate rezone sites, the applicant shall submit an arborist report to PER if native trees (as defined by the General Plan) will be impacted by development. The report shall include the species, diameter, dripline, and health of the trees, and shall be prepared by an ISA certified arborist. The report shall include an exhibit that shows the trees and their dripline in proximity to subsequent development improvements. The report shall identify any tree that will be removed and quantify the dripline encroachment from subsequent development. A) With the exception of the native trees removed and compensated for through Part B below, all healthy native trees that are 6 inches dbh or larger on a candidate rezone site, all portions of adjacent off-site healthy native trees that are 6 inches dbh or larger which have driplines that extend onto a candidate rezone site, and all off-site healthy native trees that are 6 inches dbh or larger which may be impacted by utility installation and/or improvements associated with subsequent development, shall be preserved and protected as follows: i) A circle with a radius measurement from the trunk of the tree to the tip of its longest limb shall constitute the dripline protection area of each tree. Limbs must not be cut back in order to change the dripline. The area beneath the dripline is a critical portion of the root zone and defines the minimum protected area of each tree. Removing limbs that make up the dripline does not change the protected area. ii) Any protected trees on the site that require pruning shall be pruned by a certified arborist prior to the start of construction work. All pruning shall be in accordance with the American National Standards Institute (ANSI) A300 pruning standards and the International Society of Arboriculture (ISA) “Tree Pruning Guidelines.” iii) Prior to initiating construction, temporary protective fencing shall be installed at least one foot outside the driplines of the protected trees within 100-feet of construction related activities, in order to avoid damage to the tree canopies and root systems. Where encroachment occurs, temporary high visibility protective fencing shall be installed a maximum of one foot outside the work areas in order to minimize damage to the tree canopies and root systems. iv) Any removal of paving or structures (i.e. demolition) that occurs within the dripline of a protected oak tree shall be done under the direct supervision of a certified arborist. To the maximum extent feasible, demolition work within the dripline protection area of the oak tree shall be performed by hand. If the certified arborist determines that it is not feasible to perform some portion(s) of this work by hand, then the smallest/lightest weight equipment that will adequately perform the demolition work shall be used.

Mitigation Measure

V) No signs, ropes, cables (except those which may be installed by a certified arborist to provide limb support) or any other items shall be attached to the protected trees. Small metallic numbering tags for the purpose of preparing tree reports and inventories shall be allowed.

vi) No vehicles, construction equipment, mobile home/office, supplies, materials or facilities shall be driven, parked, stockpiled or located within the driplines of protected trees.

vii) No grading (grade cuts or fills) shall be allowed within the driplines of protected trees, except for the minimum required for construction and streetscape improvements.

viii) Drainage patterns on the site shall not be modified so that water collects or stands within, or is diverted across, the dripline of any protected tree.

ix) No trenching shall be allowed within the driplines of protected trees. If it is absolutely necessary to install underground utilities within the dripline of a protected tree, the utility line shall be bored and jacked under the supervision of a certified arborist.

x) The construction of impervious surfaces within the driplines of protected trees shall be stringently minimized. When it is absolutely necessary, a piped aeration system per County standard detail shall be installed under the supervision of a certified arborist.

xi) All portions of any masonry wall that will encroach into the dripline protection area of any protected tree shall be constructed using grade beam wall panels and posts set no closer than 10 feet on center. Any wrought iron fencing shall be similarly installed, with posts set no closer than 10 feet on center. Posts shall be spaced in such a manner as to maximize the separation between the tree trunks and the posts in order to reduce impacts to the trees.

xii) Trunk protection measures, per Sacramento County standards, shall be used for all protected trees where development/construction activity, including installation of any masonry wall and wrought iron fence, occurs within 10 feet of the trunk of a tree.

xiii) No sprinkler or irrigation system shall be installed in such a manner that sprays water or requires trenching within the driplines of protected trees. An above ground drip irrigation system is recommended.

xiv) Landscaping beneath oak trees may include non-plant materials such as bark mulch, wood chips, boulders, etc. The only plant species which shall be planted within the driplines of oak trees are those which are tolerant of the natural semi-arid environs of the trees. A list of such drought-tolerant plant species is available with Planning and Environmental Review (PER). Limited drip irrigation approximately twice per summer is recommended for the understory plants.

B) To the maximum extent feasible, all on-site healthy native trees shall be protected and preserved. Any substantial (>20%) encroachment and/or removal of native trees shall be compensated by planting native trees (as defined by the General Plan), equivalent to the dbh inches lost, based on the ratios listed below, at locations that are authorized by PER. On-site preservation of native trees that are less than 6 inches (<6 inches) dbh, may also be used to meet this compensation requirement. Encroachment of over 20 percent within the dripline radius of native trees will require compensatory mitigation based on the percentage of encroachment multiplied by the dbh. Encroachment over 50 percent will require compensation for the entire tree.

Equivalent compensation based on the following ratio is required:

- one preserved native oak tree < 6 inches dbh on-site = 1 inch dbh
- one depot seedling (40 cubic inches or larger) = 1 inch dbh
- one 15-gallon tree = 1 inch dbh

Mitigation Measure

- one 24-inch box tree = 2 inches dbh
- one 36-inch box tree = 3 inches dbh

Replacement tree planting shall be completed prior to the issuance of building permits or a bond shall be posted by the applicant in order to provide funding for purchase, planting, irrigation, and 3-year maintenance period, should the applicant default on replacement tree mitigation. The bond shall be in an amount equal to the prevailing rate of the County Tree Preservation Fund.

Prior to the approval of Improvement Plans or building permits, a Replacement Native Tree Planting Plan shall be prepared by a certified arborist or licensed landscape architect and shall be submitted to the Environmental Coordinator for approval. The Replacement Native Tree Planting Plan(s) shall include the following minimum elements:

1. Species, size and locations of all replacement plantings and < 6-inch dbh trees to be preserved;
2. Method of irrigation;
3. The Sacramento County Standard Tree Planting Detail L-1, including the 10-foot deep boring hole to provide for adequate drainage;
4. Planting, irrigation, and maintenance schedules;
5. Identification of the maintenance entity and a written agreement with that entity to provide care and irrigation of the trees for a 3-year establishment period, and to replace any of the replacement oak trees which do not survive during that period.
6. Designation of 20 foot root zone radius and landscaping to occur within the radius of oak trees < 6-inches dbh to be preserved on-site.

No replacement tree shall be planted within 15 feet of the driplines of existing oak trees or landmark size trees that are retained on-site, or within 15 feet of a building foundation or swimming pool excavation. The minimum spacing for replacement oak trees shall be 20 feet on-center. Examples of acceptable planting locations are publicly owned lands, common areas, and landscaped frontages (with adequate spacing). Generally unacceptable locations are utility easements (PUE, sewer, storm drains), under overhead utility lines, private yards of single family lots (including front yards), and roadway medians.

Native trees <6 inches dbh to be retained on-site shall have at least a 20-foot radius suitable root zone. The suitable root zone shall not have impermeable surfaces, turf/lawn, dense plantings, soil compaction, drainage conditions that create ponding, utility easements, or other overstory tree(s) within 20 feet of the tree to be preserved. Trees to be retained shall be determined to be healthy and structurally sound for future growth, by an ISA Certified Arborist subject to PER approval.

If native tree replacement plantings are demonstrated to the satisfaction of the Environmental Coordinator to be infeasible for any or all trees removed, then compensation shall be through payment into the County Tree Preservation Fund. Payment shall be made at a rate of $325.00 per dbh inch removed but not otherwise compensated, or at the prevailing rate at the time payment into the fund is made.

Mitigation Measure BIO-3: Non-native Tree Canopy

Removal of non-native tree canopy for development shall be mitigated by creation of new tree canopy equivalent to the acreage of non-native tree canopy removed. In Environmental Justice (EJ) communities, tree canopy creation/mitigation shall be consistent with General Plan policy EJ-23 implementation measure, which requires projects in under-canopied EJ communities to provide an additional 25% tree replacement for lost canopy. New tree canopy acreage shall be calculated using the Sacramento County Department of Transportation 15-year shade cover values for tree species. Preference is given to on-site mitigation, but if this is infeasible, then funding shall be contributed to the Sacramento Tree

Mitigation Measure
Foundation's Greenprint program in an amount proportional to the tree canopy lost (as determined by the 15-year shade cover calculations for the tree species to be planted through the funding, with the cost to be determined by the Sacramento County Tree Foundation).
Mitigation Measure BIO-4: Nesting Raptors
If construction activity associated with subsequent development on candidate rezone sites (which includes clearing, grubbing, or grading) is to commence within 500 feet of suitable nesting habitat between March 1 and September 15, a survey for raptor nests shall be conducted by a qualified biologist. The survey shall cover all potential tree and ground nesting habitat on-site and off-site up to a distance of 500 feet from the project boundary. The survey shall occur within 30 days of the date that construction will encroach within 500 feet of suitable habitat. The biologist shall supply a brief written report (including date, time of survey, survey method, name of surveyor and survey results) to the Environmental Coordinator prior to ground disturbing activity. If no active nests are found during the survey, no further mitigation will be required. If any active nests are found, the Environmental Coordinator and California Fish and Wildlife shall be contacted to determine appropriate avoidance/protective measures. The avoidance/protective measures shall be implemented prior to the commencement of construction within 500 feet of an identified nest.
Mitigation Measure BIO-5: Swainson's Hawk Nesting Habitat.
If construction, grading, or improvements associated with subsequent development on candidate rezone sites are to commence between March 1 and September 15, a focused survey for Swainson's hawk nests on the site and within ¼ mile of the site shall be conducted by a qualified biologist no later than 30 days prior to the start of construction work (including clearing and grubbing). If active nests are found, the California Fish and Wildlife shall be contacted to determine appropriate protective measures, and these measures shall be implemented prior to the start of any ground-disturbing activities. If no active nests are found during the focused survey, no further mitigation will be required.
Mitigation Measure BIO-6: Migratory Bird Nest Protection.
To avoid impacts to nesting migratory birds as a result of subsequent development on candidate rezone sites, the following shall apply: 1. If construction activity (which includes clearing, grubbing, or grading) is to commence within 50 feet of nesting habitat between February 1 and August 31, a survey for active migratory bird nests shall be conducted no more than 14 days prior to construction by a qualified biologist. 2. Trees slated for removal shall be removed during the period of September through January, in order to avoid the nesting season. Any trees that are to be removed during the nesting season, which is February through August, shall be surveyed by a qualified biologist and will only be removed if no nesting migratory birds are found. 3. If active nest(s) are found in the survey area, a non-disturbance buffer, the size of which has been determined by a qualified biologist, shall be established and maintained around the nest to prevent nest failure. All construction activities shall be avoided within this buffer area until a qualified biologist determines that nestlings have fledged, or until September 1.
Mitigation Measure BIO-7: Avoid, Minimize, and Mitigate for Impacts on Western Burrowing Owl and Occupied Nesting Habitat
In the event appropriate Western Burrowing Owl nesting habitat is present on candidate rezone sites: • A qualified biologist shall conduct a preconstruction survey for burrowing owl no more than 30 days prior to ground-disturbing activities to provide updated information on owl locations and occupied burrows for impact avoidance, minimization, and mitigation planning. The survey shall cover the limits of ground disturbance and potentially suitable habitat within 500 feet. The survey shall be consistent with

Mitigation Measure

CDFG (2012), or more current CDFW guidelines. If ground-disturbing activities are delayed, then additional surveys shall be conducted such that no more than 7 days elapse between the survey and ground-disturbing activities.

- A Burrowing Owl Mitigation and Management Plan shall be developed in consultation with CDFW and consistent with CDFG's Staff Report on Burrowing Owl Mitigation (March 2012), or more current CDFW guidelines prior to project construction. The CDFW-approved Burrowing Owl Mitigation and Management Plan shall be submitted to the County of Sacramento for review prior to the start of construction. The plan shall address long-term ecological sustainability and maintenance of the site for burrowing owls on the project site and in adjacent areas. The Plan shall require the applicant to achieve a performance standard of no net loss of burrowing owl nesting and foraging habitat acreage, function, and values and shall include the following elements:
    - A description of the preconstruction distribution and abundance of burrowing owls and existing habitat conditions at the project site.
    - Avoidance and minimization measures to be implemented during project construction to avoid direct and indirect impacts on burrowing owls (e.g., establishment of a minimum of 50 meters, up to 500 meters, non-disturbance buffers around active burrows depending on the time of year and type of activity, consistent with CDFW's 2012 Staff Report guidelines), including a discussion of any proposed passive relocation activities, if necessary (e.g., non-breeding season active burrows that cannot feasibly be avoided).
    - Proposed management of burrowing owl nesting and foraging habitat during project operation and maintenance to achieve the goal of no net loss of existing habitat value for burrowing owls.
    - A monitoring and reporting plan addressing implementation and success of the management plan and identifying actions needed to maintain foraging and nesting habitat and reduce stressors on wintering and nesting burrowing owls.
    - An adaptive management plan that includes remedial action to be taken if the performance standards of no net loss of burrowing owl nesting and foraging habitat value are not being met. Remedial action shall focus on site-specific enhancements, or if appropriate, acquisition of credits in a burrowing owl mitigation bank, or another form of mitigation acceptable to CDFW.
- If CDFW determines that off-site compensatory mitigation is necessary to comply with the performance standard of no net loss of habitat acreage, function, and values for burrowing owls, the applicant may provide off-site compensatory mitigation through acquisition of a conservation easement or mitigation credits from an appropriate mitigation bank, as approved by CDFW.

Mitigation Measure BIO-8: Avoid, Minimize, and Mitigate for Impacts on Tricolored Blackbird

In the event that appropriate habitat or species are identified on a candidate rezone site (as identified in the biological resources report pursuant to Mitigation Measure BIO-1), the following shall apply:

- To the maximum extent feasible, clearing, grubbing, removal, and/or disturbance (e.g., trimming) to any vegetation that is suitable tricolored blackbird nesting habitat shall be performed outside of the nesting season (September through March) to avoid impacts to nesting birds. If vegetation disturbance/removal cannot be avoided during the nesting season for this species, the following measures shall be implemented.

Mitigation Measure

- A qualified biologist shall conduct a preconstruction survey for nesting tricolored blackbird approximately two days prior to vegetation or tree removal or ground-disturbing activities during the nesting season (approximately April through August). The survey shall cover the limits of construction and suitable nesting habitat within 500 feet.
- If any active nests are observed during surveys, a qualified biologist shall establish a suitable avoidance (i.e., non-disturbance) buffer from the active nest. The buffer distance for tricolored blackbird shall generally be 500 feet and shall be determined based on factors such as topographic features, intensity and extent of the disturbance, timing relative to the nesting cycle, and anticipated ground disturbance schedule. Limits of construction shall be established in the field with flagging, fencing, or other appropriate barriers to avoid active nests. Construction limits shall be based on the biologist-defined appropriate buffer distance and shall be maintained until the chicks have fledged and the nests are no longer active, as determined by the qualified biologist.
- If vegetation removal activities are delayed, additional nest surveys shall be conducted such that no more than 7 days elapse between the survey and vegetation removal activities.
- If an active nest is identified within 500 feet of the work area after construction has started, work within 500 feet of the nest shall be suspended until the qualified biologist can provide appropriate avoidance and minimization measures to ensure that the nest is not disturbed by construction. Appropriate measures may include a no-disturbance buffer until the birds have fledged, limitations on construction activities that generate substantial vibration and/or noise, and/or full-time monitoring by a qualified biologist during construction activities conducted near the nest.

Mitigation Measure BIO-9: Avoid and Minimize Impacts to Special-Status Bats

A qualified biologist shall conduct a pre-construction survey for special-status bat species within 14 days prior to development or ground disturbing activities including grading, vegetation clearing, tree removal, or construction. If no bats are observed, a letter report shall be prepared to document the survey and provided to project proponent, and no additional measures are recommended. If development does not commence within 14 days of the pre-construction survey, or halts for more than seven days, an additional survey is required prior to resuming or starting work.

Mitigation Measure BIO-10: Avoid, Minimize, and Mitigate for Impacts on Valley Elderberry Longhorn Beetle and Their Habitat

In the event that appropriate habitat or species are identified on a candidate rezone site (as identified in the biological resources report pursuant to Mitigation Measure BIO-1), the following shall apply:

- Conduct a preconstruction survey for valley elderberry longhorn beetle consistent with the Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle (Desmocerus californicus dimorphus) (USFWS 2017), or more current conservation guidelines, to confirm and update the location of elderberry shrubs and occupancy by this species and to assess final project impacts. \
- Direct impacts to individual elderberry shrubs (i.e., within 20 feet or less of project ground disturbance) shall be mitigated through transplanting the shrub(s) and providing compensation at a 1:1 ratio in accordance with the Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle (Desmocerus californicus dimorphus) (USFWS 2017), or more current conservation guidelines.
- Indirect impacts to individual elderberry shrubs (i.e., plants between 20 to 165 feet of project ground disturbance) shall be avoided by subsequent development and are subject to the implementation of the following additional measures:

Mitigation Measure

- Avoidance and Fencing. Subsequent development activities that may damage or kill an elderberry plant (e.g., trenching, paving, etc.) shall be avoided to the extent feasible. If avoidance of all plants is not feasible, impacts to plants shall be compensated through planting of elderberry plants in areas not subject to project disturbance at a ratio of 1:1. All areas to be avoided during construction activities shall be fenced and/or flagged as close to the project solar development area as feasible. Temporary construction fencing and flagging shall be installed at least 165 feet outside the edge of the driplines of the elderberry plants. Environmentally sensitive area signs shall be erected along the edge of the avoidance area. In areas where encroachment on the 165-foot buffer has been approved by USFWS, a minimum setback of at least 20 feet from the dripline of each elderberry plant shall be provided, as well as documentation of USFWS setback approval.
- Timing. All subsequent development activities that could occur within 165 feet of an elderberry plant shall be conducted outside of the flight season of the valley elderberry longhorn beetle (i.e., March through July) to the maximum extent feasible.
- Trimming. Trimming may remove or destroy valley elderberry longhorn beetle eggs and/or larvae and may reduce the health and vigor of the elderberry plant. Therefore, to avoid and minimize direct impacts to valley elderberry longhorn beetle, trimming shall occur between November and February and shall avoid the removal of any branches or stems that are greater than 1 inch in diameter. Measures to address regular and/or large-scale maintenance (trimming) shall be established and approved by USFWS.
- Mowing. Mechanical weed removal within the dripline of any elderberry plant shall be limited to the season when adult valley elderberry longhorn beetles are not active (i.e., August through February) and shall avoid damage to the elderberry plant.
- Construction Monitoring. A qualified biologist shall monitor the project site if work would occur within the 165-foot avoidance buffer to ensure that all avoidance and minimization measures are implemented, as applicable. The amount and duration of monitoring shall depend on the project specifics and shall be discussed with USFWS.

- A qualified biologist shall provide training for all contractors, work crews, and any on-site personnel on the status of the valley elderberry longhorn beetle, its host plant and habitat, the need to avoid damaging the elderberry shrubs, and the possible penalties for not complying with these requirements.

Mitigation Measure BIO-11: Avoid, Minimize, and Mitigate for Impacts on Vernal Pool Fairy Shrimp, Vernal Pool Tadpole Shrimp, or Midvalley Fairy Shrimp

In the event that appropriate habitat or species are identified on a candidate rezone site (as identified in the biological resources report pursuant to Mitigation Measure BIO-1), the following shall apply:

- Unless a smaller buffer is approved through formal consultation with USFWS, construction fencing shall be installed a minimum of 250 feet from the delineated wetland edge of any potentially suitable aquatic habitats (e.g., vernal pools, seasonal wetlands) for vernal pool fairy shrimp and vernal pool tadpole shrimp. All construction and operations activities are prohibited within this buffer area. If total avoidance is achieved, no further action is required.
- If avoidance, as described above, is not feasible, implement Mitigation Measure BIO-14, Avoid, Minimize, and Mitigate for Impacts on State and Federally Protected Wetlands to achieve the performance standard of no net loss of State and Federally Protected Wetlands, including vernal pool habitat acreage, function, and values for vernal pool fairy shrimp, vernal pool tadpole shrimp, and midvalley fairy shrimp. Direct and indirect effects to onsite suitable aquatic habitats that may support federally listed vernal pool branchiopods shall be offset through onsite preservation and/or the purchase of tadpole shrimp and fairy shrimp species preservation credits from a USFWS-

Mitigation Measure

approved in-lieu fee program or other USFWS-approved conservation or mitigation bank. The mitigation ratios shall, at minimum, comply with applicable mitigation ratios in terms and conditions of biological opinion issued by U.S. Fish and Wildlife Service pursuant to section 7 of the Endangered Species Act.

Mitigation Measure BIO-12: Western Pond Turtle

In the event that appropriate habitat or species are identified on a candidate rezone site (as identified in the biological resources report pursuant to Mitigation Measure BIO-1), the following shall apply:

1. Twenty four hours prior to the commencement of ground-disturbing activity (i.e. clearing, grubbing, or grading) suitable habitat within the project area shall be surveyed for western pond turtle by a qualified biologist. The survey shall include aquatic habitat and 1,650 feet of adjacent uplands surrounding aquatic habitat within the project area. The biologist shall supply a brief written report (including date, time of survey, survey method, name of surveyor and survey results) to the Environmental Coordinator prior to ground disturbing activity.
2. Construction personnel shall receive worker environmental awareness training. This training instructs workers how to recognize western pond turtles and their habitat.
3. If a western pond turtle is encountered during active construction, all construction shall cease until the animal has moved out of the construction area on its own or relocated by a qualified biologist. If the animal is injured or trapped, a qualified biologist shall move the animal out of the construction area and into a suitable habitat area. California Fish and Wildlife and the Environmental Coordinator shall be notified within 24-hours that a turtle was encountered.

Mitigation Measure BIO-13: Western Spadefoot Toad

In the event that appropriate habitat or species are identified on a candidate rezone site (as identified in the biological resources report pursuant to Mitigation Measure BIO-1), the following shall apply:

Prior to surface disturbance in suitable habitat for Western Spadefoot Toad within the proposed project activity areas, a qualified biologist shall conduct surveys to determine the presence of the western spadefoot toad (*Spea hammondii*). Surveys shall be conducted at the appropriate time of the year (typically February-March when eggs, larvae, or tadpoles can be detected). If western spadefoot toad is encountered during surveys, a site-specific avoidance, minimization, and/or relocation plan shall be prepared and ensure any measures in the approved plan are in place prior to project activities. If relocation (including out of harm's way), western spadefoot toad shall only be relocated by a qualified biologist with the appropriate state and/or federal handling authorizations.

Within suitable aquatic or upland western spadefoot habitat, all excavated steep-walled holes and trenches more than 6 inches deep will be covered with plywood (or similar material) or provided with one or more escape ramps constructed of earth fill or wooden planks at the end of each work day or 30 minutes prior to sunset, whichever occurs first. All steep-walled holes and trenches will be inspected each morning to ensure that no wildlife has become entrapped. All construction pipes, culverts, similar structures, construction equipment, and construction debris left overnight within suitable habitat will be inspected for western spadefoot toad.

If erosion control is implemented within suitable aquatic or upland western spadefoot habitat, non-entangling erosion control material will be used to reduce the potential for entrapment. Tightly woven fiber netting (mesh size less than 0.25 inch) or similar material will be used to ensure that western spadefoots are not trapped (no monofilament). Coconut coir matting and fiber rolls containing burlap are examples of acceptable erosion control materials.

Mitigation Measure

Mitigation Measure BIO-14: Wetlands, Vernal Pools, and Surface Waters

Prior to approval of grading permits or improvement plans and where wetlands, vernal pools, or other surface waters are present on candidate rezone sites, the applicant shall obtain all applicable permits from State and Federal regulatory agencies, including:

- Section 1600 Streambed Alteration Agreement from CDFW (for impact on riparian area and other sensitive natural communities not considered Waters of the U.S. (WUS) or State);
- CWA Section 404 permit from USACE for impacts to WUS;
- CWA Section 401 Clean Water Certification from the Regional Water Quality Control Board for impacts to WUS; and/or,
- Waste Discharge Permit from Regional Water Quality Control board for impacts to Waters of the State.

As part of the permit applications, the applicant shall develop a habitat mitigation plan that will include mitigation for impacted waters of the US/State on a no-net-loss basis. The plan may include on-site restoration, if feasible, off-site preservation, or purchasing mitigation credits from an agency-approved wetlands mitigation bank, paying an agency-approved in-lieu fee, and/or developing conservation lands to compensate for permanent loss of resources. Mitigation ratios shall be no less than 1:1 and shall be determined during the permitting process.

The applicant shall implement all conditions of the permits, including any performance monitoring, if required for on-site restoration and report on the results of the monitoring to the appropriate agencies at the frequency and duration included in the permits.

Mitigation Measure BIO-15: Special Status Vernal Pool Plants

Prior to the initial ground disturbance of candidate rezone sites containing special-status plant species or potential habitat identified in the biological resources report (Mitigation Measure BIO-1), a rare plant survey shall be performed by a qualified botanist in accordance to the Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities dated March 20, 2018, or the most recent CDFW rare plant survey protocols.

Submit a written report to the Environmental Coordinator which describes the survey. The survey report should include a brief description of the vegetation, survey results (which includes a list of all species observed), photographs, time spent surveying, date of surveys, a map showing the location of the survey route and any rare plant populations and copies of any rare plant occurrence forms. If no rare plants are found, no further mitigation for plant species is required. If a special status plant or natural community is located, complete and submit to the CNDDB a California Native Species (or Community) Field Survey Form or equivalent written report. Total avoidance of habitats which contain rare plants shall be required unless deemed infeasible by the Environmental Coordinator. If avoidance is infeasible, prior to construction within 250 feet of the vernal pool(s) which contain the rare plant occurrences, notify California Department of Fish and Wildlife and U.S. Fish and Wildlife Service and comply with any permit or mitigation requirements stipulated by those agencies. Submit copies of all such correspondence, including a copy of any required permits, to the Environmental Coordinator.

Measures may include but are not limited to a preconstruction survey of all areas to be disturbed. If any special-status plant species are identified, the botanist will flag and Global Positioning System (GPS) the location.

Mitigation Measure

Impacts to special-status plant species shall be avoided to the maximum extent feasible and habitat that supports special-status plant species shall be preserved. If avoidance is not feasible, perennial plant species shall be mitigated with established protocols during consultation with federal and state agencies.

Mitigation Measure BIO-16: Sanford's Arrowhead

If Sanford's Arrowhead are found on candidate rezone sites, the botanist shall establish distribution of the colony(s) and estimate the number of individuals in the population. Unless deemed infeasible by the Environmental Coordinator, all plants or tuber/rhizomes shall be removed from the area of impact and transplanted to a new or existing preserve or, if the impact is temporary, replanted in the same location after the disturbance. Surveys shall be performed annually at the transplant location for a period of three years, to ensure success. If survival is not meeting a minimum 60% survivorship, transplantation will be deemed failed. In cases where transplanting is deemed infeasible, or where transplanting has failed, compensatory mitigation shall be provided.

Mitigation Measure BIO-17: Compliance with South Sacramento Habitat Conservation Plan

The applicant of subsequent development on candidate rezone sites in South Sacramento Habitat Conservation Plan (SSHCP) (Sites 30 through 59 and 73 through 79) shall obtain authorization through SSHCP prior to all ground disturbing activities, on-site and off-site. Authorization under SSHCP shall include implementation and conformance with all applicable SSHCP Avoidance and Minimization Measures (Appendix INTRO-2) and payment of fees necessary to mitigate for impacts to species and habitat.

Cultural Resources

Mitigation Measure CULT-1: Cultural Resources Survey

Prior to approval of grading plans or issuance of building permits, the applicant of subsequent development on candidate rezone sites must provide documentation that there are no cultural resources present within the construction area (including staging areas and similar). A qualified cultural resources professional shall perform a preliminary analysis of the construction area, to determine the relative sensitivity of the construction area. This need not include a formal cultural resources survey if the cultural resources investigator determines a finding of negative presence can be made from previous surveys or otherwise. If cultural resources are considered not to be present, Mitigation Measure CULT-2 will still apply. If additional work is required, Mitigation Measure CULT-2 and CULT-3 shall apply.

Mitigation Measure CULT-2: Cultural Resources Subsequent Assessment

Subsequent development on candidate rezone sites that have been determined sensitive for known and/or unknown cultural resources within the construction area (which includes staging areas and similar) shall adhere to one or a combination of the following, to the satisfaction of the Environmental Coordinator:

A. Conduct an archaeological/historical survey and assessment, by a qualified professional archaeologist, of the area of direct impact. If the subsequent development area includes known resources, than the survey will assess the condition of the resource.

B. Based on this review and, as appropriate, a subsurface testing program will be developed and implemented to determine the significance of the resource.

Mitigation Measure

C. Following the field investigations, a technical report describing the evaluation shall be prepared to the satisfaction of the Environmental Coordinator.

D. If based on the results of the field investigations the resource is not considered significant or important, no additional work would be required for that resource, and all construction related impacts would be considered less than significant.

E. If based on the results of the field investigations resources were identified as being significant the following mitigation would apply:

a. Total Avoidance: Redesign the subsequent development as to preserve and protect all significant cultural resources. This would reduce impacts to less than significant levels.

i. OR, if a redesign is determined infeasible by the Environmental Coordinator, then,

b. Data Recovery: After all design options have been exhausted that would result in the preservation of significant resources, institute a data recovery program to the satisfaction of Environmental Coordinator. Impacts to the resource would remain significant.

Mitigation Measure CULT-3: Cultural Resources Inadvertent Discovery

In the event that human remains are discovered in any location other than a dedicated cemetery, work shall be halted and the County Coroner contacted. For all other potential tribal cultural resources [TCRs], archaeological, or cultural resources discovered during project's ground disturbing activities, work shall be halted until a qualified archaeologist and/or tribal representative may evaluate the resource.

1. **Unanticipated human remains**. Pursuant to Sections 5097.97 and 5097.98 of the State Public Resources Code, and Section 7050.5 of the State Health and Safety Code, if a human bone or bone of unknown origin is found during construction, all work is to stop and the County Coroner and the Planning and Environmental Review shall be immediately notified. If the remains are determined to be Native American, the coroner shall notify the Native American Heritage Commission within 24 hours, and the Native American Heritage Commission shall identify the person or persons it believes to be the most likely descendent from the deceased Native American. The most likely descendent may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposition of, with appropriate dignity, the human remains and any associated grave goods.
2. **Unanticipated cultural resources**. In the event of an inadvertent discovery of cultural resources (excluding human remains) during construction, all work must halt within a 100-foot radius of the discovery. A qualified professional archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for prehistoric and historic archaeology, shall be retained at the Applicant's expense to evaluate the significance of the find. If it is determined due to the types of deposits discovered that a Native American monitor is required, the Guidelines for Monitors/Consultants of Native American Cultural, Religious, and Burial Sites as established by the Native American Heritage Commission shall be followed, and the monitor shall be retained at the Applicant's expense.
    a. Work cannot continue within the 100-foot radius of the discovery site until the archaeologist and/or tribal monitor conducts sufficient research and data collection to make a determination that the resource is either 1) not cultural in origin; or 2) not potentially eligible for listing on the National Register of Historic Places or California Register of Historical Resources.
    b. If a potentially-eligible resource is encountered, then the archaeologist and/or tribal monitor, Planning and Environmental Review staff, and project proponent shall arrange for either 1) total avoidance of the resource, if possible; or 2) test excavations or total data recovery as mitigation. The determination shall be formally documented in writing and submitted to the County Environmental Coordinator as verification that the provisions of CEQA for managing unanticipated discoveries have been met.

Mitigation Measure
Mitigation Measure CULT-4: Historic Resources If existing structures of ages 50 years or greater are present on a candidate rezone site, and have not been formally evaluated for the National Register of Historic Places (NRHP) or California Register of Historical Resources (CRHR), the applicant of subsequent development on candidate rezone sites shall retain a qualified architectural historian to conduct a pedestrian or windshield survey, and if needed, a formal evaluation applying the criteria of the NRHP and the CRHR shall be prepared to determine if they are significant historic resources. Results of the evaluations shall be submitted to the Environmental Coordinator for review and approval prior to approval of any permits authorizing construction. If resources are determined not to be eligible for listing on the NRHP or CRHR, further mitigation is not required. If resources are determined to be eligible, such resources shall be avoided. However, if avoidance is not feasible, Mitigation Measure CULT-5 shall be implemented. **Mitigation Measure CULT-5: Historic Documentation Report** Prior to the demolition of any existing historic buildings on a candidate rezone site, the following measures shall be implemented: a) The applicant of subsequent development on a candidate rezone site shall retain a qualified architectural historian to prepare a "Historic Documentation Report." The report shall include current photographs of each building displaying each elevation, architectural details or features, and overview of the buildings, together with a textual description of the building along with additional history of the building, its principal architect or architects, and its original occupants. The photo-documentation shall be done in accordance with Historic American Buildings Survey/Historic American Engineering Record (HABS/HAER) guidelines, which shall include archival quality negatives and prints. The report shall be deposited with the Environmental Coordinator, the Department of Museums, and the State Office of Historic Preservation, as well as other appropriate organizations and agencies as identified by Sacramento County Planning and Environmental Review (PER).
Hazards and Hazardous Materials
Mitigation Measure HAZ-1: Environmental Site Assessments The applicant of subsequent development on candidate rezone sites shall prepare a Phase I Environmental Site Assessment. The Phase I analysis shall disclose whether the site is listed as a known toxic site in the State Water Resources Control Board's GeoTracker or the Department of Toxic Substances' EnviroStor databases, and any historic uses onsite which may have contributed to toxics onsite. The analyses shall be submitted to the Environmental Coordinator for review and approval prior to any onsite ground-disturbing activities associated with subsequent development and all identified measures to minimize exposure to potential toxic substances shall be implemented. In the event the Phase I analyses identify the need for a subsequent Phase II Environmental Site Assessment, Soil Management Plan or a Health Risk Assessment, the applicant of subsequent development on candidate rezone sites shall continue to consult with PER and prepare the Phase II analyses. All site clean-up recommendations shall be completed prior to issuance of any building or grading permit, unless PER approves clearance due to extenuating circumstances.

Note: Refer to the Executive Summary for applicability of these mitigation measures to specific candidate rezone sites.

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2 PROJECT DESCRIPTION

INTRODUCTION

Sacramento County (County) is undertaking the County Regional Housing Needs Allocation (RHNA) Rezone Project (Project) which consists of rezoning approximately 235 acres within the unincorporated County to provide additional lower income (i.e., extremely low income, very low income, and low income) and moderate income category housing opportunities. The Project, including necessary general plan and other land use plan amendment approvals, is described in detail below.

PROJECT SETTING

PROJECT LOCATION

The Project planning area consists of the unincorporated portions of Sacramento County, which encompasses approximately 469,083 acres or 775 square miles (approximately 79 percent of the entire County) (Plate PD-1). The remaining 21 percent of the County, which is not part of the Project planning area, is comprised of the incorporated cities of Sacramento, Citrus Heights, Folsom, Rancho Cordova, Galt, Elk Grove, and Isleton. The County is bound by Placer and Sutter Counties to the north, San Joaquin and Contra Costa Counties to the south, El Dorado and Amador Counties to the east, and Yolo and Solano Counties to the west. The Sacramento River forms the western boundary of the County. Major roadway access to the County is provided by Interstate 5 (I-5), Interstate 80 (I-80), U.S. Highway 50, and State Routes (SR) 99 and 16.

The unincorporated County is divided into 14 communities. The Project proposes rezoning of parcels (or portions of parcels) (referred to as candidate rezone sites) within 10 of the County communities including: Antelope, Arden Arcade, Carmichael/Old Foothill Farms, Cordova, Fair Oaks, North Highlands, Orangevale, Rio Linda/Elverta, South Sacramento, and Vineyard.

PROJECT BACKGROUND

State law requires each city and county to adopt a general plan containing at least eight elements including a housing element. The housing element, required to be updated regularly, is subject to detailed statutory requirements and mandatory review by the State Department of Housing and Community Development (HCD). The *Sacramento County Housing Element of 2021-2029* (Housing Element) was adopted by the Sacramento County Board of Supervisors on March 8, 2022 and certified by HCD on May 9, 2022.

State housing law requires local governments to plan adequately to accommodate their existing and projected housing needs, including their share of the regional housing need.

California Government Code Sections 65583 and 65583.2 require cities and counties to provide a parcel-specific inventory of appropriately-zoned, available, and suitable sites to provide opportunities for housing at all income levels. RHNA identified in the Housing Element for unincorporated Sacramento County is 21,272 new housing units. Table PD-1 identifies the RHNA allocation of the new housing units and projected supply by income category (i.e., income category the units are required to be affordable for).

Table PD-1: 2021-2029 Regional Housing Needs Allocation and Projected Supply for Unincorporated Sacramento County by Income Category

Income Category (Income Level)	RHNA	Projected Supply[1]	Oversupply / Shortfall
Lower Income ($0 - $69,050)[2]	7,158 units	4,274 units	-2,884 units
Moderate Income ($69,051 - $103,550)	4,186 units	7,658 units	+3,472 units
Above Moderate Income ($103,550+)	9,928 units	12,121 units	+2,189 units
Total	21,272 units	23,653 units	

Notes: [1] Projected supply includes accessory dwelling units (ADUs).

[2] The lower income category includes Extremely Low Income ($0 - $25,900), Very Low Income ($25,901 - $43,150), and Low Income ($43,151 - $69,050) levels.

Source: Sacramento County Housing Element of 2021-2029.

As summarized in Table PD-1, the Housing Element demonstrates that the County has sufficient residential capacity to accommodate its RHNA for moderate and above moderate income category units, but has a shortfall of sites to accommodate the lower income category units. The County has appropriately-zoned sites to accommodate 4,274 lower income category units, compared to a RHNA of 7,158 lower income category units. Therefore, there is a shortfall of 2,884 lower income category units. Program A1 of the Housing Element identifies the Countywide Rezone Program as the means to accomplish accommodating the shortfall of lower income category units.

PROJECT CHARACTERISTICS

PROJECT OVERVIEW

As described in Program A1 of the Housing Element, to meet the shortfall identified for the lower income category (2,884 units), the County is required to rezone sufficient sites to allow multifamily residential uses by-right, at 30 dwelling units per acre or greater. The County intends to rezone additional sites beyond those needed to meet the RHNA obligation for the lower income category in order to provide a buffer of lower-income sites in the event those sites are lost from the inventory (i.e., lower-income sites are developed units for moderate or above moderate income categories). Additionally, the County also intends to rezone sites to increase the buffer for the moderate income category.

The Project entails the rezone of 79 candidate rezone sites, totaling approximately 235 acres, resulting in a potential development capacity (realistic capacity) of 3,857 lower income category units and 156 moderate income category units. The addition of 3,857

lower income category units exceeds the County's unmet RHNA of 2,884 lower income category units by 973 units. However, this SEIR assumes the net increase of units from the proposed rezone. The Project would result in 4,081 net new lower income and moderate category units. Plate PD-2 shows the locations of the candidate rezone sites. Appendix B includes the list of the candidate rezones sites as well as their assigned site number used in this analysis and information pertaining to existing and proposed zoning and General Plan land use designations with the Project.

Table PD-2 identifies the resultant zoning designations of the approximately 235 acres with the Project.

Table PD-2: Summary of Resultant Zoning Designations

Resultant Zoning Designation	Acres (# of Rezone Sites)	Income Category
RD-10, Residential 10	3.59	Moderate Income
RD-15, Multiple Family Residential 15	16.66	Moderate Income
RD-20, Multiple Family Residential 20	0.97	Moderate Income
RD-30, Multiple Family Residential 30	142.58	Lower Income
RD-40, Multiple Family Residential 40	71.72	Lower Income
Total	235.52	

As shown in Table PD-2, 3.59 acres, 16.66 acres, and 0.97 acres would be rezoned to RD-10, RD-15, and RD-20, respectively, for the moderate income category. Subsequent residential uses, primarily multifamily, on the resultant RD-10, RD-15, and RD-20 zoned sites may be subject to discretionary review and approval (i.e., conditional use permit). The least dense zoning designation RD-10 would allow a minimum of 10 units per acres, which could support single family development.[1] Per Section 3.5.1.C of the Sacramento County Zoning Code, multifamily projects (three or more dwelling units on one lot) in the RD-10 zone requires a Conditional Use Permit by the Zoning Administrator, and in the RD-15 through RD-40 zones requires a Minor Use Permit by the Planning Director if greater than 150 dwelling units.

For the lower income category, 142.58 acres and 71.72 acres would be rezoned to RD-30 and RD-40, respectively. As stipulated in Program A1 of the Housing Element, in accordance with California Government Code Section 65583.2(i), multifamily residential uses on the resultant RD-30 and RD-40 zoned sites for the lower income category would be allowed by-right (i.e., review of the use may not require a conditional use permit, planned unit development permit, or discretionary local government review or approval) when at least 20 percent of the units developed are affordable to lower-income households.

[1] Single family development would be subject to subsequent discretionary review.

Distinct Plan Areas

The County has several distinct plan areas, each with a specific plan (i.e., Community Planning Area, Special Planning Area [SPA], Neighborhood Preservation Area [NPA], etc.). These distinct plan area plans provide goals and policies for individual communities and are intended to be a comprehensive guide for the physical development of a community on a more detailed basis than the General Plan. The plan for each distinct plan area depends on the need for each community and provides strategies to impellent the plan. A total of 13 rezone sites are located in three distinct area plans (Fair Oaks Boulevard Corridor Plan, North Watt Avenue Corridor Plan, and Old Florin Town SPA). Site 67 is located in the Fair Oaks Boulevard Corridor area, Sites 68-72 are located in the North Watt Avenue Corridor area, and Sites 73-79 are located in the Old Florin Town SPA. Distinct plan areas and rezone site locations are shown on Plate PD-2. Future development as part of the Project within these three distinct plan areas would be subject to the goals and policies in their respective plans in addition to the General Plan.

By-Right Development On Candidate Rezone Sites

The Project does not propose to construct new residential or other development on the approximately 235 acres evaluated in this SEIR; rather, it provides capacity for future development of housing units to meet the County's remaining unmet RHNA of 2,884 lower income category units, consistent with State law. Of the approximately 235 acres proposed to be rezoned, approximately 156 acres (66 percent) currently allows for (either by-right or with a discretionary entitlement) multifamily residential development. The Project would increase residential density on these sites and does not change the development footprint. The horizon year for the Project is 2029.

Subsequent residential development, primarily multifamily, on the candidate rezone sites for the lower income category would be allowed by-right and subject to applicable objective development standards prescribed in Section 5.4.3.C of the Sacramento County Zoning Code (Zoning Code) and/or those prescribed in the distinct area plans candidate rezone sites are located in (i.e., SPAs, Corridor Plans, and NPAs). Table PD-3 provides a summary of the applicable minimum yard and maximum height requirements for multifamily residential development prescribed in the Zoning Code.

Table PD-3: Summary of Pertinent Development Standards for Resultant Zoning Designations

Topic	Development Standard
Minimum Yard Requirements	
Front Yard	20 feet without public utilities public facilities (PUPF) easement 26 feet with PUPF easement
Interior Side and Rear Yards	Adjacent to or within Low Density Residential (RD-1 through RD-10) zoning districts: • 25 feet (1 story) • 50 feet (2 story) • 75 feet (3 story) • 75 feet (4 story when adjacent to collector/arterial) All other circumstances:

Topic	Development Standard
	• 10 feet (1 and 2 story) • 15 feet (3 story or greater)
Side Street Yard	15 feet without PUPF easement 21 feet with PUPF easement
Maximum Height and Story Limits	
Maximum Height and Stories	Adjacent to or within Low Density Residential (RD-1 through RD-10) zoning districts: • 40 feet and 3 stories, except when adjacent to major collectors/arterials. Heights may be increased by one story along major collector/arterial streets with widths of 80 feet or more. All other circumstances: • RD-30 and all other zones: 150 feet and no story limit

Source: Sacramento County Zoning Code.

Table PD-3 does not provide an exhaustive list of all applicable multifamily residential development standards (i.e., open space, parking, wall/fencing requirements, etc.). The minimum yard and maximum height/story requirements are highlighted to provide a frame of reference for subsequent by-right development. Although distinct area plans may contain varying standards, the development standards identified in Table PD-3 would apply to the majority of subsequent development on the candidate rezone sites.

Should a subsequent development deviate from any applicable development standards, be it Zoning Code or distinct area plan development standards, a discretionary permit (i.e., special development permit, variance, etc.) would be required.

Applicable Land Use Plans and Prior Environmental Analysis

Analysis of the Project tiers from the *Sacramento County General Plan of 2005-2030* (General Plan) and three distinct area plans (Fair Oaks Boulevard Corridor Plan, North Watt Avenue Corridor Plan, and Old Florin Town SPA). The Fair Oaks Boulevard Corridor Plan, North Watt Avenue Corridor Plan, and Old Florin Town SPA are products of General Plan Policy LU-11 which directed the corridor planning processes for certain commercial corridors. As described below, the environmental analysis associated with rezoning candidate rezone sites within these distinct area plans tier from the prior environmental analysis prepared for these area plans. Table PD-4 summarizes the additional residential capacities accounted for in each of these plans, as well as the Project's resultant net increase in residential units in each plan.

Table PD-4: Summary of Additional Residential Capacities Accounted For in Land Use Plans and Project's Net Increase in Units

Land Use Plan	Additional Residential Capacity Accounted For in Land Use Plan	Project's Net Increase
General Plan	103,500 – 150,000 units	--
Infill development	10,000 – 18,000 units	3,565 units
Buildout of planned communities	25,000 – 35,000	

Land Use Plan	Additional Residential Capacity Accounted For in Land Use Plan	Project's Net Increase
New growth areas	51,500 – 76,000	
Commercial corridor planning	17,000 – 21,000 units	--
Fair Oaks Boulevard Corridor Plan	5,310 units	12 units
North Watt Avenue Corridor Plan	7,200 units	230 units
Old Florin Town SPA	1,126 units	274 units
Total		4,081 units

General Plan

The General Plan and *Sacramento County General Plan Update Final Environmental Impact Report* (General Plan EIR) identifies four distinct growth management strategies, which combined result in 103,500 to 150,000 additional housing units within the planning period. The four growth management strategies are listed and described below.

1) Infill development entailing the buildout of vacant and underutilized infill parcels (outside of commercial corridors), resulting in 10,000 to 18,000 housing units;

2) Commercial corridor planning and revitalization of 14 identified corridors (including North Watt Area, Florin Road Area, and Fair Oaks Boulevard Central), resulting in 17,000 to 21,000 housing units;

3) Buildout of approved or proposed planned communities including Elverta, East Antelope, Vineyard Springs, North Vineyard Station, and Florin Vineyard Gap that have yet to be developed to their identified holding capacities, resulting in 25,000 to 35,000 housing units; and

4) Four new growth areas identified as West of Watt, Easton, Jackson Highway Corridor, and Grant Line East, resulting in 51,500 to 76,000 housing units.

None of the candidate rezone sites are located within planned communities or new growth areas (the latter two growth management strategies). All candidate rezone sites are located within the Urban Service Boundary (USB) which is the ultimate boundary of the urban area in the unincorporated County, as well as the Urban Policy Area (UPA) which is the area within the USB expected to receive urban levels of public infrastructure and services within the General Plan planning period. As such, the 79 candidate rezone sites are either categorized under the infill development or commercial corridor growth management strategies identified in the General Plan.

Thirteen of the candidate rezone sites (Sites 67-79) are located in identified commercial corridors for which subsequent area plans and associated environmental analysis was prepared. The environmental analysis associated with rezoning candidate rezone sites within these area plans tier from the prior environmental analysis prepared for these area plans. Descriptions of the Fair Oaks Boulevard Corridor Plan, North Watt Avenue Corridor Plan, and Old Florin Town SPA and the environmental analysis prepared for these area plans are further described below.

The remaining 66 candidate rezone sites (Sites 1-66), approximately 3,565 net new units, are categorized under the infill development growth management strategy as they are located within the General Plan's USB and UPA. Nine candidate rezone sites are located within distinct area plans (i.e., Site 58 in the Stockton Boulevard NPA, Site 59 in the Victory Avenue NPA, Sites 60-64 in the Greenback Lane SPA, and Sites 65-66 in the Downtown Rio Linda SPA) for which associated environmental analysis or EIR was not prepared. Absent a comprehensive environmental analysis for these distinct area plans, the environmental analysis associated with rezoning Sites 58-66 tier from the General Plan EIR. As identified in the General Plan EIR, an estimated holding capacity of 10,000 to 18,000 housing units is identified for the buildout of vacant and underutilized infill parcels outside of commercial corridors. Implementation of the Project would result in a net increase of 3,565 units.

The General Plan EIR identifies the following levels of impact:

- Less-than-significant level of impacts related to land use plan compatibility, agricultural policies, division or disruption of an established community, displacement of housing, airport safety zone compatibility, most public services, water supply policies, groundwater pumping in the North Groundwater Basin, most effects to and from floodplains, circulation policy compatibility, traffic and circulation safety, bicycle and pedestrian facilities, airport noise compatibility, construction equipment emissions, carbon monoxide hotspots, pollutant emissions from the Sacramento International Airport, erosion, seismicity, unstable soils, hazardous materials, and asbestos.
- Potentially significant impacts which could be reduced to a less-than-significant level through inclusion of mitigation measures related to land use policy conflict with smart growth principles, park services, noise policies, groundwater pumping within the Central Groundwater Basin, and flooding impacts associated with development of specific areas near the American River levee system.
- Significant and unavoidable impacts related to land use plan conflict with smart growth principles, conversion of or conflict with farmland, sewer capacity, water supply, groundwater recharge, water quality, biological resources, roadway levels of service, transit services, vehicle noise, construction dust (particulate matter), operational air quality emissions (area, stationary, mobile, off-road), exposure of sensitive receptors to pollutants (roadway emissions, Roseville Railyard emissions, and other Toxic Air Contaminant sources), climate change impacts to and from the project, loss of mineral resources, impacts to important archaeological resources, impacts to important historical/structural resources, impacts to important cultural resources, impacts to unique paleontological resources, degradation of visual quality, and substantial glare/loss of nighttime views.

Fair Oaks Boulevard Corridor Plan

One candidate rezone site (Site 67) is located within the Fair Oaks Boulevard Corridor Plan. Plate PD-3 depicts the location of Site 67 in the Fair Oaks Boulevard Corridor area. Site 67

would be rezoned from the Business Professional Office (BP) subzone to the RD-30 subzone in the Fair Oaks Boulevard Corridor Plan, resulting in a net increase of 12 units.

The Fair Oaks Boulevard Corridor Plan comprises approximately 692 acres and spans a three-mile stretch of commercial and contiguous residential parcels along the north-south segment of Fair Oaks Boulevard and Manzanita Avenue, bounded by Oak Avenue to the south and Winding Way to the north, and the east-west segment of Fair Oaks Boulevard extending east to Marshall Avenue. The intent of the Plan is to revitalize and enhance Fair Oaks Boulevard creating livable, social and vibrant districts that provide a community center for the community's residents. The Fair Oaks Boulevard Corridor Plan could result in the development of up to 5,310 residential units, 5,052,650 square feet of commercial/retail uses, and 2,231,300 square feet of office uses. The Fair Oaks Boulevard Corridor Plan is divided into four districts including the Manzanita, East Fair Oaks, Main Street, and South Gateway districts. Site 67 is located within the East Fair Oaks district and development within this district may rely upon the Zoning Code or opt into the development standards included in the Fair Oaks Boulevard Corridor Plan.

The *Fair Oaks Boulevard Corridor Plan and Roadway Project Final Environmental Impact Report* (Fair Oaks Boulevard EIR) identifies the following levels of impact:

- Less-than-significant level of impacts related to land use, public services, hydrology and water quality, bicycle and pedestrian facilities, traffic safety, and climate change (residential and commercial transportation energy emissions).
- Potentially significant impacts which could be reduced to a less-than-significant level through inclusion of mitigation measures related to land use (General Plan, Carmichael Colony NPA, and Winding Way/Hackberry Lane SPA consistency), public transit, noise, biological resources, hazardous materials, climate change (residential and commercial development energy emissions), and cultural resources (archeological resources).
- Significant and unavoidable impacts related to traffic and circulation, air quality, noise, and cultural resources (architectural resources).

North Watt Avenue Corridor Plan

Five candidate rezone sites (Site 68-72) are located within the North Watt Avenue Corridor Plan. Plate PD-4 depicts the locations of Site 68-72 in the North Watt Avenue Corridor area. Sites 68, 69, and 72 would be rezoned from the Residential Mixed-Use 1 (RMU-1) subzone to the RD-40 subzone and Sites 70 and 71 would be rezoned from the Residential Mixed-Use 2 (RMU-2) and RMU-1 subzones, respectively, to the RD-30 subzone in the North Watt Avenue Corridor Plan. Note the candidate rezone sites in the North Watt Avenue Corridor Plan would maintain their existing subzoning designation (i.e., RMU-1 or RMU-2), however the minimum densities permitted on the candidate rezone sites would be amended to correspond with the proposed subzones (i.e., RD-30 or RD-40). For the purposes of this EIR, this is described as a rezone to the RD-30 and/or RD-40 subzone. Collectively, this would result in a net increase of 230 units in the North Watt Avenue Corridor area.

This North Watt Avenue Corridor Plan encompasses approximately 750 acres distributed along a 4-mile segment of Watt Avenue north of Interstate 80 (I-80) to Antelope Road. The intent of the Plan is to guide infill growth and public improvements along North Watt Avenue. The North Watt Avenue Corridor Plan could result in the addition of up to 7,200 residential units, 1,170,000 square feet of new retail, and 714,700 square feet of new office uses. The North Watt Avenue Corridor Plan is subdivided into three district: Elkhorn, Town Center, and Triangle Gateway. Sites 68-71 are within the Elkhorn District, which is defined by higher densities (greater than 25 units per acre) and intensities necessary to support transit within a convenient walking distance. Site 72 is within the Town Center District which is envisioned predominantly as a residential mixed-use district.

The *North Watt Avenue Corridor Plan Final Environmental Impact Report* (North Watt Avenue EIR) identifies the following levels of impact:

- Less-than-significant level of impacts related to land use (General Plan and Zoning Code consistency), airport noise, navigable airspace, drainage and hydrology, fire and emergency services, law enforcement, solid waste, schools, park and recreation services, energy services, construction noise, formally evaluated historical resources, and exposure to lead based paint and asbestos.
- Potentially significant impacts which could be reduced to a less-than-significant level through inclusion of mitigation measures related to land use compatibility, water services, sewer services, ozone precursor and diesel particulate emissions caused by construction activities, ozone precursor and diesel particulate emissions caused by high traffic roadways and railroad, interior noise, biological resources, climate change emissions, prehistoric and historic archaeological resources, and contamination sites.
- Significant and unavoidable impacts related to airport safety zones, study road segments and intersections, study freeway facilities, fugitive dust, operational emissions, exterior noise, and historic architectural resources.

Old Florin Town SPA

Seven candidate rezone sites (Sites 73-79) are located within the Old Florin Town SPA, which is the comprehensive plan prepared for the Florin Road Area commercial corridor identified in the General Plan. Plate PD-5 depicts the locations of Site 73-79 in the Old Florin Town SPA. Sites 73-76 and 79 would be rezoned from the Mixed Use Residential (MUR) subzone to the RD-30 subzone, Site 77 would be rezoned from the MUR/Mixed Use Commercial (MUC) subzone to the RD-30 subzone, and Site 78 would be rezoned from the MUR subzone to the RD-40 subzone in the Old Florin Town SPA. Collectively, this would result in a net increase of 274 units in the Old Florin Town SPA.

The Old Florin Town SPA encompasses approximately 430 acres consisting of parcels along the Florin Road corridor between Power Inn Road to the west and Florin-Perkins Road and French Road to the east. The intent of the SPA is to preserve the historic community of Old Florin Town from growing development pressures from surrounding areas and allows for low (2 units per acre), medium (20 units per acre or greater), and

mixed-use (up to 20 unit per acre) residential; commercial and mixed-use commercial; and industrial and industrial/office park uses. The Old Florin Town SPA would include the development of up to 1,126 residential units, 391,500 square feet of commercial/retail, and 1,888 new general industrial employees. This SPA identifies a Housing Element Sites overlay on 22.5 acres located north of Florin Road in the vicinity of Bacchini Avenue for parcels that were rezoned to RD-20 as part of a prior Housing Element cycle to provide adequate multifamily zoned sites. Several of the Project's candidate rezone sites are located within this SPA Housing Element Sites overlay.

The *Old Florin Town Special Planning Area Final Environmental Impact Report* (Old Florin Town SPA EIR) identifies the following levels of impact:

- Less-than-significant level of impacts related to land use, public services (with the exception of water and sewer services), drainage, and construction noise.
- Potentially significant impacts which could be reduced to a less-than-significant level through inclusion of mitigation measures related to biological resources, hazardous materials, air quality: ozone precursor emissions and diesel particulates caused by construction, cultural resources (archaeological resources), and climate change.
- Significant and unavoidable impacts related to water service, sewer service, traffic, operational air quality, fugitive dust air quality, noise, and cultural resources (historic architectural resources).

PROJECT ENTITLEMENTS

The following entitlements are requested for the Project:

1. A **General Plan Amendment** for 60 candidate rezone sites, totaling approximately 181.15 acres, consisting of:

    - Approximately 109.43 acres from existing land use designations to the proposed Medium Density Residential (MDR) land use designation; and

    - Approximately 71.72 acres from existing land use designations to the High Density Residential (HDR) land use designation.

2. A **Community Plan Amendment** for 68 candidate rezone sites, totaling ±205.60 acres, consisting of:

    - Approximately 29.63 acres in the Antelope Community Plan from existing plan designations to the proposed RD-30 and RD-40 plan designations;

    - Approximately 1.98 acres in the Arden Arcade Community Plan from the existing plan designation to the proposed RD-30 plan designation;

- Approximately 16.62 acres in the Carmichael/Old Foothill Farms Community Plan from existing plan designations to the proposed RD-10, RD-15, and RD-30 plan designations;

- Approximately 13.90 acres in the Cordova Community Plan from the existing plan designation to the proposed RD-40 plan designation;

- Approximately 2.89 acres in the Fair Oaks Community Plan from existing plan designations to the proposed RD-30 plan designation;

- Approximately 42.52 acres in the North Highlands Community Plan from the existing plan designations to the proposed RD-20, RD-30, and RD-40 plan designations;

- Approximately 3.23 acres in the Orangevale Community Plan from the existing plan designations to the proposed RD-30 and RD-40 plan designations;

- Approximately 18.77 acres in the Rio Linda/Elverta Community Plan from the existing plan designations to the proposed RD-30 plan designation;

- Approximately 71.25 acres in the South Sacramento Community Plan from existing plan designations to the proposed RD-15, RD-30, and RD-40 plan designations; and

- Approximately 4.81 acres in the Vineyard Community Plan from the existing plan designation to the proposed RD-30 plan designation.

3. A **Rezone** for 74 candidate rezone sites, totaling 214.21 acres, consisting of:

   - Approximately 3.59 acres from existing zoning districts to the proposed RD-10 zoning district;

   - Approximately 16.66 acres from existing zoning districts to the proposed RD-15 zoning district;

   - Approximately 0.97 acres from the existing zoning district to the proposed RD-20 zoning district;

   - Approximately 131.08 acres from existing zoning districts to the proposed RD-30 zoning district; and

   - Approximately 61.91 acres from existing zoning districts to the proposed RD-40 zoning district.

4. A **Zoning Ordinance Amendment** to amend Chapters 2 and 5, and Section 6.7 (Fair Oaks Boulevard Corridor Plan); Section 506-20 (Greenback Lane SPA

Ordinance); Section 506-50 (Downtown Rio Linda SPA Ordinance); Section 530-40 (Victory Avenue NPA Ordinance); Section 530-90 (Stockton Avenue NPA Ordinance); Section 610-10 (Old Florin Town SPA Ordinance); and Section 612-10 (North Watt Avenue Corridor Plan) of the Zoning Code to ensure consistency with State requirements for density, remove discretionary entitlement requirements when at least 20 percent of the units developed are affordable to lower-income households, and classify lower-income sites within these land use plans as available affordable housing sites.

GENERAL PLAN AMENDMENTS

The Project would require amendments to the County's General Plan to ensure consistency between the General Plan land use designations and proposed zoning districts. Of the total 235.52 acres proposed to be rezoned with the Project, 109.43 acres would be amended to the Medium Density Residential (MDR) land use designation and 71.72 acres would be amended to the High Density Residential (HDR) land use designation. The remaining 54.37 acres would not require a General Plan land use designation amendment.

COMMUNITY PLAN AMENDMENTS AND REZONES

The Project would require amendments to the respective community plans each candidate rezone site is located in to ensure consistency between the community plan designations and proposed zoning districts. The Orangevale and South Sacramento Community Plans utilize SPA as a plan designation, and this plan designation would be maintained for 12 candidate rezone sites (5 in the Orangevale Community Plan for the Greenback Lane SPA and 7 in the South Sacramento Community Plan for the Old Florin Town SPA). The Project would also require rezones of the candidate rezone sites to their proposed zoning districts. The 5 candidate rezone sites within the North Watt Avenue Corridor Plan would maintain their existing subzoning designation (i.e., RMU-1 or RMU-2), however the minimum densities permitted on the candidate rezone sites would be amended to correspond with the proposed subzones (i.e., RD-30 or RD-40).

ZONING ORDINANCE AMENDMENTS

The Zoning Code would be amended to identify minimum density requirements for the zoning districts accommodating the lower-income category, the RD-30 and RD-40 zones. The minimum densities for these zoning districts would be not less than 75% of the zoned maximum density, consistent with General Plan Policy LU-5.

As described above, 22 candidate rezone sites are located within distinct area plans such as SPAs, Corridor Plans, and NPAs. These distinct area plans, which are an extension of the Zoning Code, will be amended to ensure consistency with State requirements for density, removing discretionary entitlement requirements when at least 20 percent of the units developed are affordable to lower-income households, and classifying lower-income sites within these distinct area plans as available affordable housing sites.

PROJECT OBJECTIVES

The purpose of the Project is to address the housing needs of the County and to meet the requirements of State law. The objectives of the Project are to:

- Comply with California Government Code Sections 65583 and 65583.2;
- Implement Housing Action Plan Program A1 to increase the vacant land inventory and facilitate development;
- Provide zoning and land use designations for at least 3,300 lower-income housing units to meet the RHNA and a buffer to accommodate the "no net loss" provision requirements; and
- Provide zoning and land use designations for moderate income housing units.

ENVIRONMENTAL SETTING

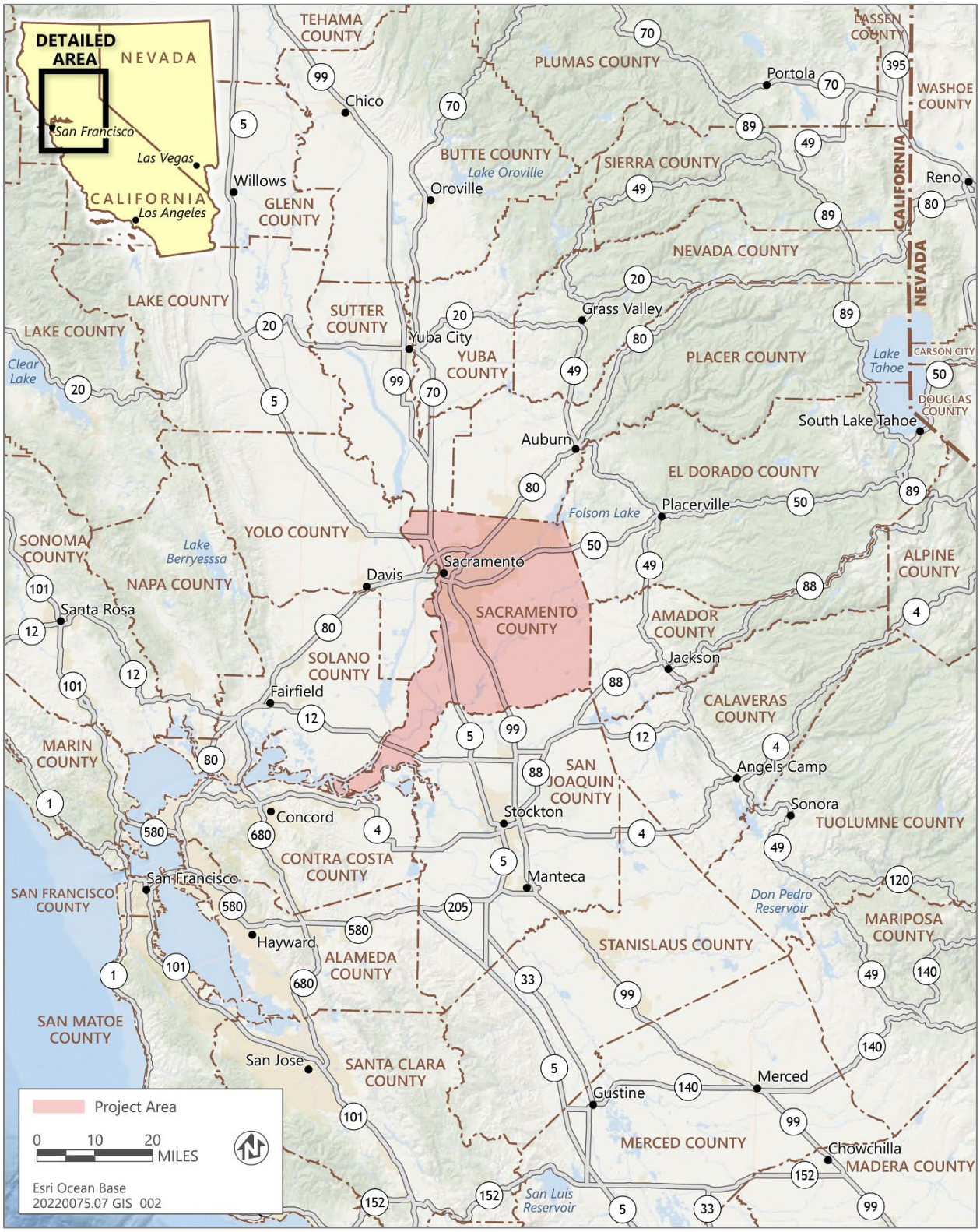
The Project is located in Sacramento County, which lies within the Central Valley of California. The County includes 7 incorporated cities, and the remaining unincorporated portions of the County is divided into 14 community planning areas. Most of these community planning areas are in the urbanized core in the western, northwestern or northern portion of the County, where the majority of the candidate rezone sites are proposed (Plate PD-2). The southwestern, eastern and southern portions of the County are more agricultural and rural residential. Many portions of the developed County are within the historic floodplains of the three major rivers (Sacramento, American, and Cosumnes Rivers) and are protected by a system of levees.

INTENDED USES OF THIS EIR

The Sacramento County Planning Commission and the Board of Supervisors will use the information in this SEIR to evaluate the Project and render a decision to approve or deny the proposed zoning and land use amendments.

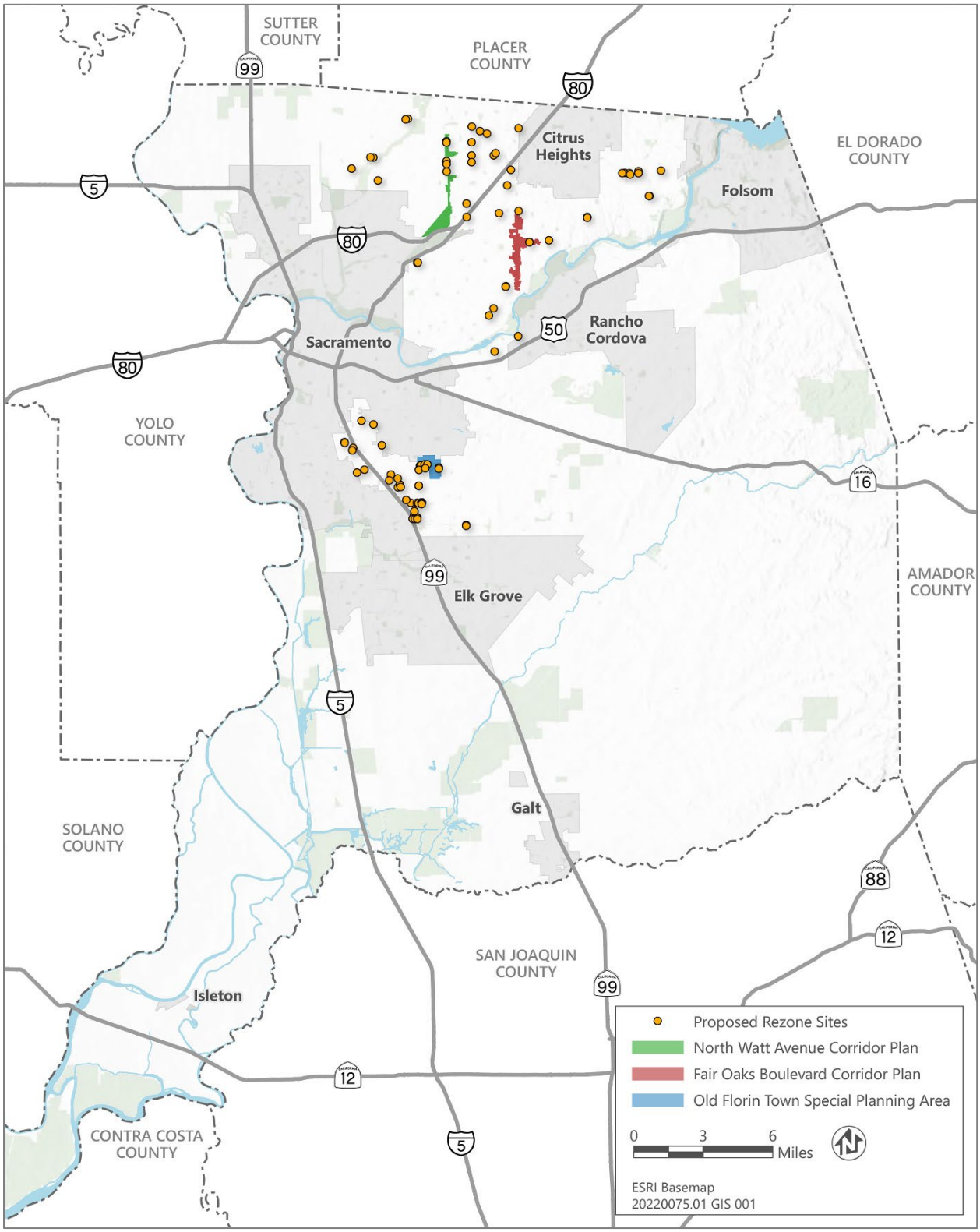
The SEIR will serve as an informational document for the general public as well. Responsible agencies may also use the SEIR as needed for subsequent discretionary actions. Based on the potential effects known at this time, responsible agencies may include (but may not be limited to) the United States Army Corps of Engineers, US Fish and Wildlife Service, California Depart of Fish and Wildlife, Central Valley Regional Water Quality Control Board, Pacific Gas and Electric, and Sacramento Municipal Utilities District.

Plate PD-1: Project Location



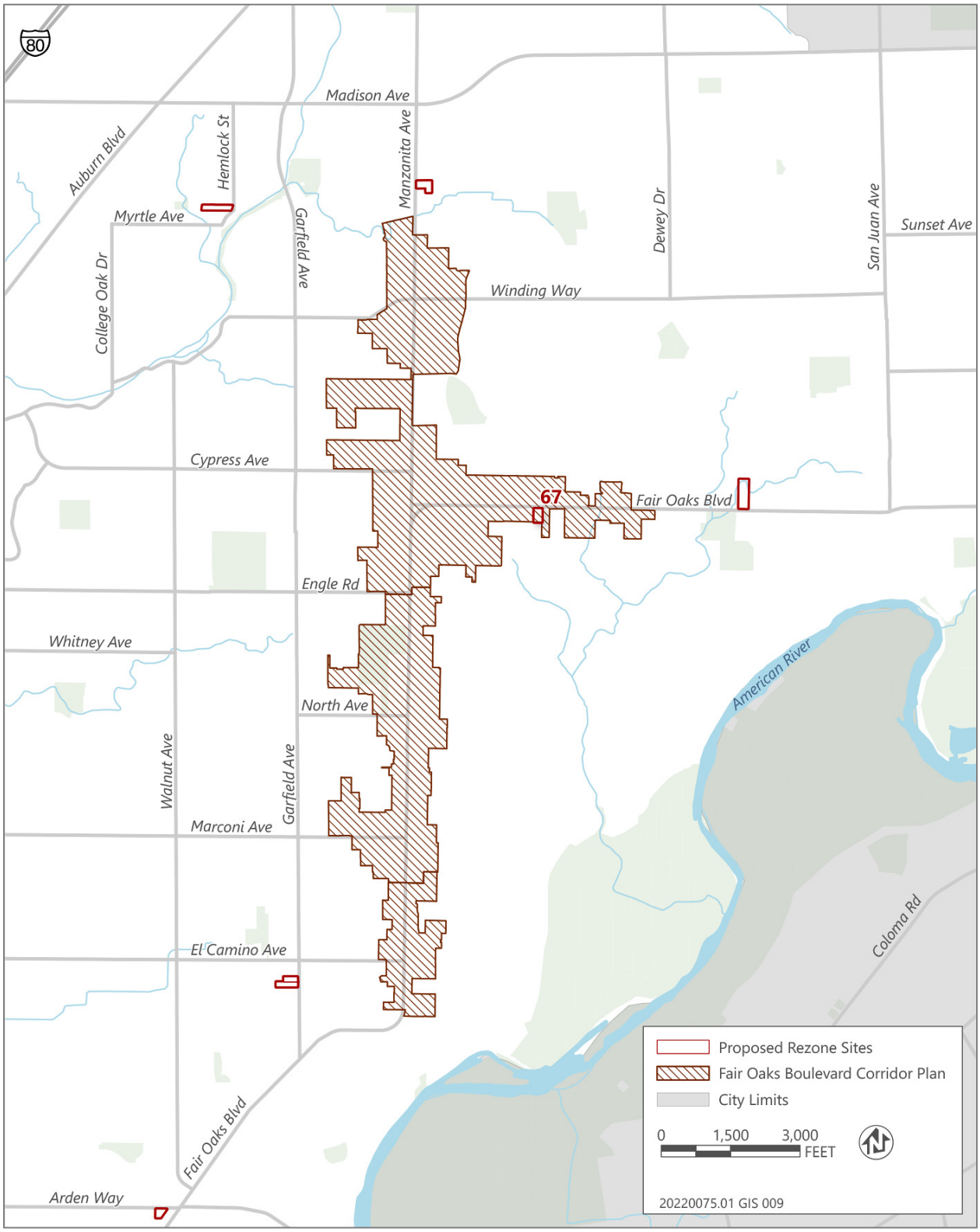
Source: adapted by Ascent in 2023.

Plate PD-2: Proposed Rezone Sites



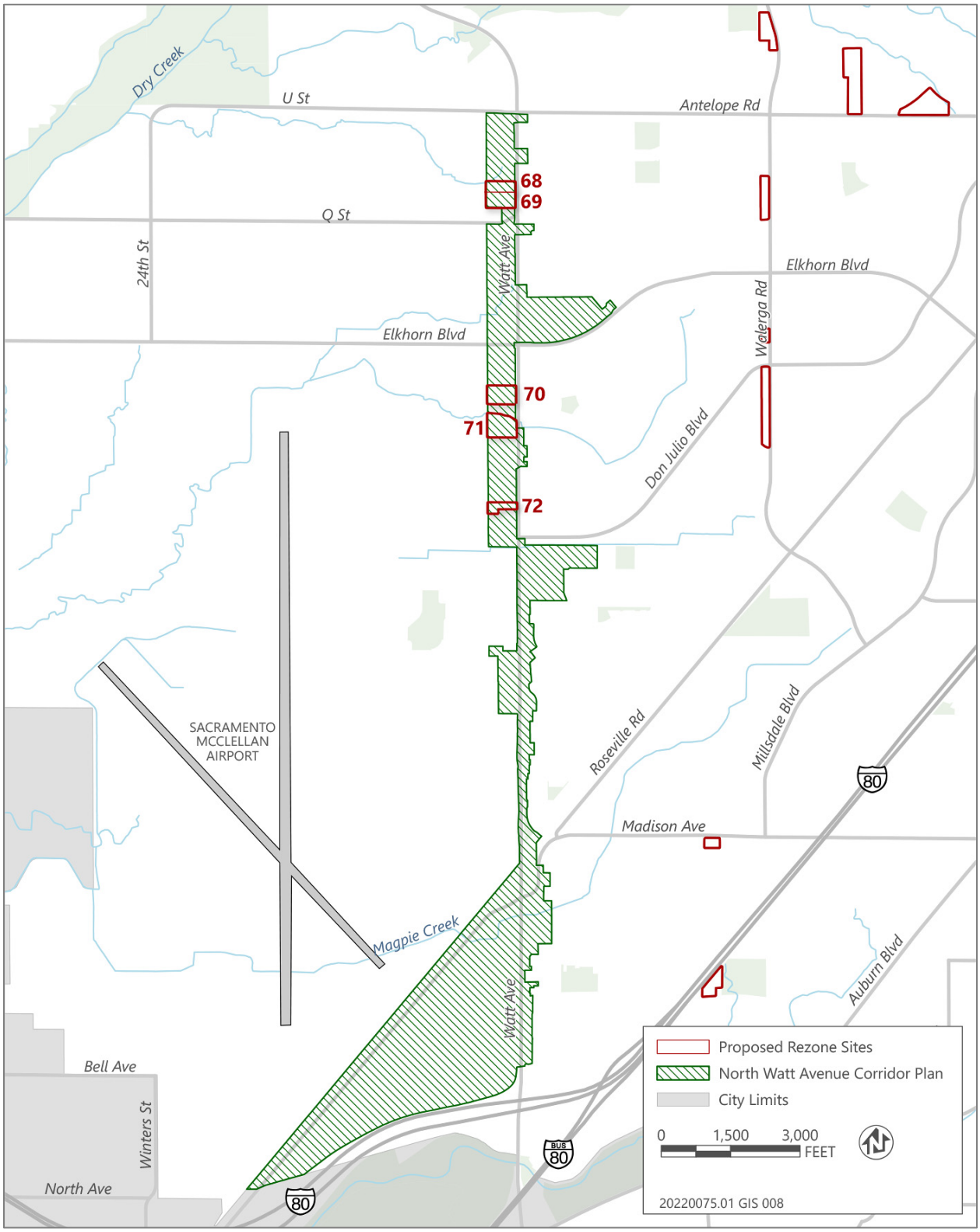
Source: Data received from Sacramento County and adapted by Ascent in 2024.

Plate PD-3: Proposed Rezone Sites within Fair Oaks Boulevard Corridor Plan



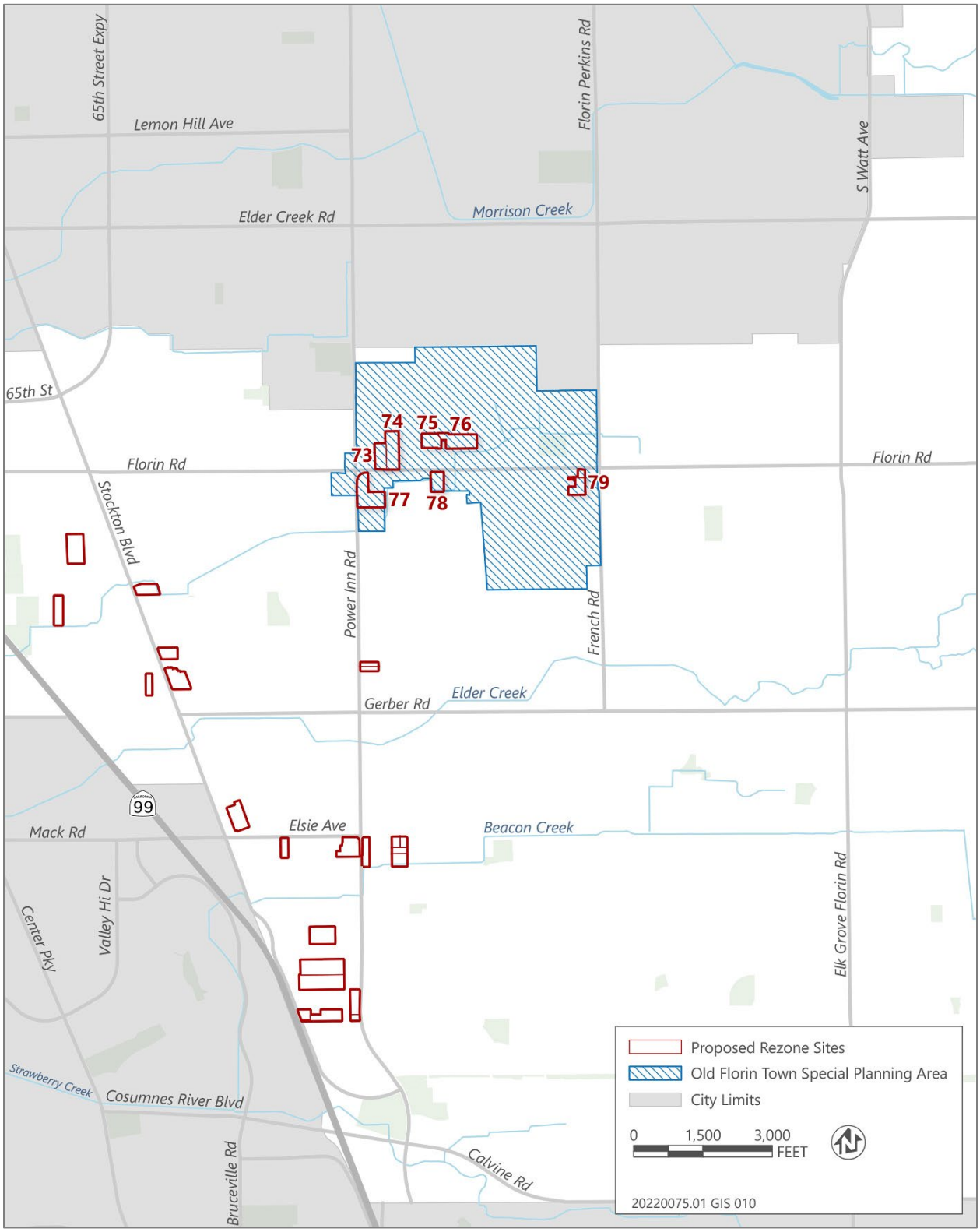
Source: Data received from Sacramento County and adapted by Ascent in 2024.

Plate PD-4: Proposed Rezone Sites within North Watt Avenue Corridor Plan



Source: Data received from Sacramento County and adapted by Ascent in 2024.

Plate PD-5: Proposed Rezone Sites within Old Florin Town Special Planning Area



Source: Data received from Sacramento County and adapted by Ascent in 2024.

3 ALTERNATIVES

INTRODUCTION

This chapter describes the alternative versions of the proposed Project that may lessen impacts or provide meaningful information to foster informed decisions. California Code of Regulations (CCR) Section 15126.6(a) (State CEQA Guidelines) requires EIRs to describe:

> a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather, it must consider a range of potentially feasible alternatives that will foster informed decision making and public participation. An EIR is not required to consider alternatives that are infeasible. The lead agency is responsible for selecting a range of project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. There is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the rule of reason.

The State CEQA Guidelines require that the EIR include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project. If an alternative would cause one or more significant effects in addition to those that would be caused by the project as proposed, the significant effects of the alternative must be discussed, but in less detail than the significant effects of the project as proposed (CCR Section 15126.6[d]).

The State CEQA Guidelines further require that the "no project" alternative be considered (CCR Section 15126.6[e]). The purpose of describing and analyzing a no project alternative is to allow decision makers to compare the impacts of approving a proposed project with the impacts of not approving the proposed project. If the no project alternative is the environmentally superior alternative, CEQA requires that the EIR "shall also identify an environmentally superior alternative among the other alternatives" (CCR Section 15126.6[e][2]).

In defining "feasibility" (e.g., "feasibly attain most of the basic objectives of the project"), CCR Section 15126.6(f)(1) states, in part:

> Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries (projects with a regionally significant impact should consider the regional context), and whether the proponent can reasonably acquire, control or otherwise have access

to the alternative site (or the site is already owned by the proponent). No one of these factors establishes a fixed limit on the scope of reasonable alternatives.

In determining what alternatives should be considered in the EIR, it is important to consider the objectives of the project, the project's significant effects, and unique project considerations. These factors are crucial to the development of alternatives that meet the criteria specified in CCR Section 15126.6(a). Although, as noted above, EIRs must contain a discussion of "potentially feasible" alternatives, the ultimate determination as to whether an alternative is feasible or infeasible is made by lead agency decision maker(s). (See PRC Section 21081[a][3].)

As discussed in Chapter 1, "Introduction," this is a subsequent environmental impact report (SEIR) to the General Plan EIR, Fair Oaks Boulevard Corridor Plan EIR (Fair Oaks Boulevard EIR), North Watt Avenue Corridor Plan EIR (North Watt Avenue EIR), and Old Florin Town Special Planning Area (SPA) EIR (Old Florin Town SPA EIR). Alternatives analyses have been included in original EIRs. Therefore, this alternative analysis is focused specifically on whether additional alternatives are available to avoid or minimize the new or more severe impacts resulting from the proposed rezone under the Project.

CONSIDERATIONS FOR SELECTION OF ALTERNATIVES

ATTAINMENT OF PROJECT OBJECTIVES

As described above, one factor that must be considered in selection of alternatives is the ability of a specific alternative to attain most of the basic objectives of the project (CCR Section 15126.6[a]). Chapter 2, "Project Description," articulates the following Project objectives:

- Comply with California Government Code Sections 65583 and 65583.2;
- Implement Housing Action Plan Program A1 to increase the vacant land inventory and facilitate development;
- Provide zoning and land use designations for at least 3,300 lower-income housing units to meet the RHNA and a buffer to accommodate the "no net loss" provision requirements; and,
- Provide zoning and land use designations for moderate income housing units.

ENVIRONMENTAL IMPACTS OF THE PROJECT

Chapters 4 through 13 of this SEIR address the environmental impacts of implementation of the Project. Potentially feasible alternatives were developed with consideration of avoiding or lessening the significant, and potentially significant, adverse impacts of the Project, as identified in this SEIR and summarized below. If an environmental issue area analyzed in this SEIR is not addressed below, it is because no significant impacts were identified for that issue area.

Less Than Significant Impact with Mitigation

Environmental impacts of the Project that have been identified as requiring mitigation measures to ensure that the level of significance is ultimately less than significant include the following:

- **Air Quality**. Implementation of the Project could expose sensitive receptors to substantial concentration of toxic air contaminations (TACs). However, the impacts would be reduced to a less-than-significant level with implementation of mitigation measures.
- **Tribal Cultural Resources**. Implementation of the Project could cause a substantial adverse change in the significance of a tribal cultural resource. However, the impacts would be reduced to a less-than-significant level with implementation of mitigation measures.

Significant and Unavoidable

The County has determined that the following Project impacts would remain significant and unavoidable, even after implementation of mitigation measures set forth in this SEIR:

- **Aesthetics.** Implementation of the Project would not result in new substantial adverse physical impacts associated with the creation of a new source of substantial light or glare that would occur with implementation of the General Plan. The Project's contribution to impacts would not be substantial; however, overall impacts remain significant.
- **Air Quality**. Implementation of the Project would result in short-term construction emissions and long-term operational emissions of criteria pollutants and precursors. These would be new or more severe effects compared to the impacts identified in the General Plan EIR and distinct area plan EIRs.
- **Climate Change**. Implementation of the Project would result in greenhouse gas (GHG) emissions that may have a significant impact on the environment. These would be new or more severe effects compared to the impacts identified in the General Plan EIR and distinct area plan EIRs.
- **Noise and Vibration**. Implementation of the Project would result in construction noise that exceeds County standards and result in construction vibration that could impact persons or buildings. These would be new or more severe effects compared to the impacts identified in the General Plan EIR and distinct area plan EIRs.
- **Transportation**. Implementation of the Project would result in impacts to transit facilities and result in vehicle miles traveled (VMT) impacts. These would be new or more severe effects compared to the impacts identified in the General Plan EIR and distinct area plan EIRs.
- **Utilities**. Implementation of the Project would result in impacts associated with exceeding reasonable foreseeable future water service capacity. These would be

new or more severe effects compared to the impacts identified in the General Plan EIR and distinct area plan EIRs.

Unique Project Consideration

As described in Chapter 2, "Project Description," the Project has been proposed by the County to meet the identified shortfall of lower-income category (incomes ranging from $0 to $69,050 annually) units. To comply with State housing requirements, the County is required to rezone sufficient sites at 30 dwelling units per acre or greater to accommodate the shortfall of 2,884 units for the lower-income category. Therefore, the alternatives considered would also be required to meet State housing law. This unique project consideration would limit the range of alternatives considered for the Project.

Alternatives Considered but not Evaluated Further

State CEQA Guidelines Section 15126.6(c) provides that the range of potential alternatives for the project shall include those that could feasibly accomplish most of the basic objectives of the project and could avoid or substantially lessen one or more of the significant effects. Alternatives that fail to meet the fundamental project purpose need not be addressed in detail in an EIR (*In re Bay-Delta Programmatic Environmental Impact Report Coordinated Proceedings* (2008) 43 Cal.4th 1143, 1165–1167).

In determining what alternatives should be considered in the EIR, it is important to acknowledge the objectives of the project, the project's significant effects, and unique project considerations. These factors are crucial to the development of alternatives that meet the criteria specified in Section 15126.6(a). Although, as noted above, EIRs must contain a discussion of "potentially feasible" alternatives, the ultimate determination as to whether an alternative is feasible or infeasible is made by lead agency decision maker(s). (See PRC Section 21081[a][3].) At the time of action on the project, the decision maker(s) may consider evidence beyond that found in this EIR in addressing such determinations. The decision maker(s), for example, may conclude that a particular alternative is infeasible from a policy standpoint and may reject an alternative on that basis provided that the decision maker(s) adopt a finding, supported by substantial evidence, to that effect, and provided that such a finding reflects a reasonable balancing of the relevant economic, environmental, social, and other considerations supported by substantial evidence (*City of Del Mar v. City of San Diego* [1982] 133 Cal.App.3d 401, 417; *California Native Plant Society v. City of Santa Cruz* [2009] 177 Cal.App.4th 957, 998).

The EIR should also identify any alternatives that were considered by the lead agency but were rejected during the planning or scoping process and briefly explain the reasons underlying the lead agency's determination. The following alternatives were considered by the County but were rejected for further evaluation in this SEIR.

Mixed-use Concept

This alternative would provide a mixed-use concept of development on all the proposed candidate rezone sites with a minimum residential requirement to minimize vehicle trips.

Under this alternative jobs, retail, and commercial development would be included with the residential development on the candidate rezone sites, which would result in reduced trip length. However, the primary purpose of the Project is to identify lands with appropriate zoning to accommodate the County's RHNA shortfall for lower-income units. Allowing other types of development (i.e., commercial, retail, etc.) to occur on a candidate rezone site in tandem with or as an alternate to the intended residential uses may disincentivize residential development on the candidate rezone site. This alternative may undercut the underlying intent of the Project which is to create more housing opportunities in the County.

Increase Active Transportation Options

This alternative would increase public transit and alternative forms of transportation (cycling and walking) opportunities in the vicinity of the candidate rezone sites to reduce vehicle trips. However, this alternative is not feasible because existing and planned transit and bicycle/pedestrian facilities are not necessarily available to allow integration with any such improvements that would be provided by individual projects under this alternative. Transit planning is also not within the direct purview of the County; that is, other independent agencies are responsible for public transit planning. Also, it cannot be guaranteed that people would utilize alternative transportation options, especially residents of candidate rezone sites in less urbanized areas using bicycle or pedestrian facilities.

County-Owned Properties Alternative

This alternative would utilize only County-owned properties to accommodate the RHNA shortfall and establish a buffer comparable to the Project. However, the County does not own properties that are planned for or readily available to accommodate permanent residential uses. The majority of County-owned properties within the unincorporated County are developed and utilized for administrative and/or public government uses. County-owned properties that are currently vacant are mainly for the purposes of planned or anticipated infrastructure projects for flood control and/or roadway improvements. As such, the majority of County-owned properties would not meet the above-described State criteria and County priorities sites are vetted against. Given the unavailability of County-owned sites, limiting the rezone sites to only County-owned properties would not provide the amount of units required to meet the RHNA shortfall. As such, utilizing only County-owned properties would not meet the Project's objectives, is not considered feasible and is thus dismissed from detailed evaluation.

Alternatives Selected for Detailed Analysis

The following alternatives are evaluated in this SEIR:

- **Alternative 1: No Project Alternative** assumes continued implementation of the existing zoning and land use designations on the candidate rezone sites. No changes would be made to address State housing requirements.

- **Alternative 2: Green Zones Alternative** would increase residential development density in the five Green Zones within the unincorporated County identified by the Sacramento Area Council of Governments (SACOG).
- **Alternative 3: No Sites in Rio Linda/Elverta Community Water District (RLECWD) Alternative** would be the same as the Project with the exclusion of Sites 28, 29, 65, and 66.

Further details on these alternatives, and an evaluation of their environmental effects compared to the Project, are provided below. For purposes of comparison with Project, conclusions for each technical area are characterized as "impacts" that are greater, similar, or less to describe conditions that are worse than, similar to, or better than those of the Project.

Alternative 1: No Project Alternative

Section 15126.6(e) of the State CEQA Guidelines requires that an EIR evaluates and analyzes the environmental impacts of the No Project Alternative to examine and compare the potential environmental consequences associated with not approving the project. For the purpose of this analysis, the No Project Alternative would allow continued implementation of existing zoning and land use designations on candidate rezone sites. The County would continue to implement the adopted General Plan, including the recent amendments for the 2021-2029 Housing Element, but would not implement Housing Action Plan Program A1. As a result, no land use designations and zoning would be amended for an additional 3,568 lower and moderate-income housing units and the County's RHNA would not be met.

The No Project Alternative would result in the continuation of existing conditions and planned development in the county. No new significant environmental impacts or increased severity of environmental impacts identified in the General Plan EIR would occur under this alternative because it would retain the current General Plan land use designations and policy provisions, as well as existing zoning. However, implementation of the No Project Alternative would not meet any of the Project objectives. If the County does not comply with the State housing requirements, California Department of Housing & Community Development may refer the County to the Attorney General. The consequences of those cases brought by the Attorney General are up to the courts but can include financial penalties.

Alternative 2: Green Zones Alternative

Alternative 2 would consist of rezoning only sites within the five Green Zones within the unincorporated County identified by SACOG including: Arden Way Corridor, Butterfield RT Station, Fair Oaks Boulevard Corridor, North Watt Corridor, and South Sacramento-Stockton Boulevard-14th Avenue to Mack Road. Green Zones are areas that the County has identified for infill development or new transportation options that are within a center, corridor, or established community. These areas are intended to be the accelerators for economic development projects that promote increased alternative transportation

options; increase housing near expanded travel options and other amenities; and make it easier for the region to access electric vehicles for cleaner transportation.

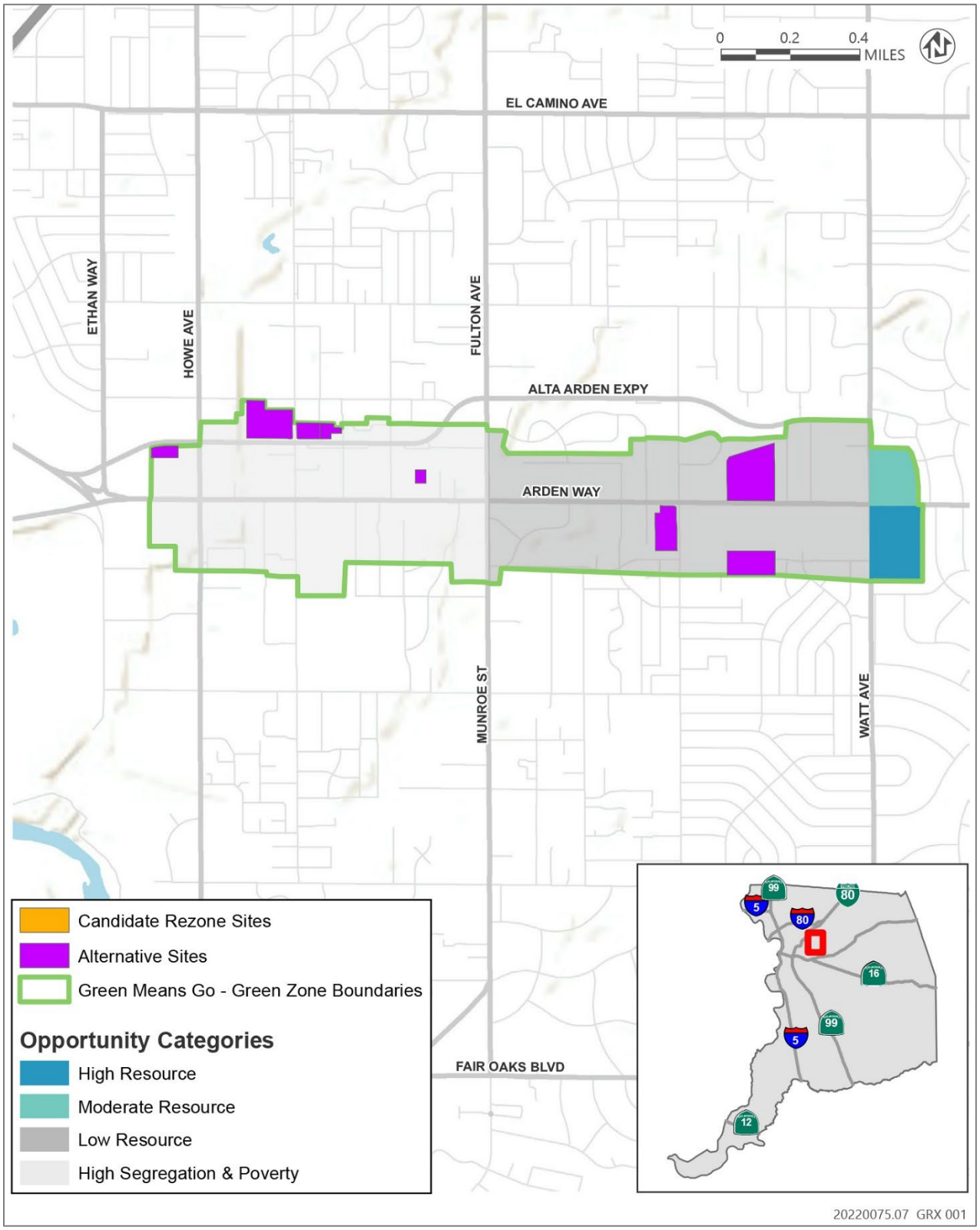
Under this alternative, the Project's stated objective of 3,300 lower-income units would be dispersed evenly across the five Green Zones (approximately 660 units in each Green Zone). Housing Action Plan Program A1 identifies that at least 30 percent of the 2,884 lower-income RHNA units (approximately 866 lower-income units) be sited in highest, high, and moderate resource areas to affirmatively further fair housing choice. This would be accomplished through unit allocations in the Butterfield RT Station and Fair Oaks Boulevard Corridor Green Zones which predominantly contain high and moderate resource areas.

To accommodate approximately 660 units in each Green Zone, conservatively approximately 22 acres of land would be required utilizing the Multiple Family Residential 40 (RD-40) zoning district density permitted (minimum 30 dwelling units per acre and maximum 40 dwelling units per acre). This alternative utilizes the acreages of the candidate rezone sites that are part of the Project which are within these Green Zones. Where there is insufficient acreage from the Project's candidate rezone sites, additional sites (or portions of parcels) were identified for the purpose of this alternative. Cursory review of sites that are vacant, and generally meet State law requirements for the selection of candidate rezone sites were identified for this purpose. Because there are insufficient vacant lands based on cursory review of the Arden Way and Fair Oaks Boulevard Green Zones to meet the targeted approximately 22 acres of land, lands in the South Sacramento-Stockton Boulevard-14th Avenue to Mack Road Green Zone (which are part of the Project) are utilized for this alternative.

Specifically, this alternative entails the identified acreages and specific sites within the following Green Zones, as depicted in Plates ALT-1 through ALT-5.

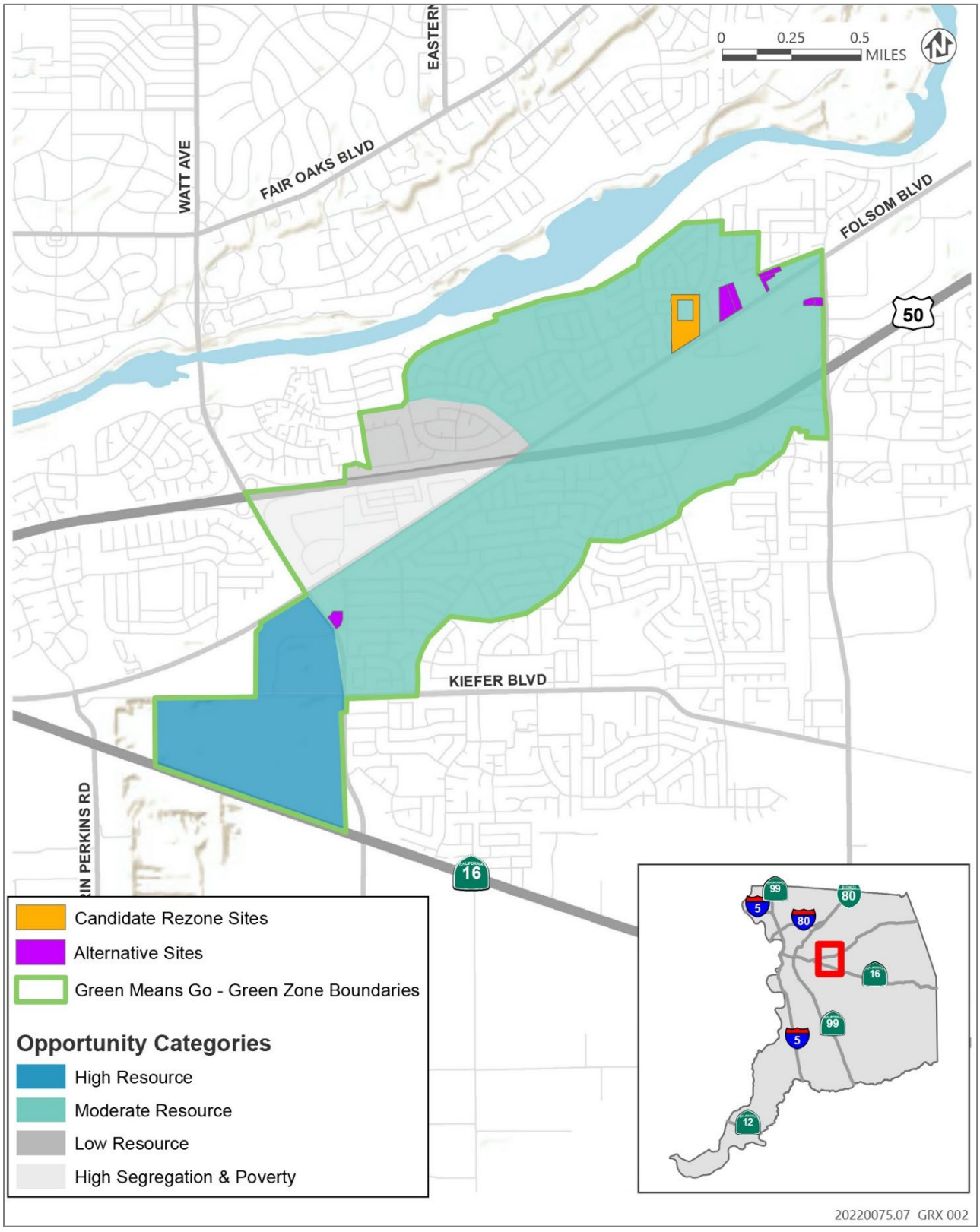
- Approximately 13.5 acres in the Arden Way Green Zone consisting of:
  - 13.5 acres from eight additional sites
    - 1745 Alta Arden Way,
    - portion of 1825 Bell Street (approximately 0.7 acre),
    - portion of 1820 Bell Street (approximately 0.8 acre),
    - Accessor Parcel Number (APN) 278-0230-056,
    - APN 278-0260-044,
    - portion of 1615 Morse Avenue (approximately 1.5 acres),
    - portion of 3235 Arden Way (approximately 1.5 acres), and
    - portion of 1500 Dom Way (approximately 6 acres.

Plate ALT-1: Alternative 2 Rezone Sites within Arden Way Green Zone



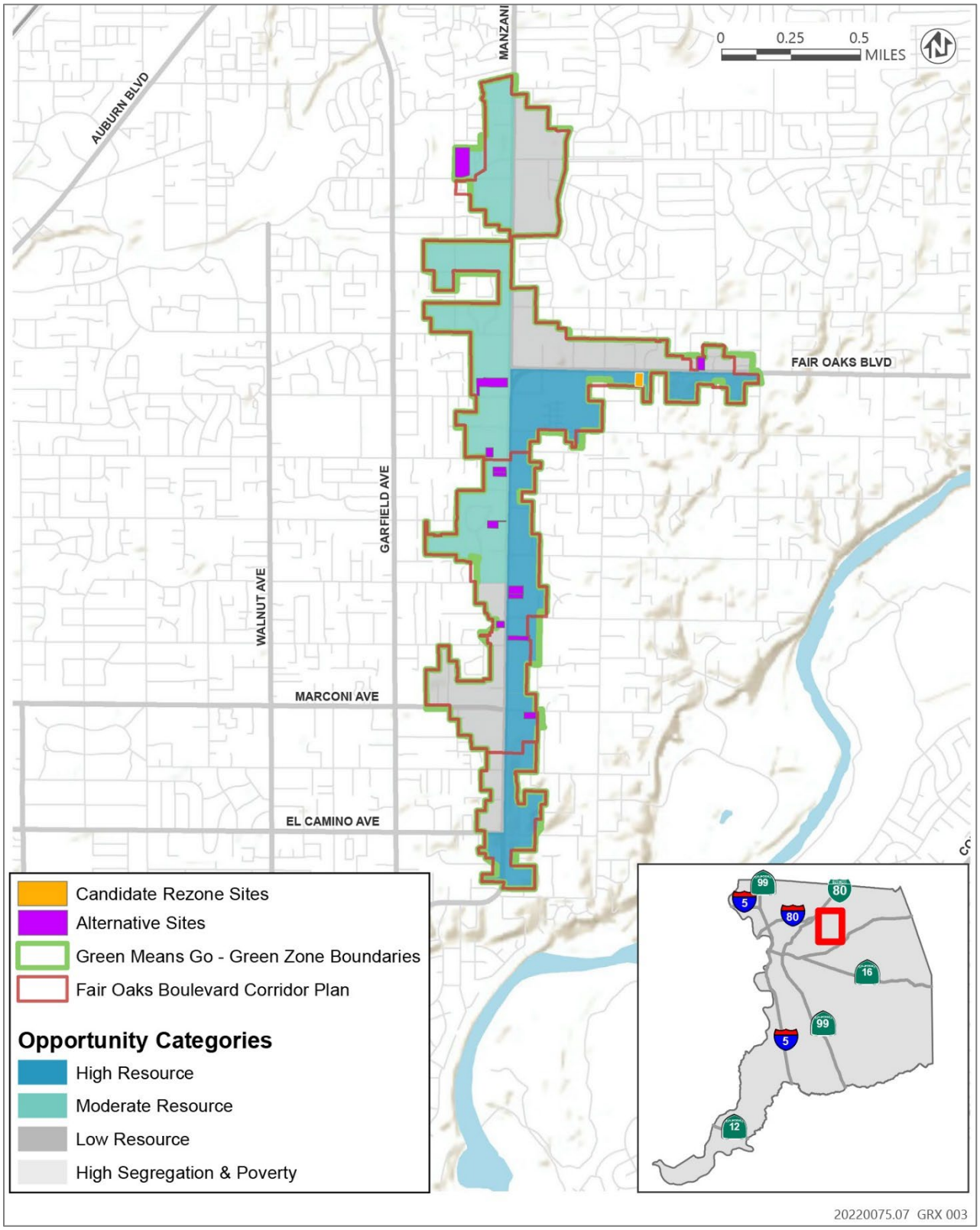
Source: Provided by Sacramento County 2024 and adapted by Ascent 2024.

Plate ALT-2: Alternative 2 Rezone Sites within Butterfield RT Station Green Zone



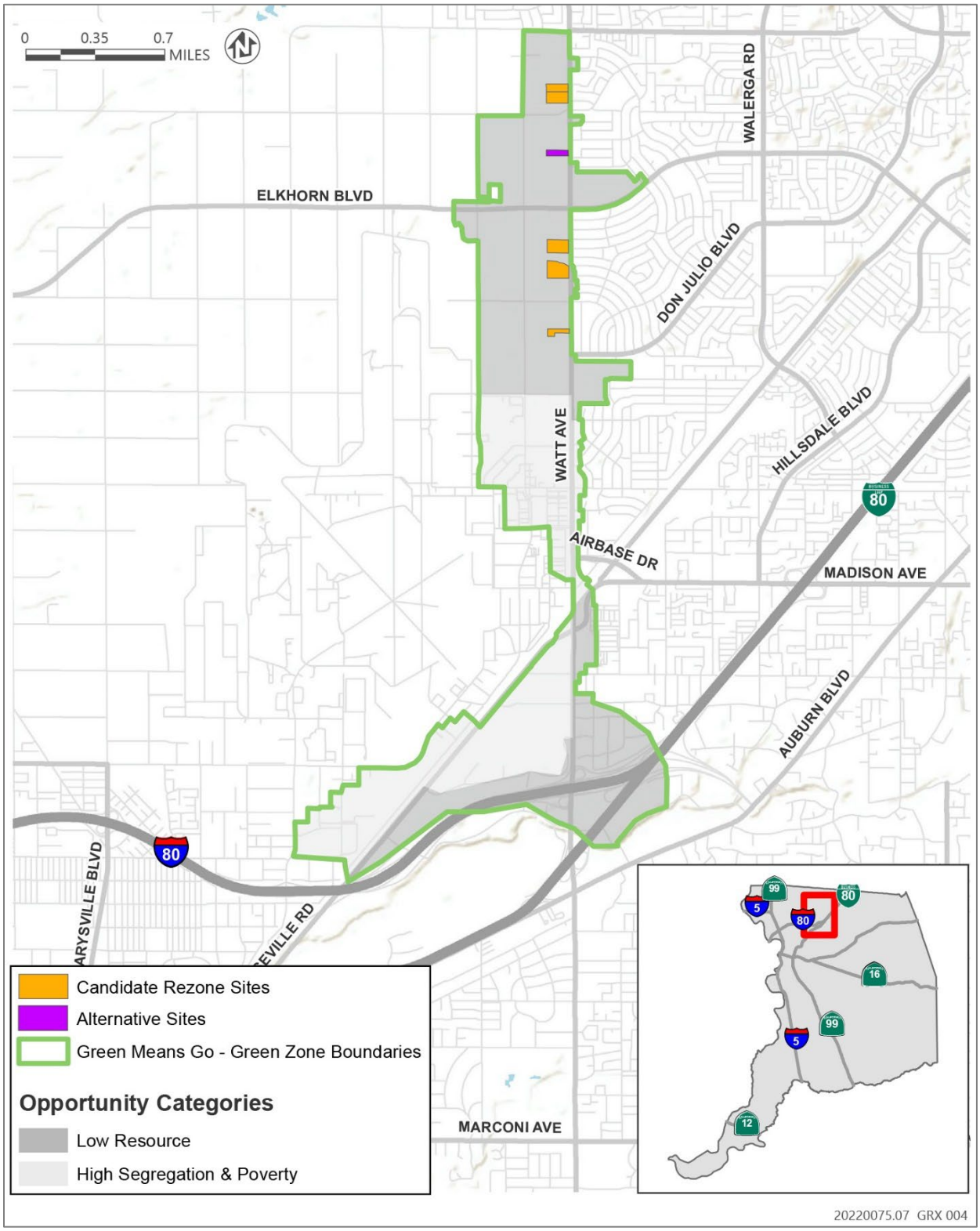
Source: Provided by Sacramento County 2024 and adapted by Ascent 2024.

Plate ALT-3: Alternative 2 Rezone Sites within Fair Oaks Boulevard Green Zone



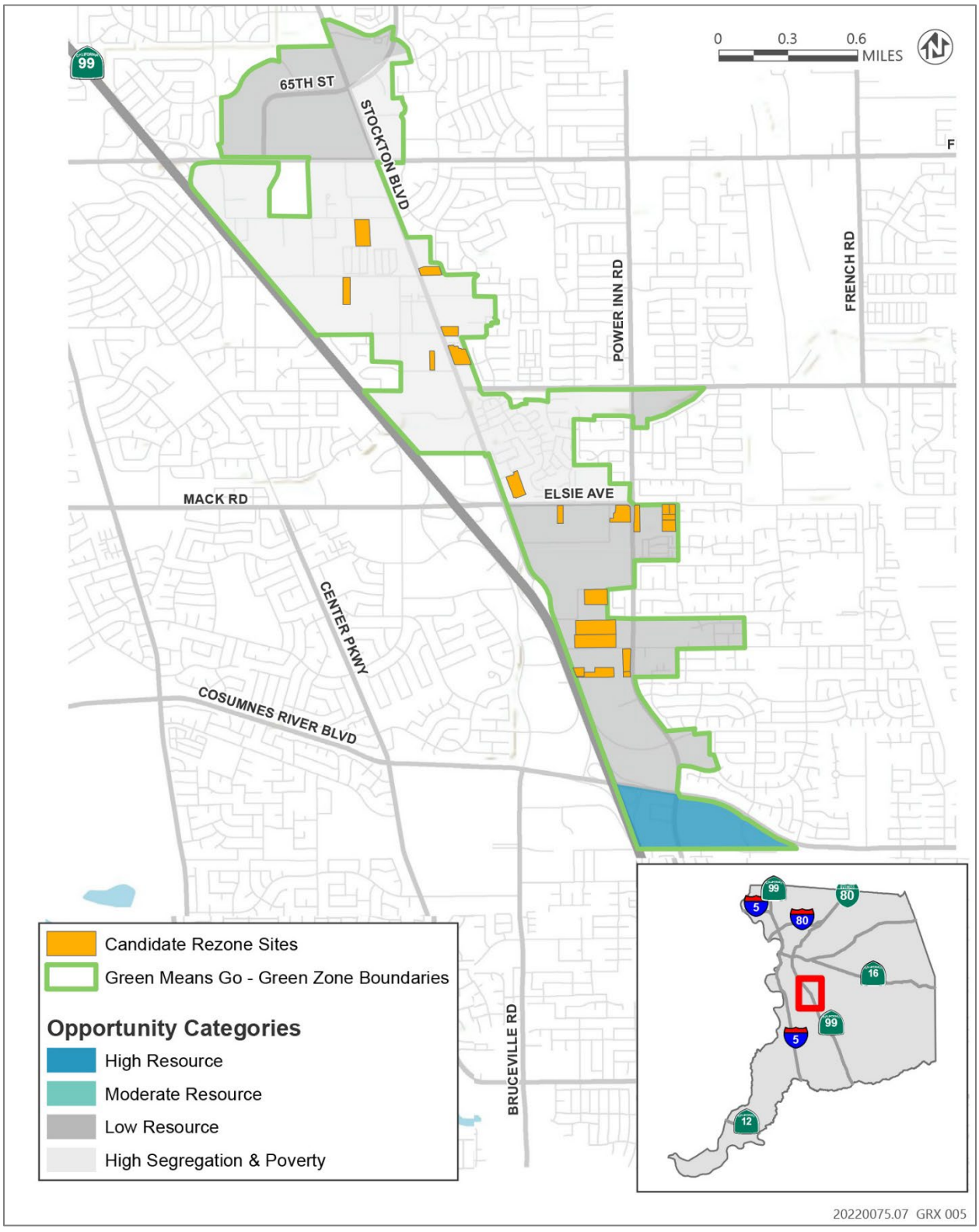
Source: Provided by Sacramento County 2024 and adapted by Ascent 2024.

Plate ALT-4: Alternative 2 Rezone Sites within North Watt Corridor Green Zone



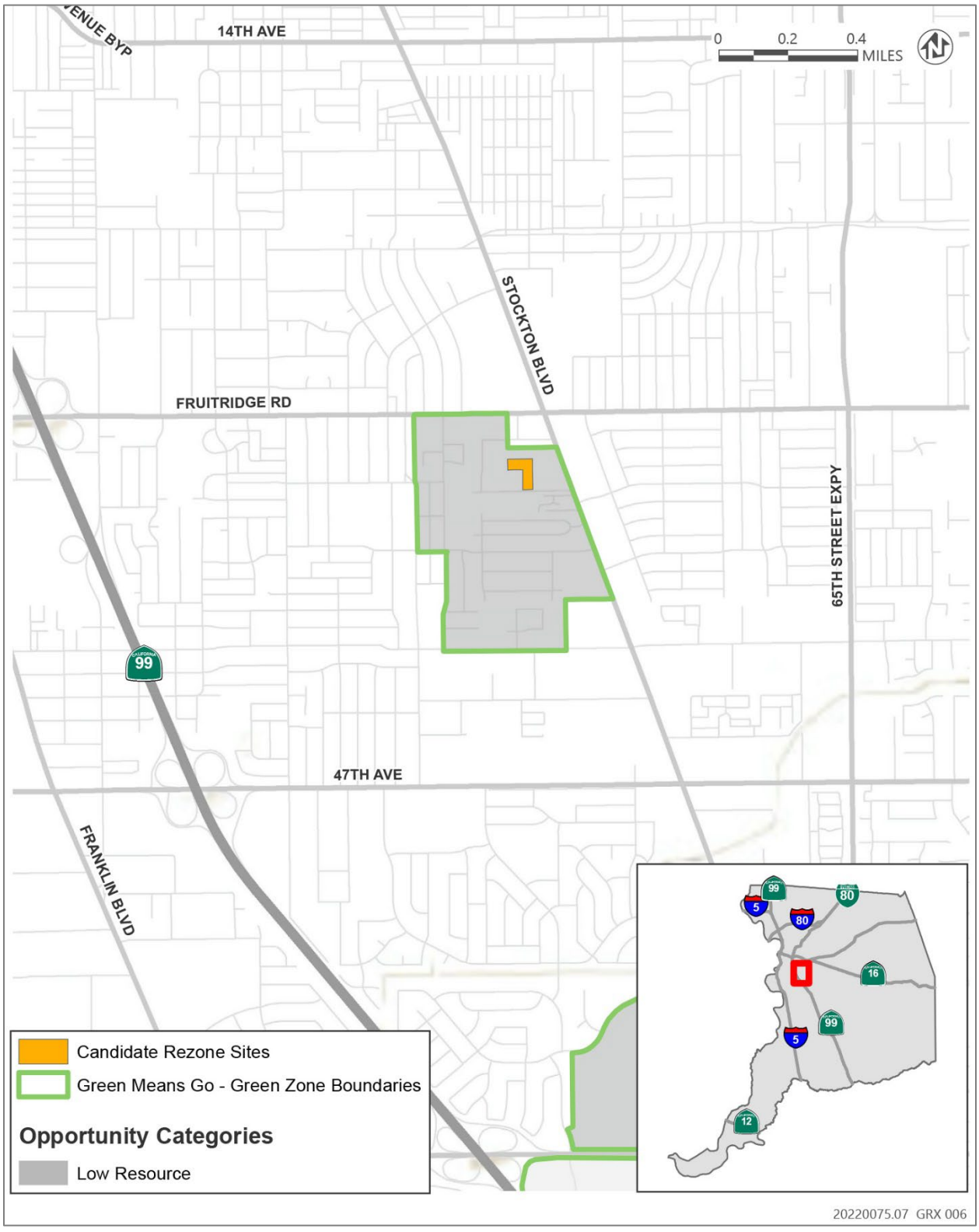
Source: Provided by Sacramento County 2024 and adapted by Ascent 2024.

Plate ALT-5: Alternative Rezone Sites within South Sacramento-Stockton Boulevard-14th Avenue to Mack Road Green Zone, Part 1 of 2



Source: Provided by Sacramento County 2024 and adapted by Ascent 2024.

Plate ALT-5: Alternative 2 Rezone Sites within South Sacramento-Stockton Boulevard-14th Avenue to Mack Road Green Zone, Part 2 of 2



Source: Provided by Sacramento County 2024 and adapted by Ascent 2024.

- Approximately 22.04 acres in Butterfield RT Station Green Zone consisting of:
  - 14.65 acres from one candidate rezone site (Site 15); however, different from the Project, this alternative assumes the entirety of the parcel at 14.65 acres is available; and
  - 7.39 acres from four additional sites:
    - 3100 Bradshaw Road and APN 068-0210-041,
    - 3096 Manlove Road,
    - APNs 075-0040-025 and 075-0040-040,
    - portions of 9501 and 9509 Folsom Boulevard (approximately 2.3 acres).
- Approximately 16.32 acres in the Fair Oaks Boulevard Green Zone consisting of:
  - 1.25 acres from one candidate rezone site (Site 67); and
  - 15.07 acres from 10 additional sites:
    - 5701 Winding Way,
    - 8105 Fair Oaks Boulevard,
    - 7411 Fair Oaks Boulevard,
    - APN 258-0080-037,
    - 6959 Fair Oaks Boulevard,
    - 7129 and 7135 Fair Oaks Boulevard,
    - 6740 and 6750 Fair Oaks Boulevard,
    - 6649 Fair Oaks Boulevard,
    - 6620 Fair Oaks Boulevard, and
    - 5948 Palm Drive.
- Approximately 23.62 acres in the North Watt Corridor Green Zone consisting of:
  - 21.31 acres from five candidate rezone site: Sites 68 through 72; and
  - 2.31 acres from one additional site: 7025 Watt Avenue.
- Approximately 56.15 acres in the South Sacramento-Stockton Boulevard-14th Avenue to Mack Road Green Zone consisting of:
  - Approximately 56.15 acres from 20 candidate rezone sites: Sites 31, 38 through 41, 43 through 55, and 58 through 59.

With a total of 50 candidate rezone sites and approximately 131.63 total acres identified among the five Green Zones, utilizing the RD-40 zoning district density permitted, this alternative would result in a minimum of 3,949 units and a maximum of 5,265 units and would thus meet Project objectives. Alternative 2 would result in the proposed rezone on Site 67 and an additional of 10 sites (approximately 15 acres) to the proposed rezone within the Fair Oaks Boulevard Corridor Plan area (Fair Oaks Boulevard Corridor area) compared to the Project. Alternative 2 would rezone Sites 68 through 72 and one additional site (approximately 2.3 acres) within the North Watt Avenue Corridor Plan area (North Watt Avenue Corridor area) compared to the Project. Finally, the proposed rezone on Sites 73 through 79 within the Old Florin Town Special Planning Area (SPA) would be removed from the Project under this alternative. Overall, Alternative 2 would have the potential to result in 1,184 more units than the Project (4,081 units).

AESTHETICS

GENERAL PLAN

As discussed in Chapter 4," Aesthetics," of this SEIR, the Project would result in less-than-significant impacts related to changes in visual character and new sources of substantial light or glare from new higher density residential development. Although the Project's contribution to impacts associated with light or glare would not substantially worsen the impacts disclosed in the General Plan EIR, overall impacts would remain significant. Implementation of Alternative 2 would have the potential to result in modifications to the development standards for residential housing development, such as higher and denser buildings. Alternative 2 would occur within five Green Zones that have been identified for infill development or new transportation options that are within a center, corridor, or established community. Alternative 2 would result in development that would be consistent with the visual character of the County's infill areas. In addition, future development under Alternative 2 would undergo non-discretionary design review to ensure compliance with Design Guidelines, aiming to enhance development and visual quality across the County. However, Alternative 2 would have the potential to result in 1,184 more units than the Project, which would result in slightly greater impacts related to changes to the existing visual character of the area, as well as potentially result in new source of nighttime lighting in the area. (*Slightly Greater*)

FAIR OAKS BOULEVARD CORRIDOR PLAN

As discussed in Chapter 4, the proposed rezone on Site 67 within the Fair Oaks Boulevard Corridor area would result in less-than-significant impacts associated with degradation of existing visual character or quality of public views and creation of a new source of substantial light or glare. The proposed rezone on Site 67 would remain and an additional 10 sites (approximately 15 acres) would be added to the proposed rezone within the Fair Oaks Boulevard Corridor area under this alternative. Therefore, development under Alternative 2 would result in slightly greater impacts than discussed in Chapter 4 related to changes to the existing visual character of the Fair Oaks Boulevard Corridor area, as well as potentially result in new sources of nighttime lighting in the Fair Oaks Boulevard Corridor area. (*Slightly Greater*)

NORTH WATT AVENUE CORRIDOR PLAN

As discussed in Chapter 4, the proposed rezone on Sites 68 through 72 within the North Watt Avenue Corridor area would result in less-than-significant impacts associated with degradation of existing visual character or quality of public views and creation of a new source of substantial light or glare. The proposed rezone on Sites 68 through 72 would remain and an additional site (approximately 2.3 acres) would be added to the proposed rezone within the North Watt Avenue Corridor area under this alternative. Therefore, development under Alternative 2 would result in slightly greater impacts than discussed in Chapter 4 related to changes to the existing visual character of the North Watt Avenue Corridor area, as well as potentially result in new sources of nighttime lighting in the North Watt Avenue Corridor area. (*Slightly Greater*).

OLD FLORIN TOWN SPA

Alternative 2 would result in the continuation of existing conditions and planned development for Sites 73 through 79 within the Old Florin Town SPA. No new significant environmental impacts or an increased severity of environmental impacts identified in the Old Florin Town SPA EIR would occur under this alternative because it would retain the current land use designations and policy provisions. Overall, aesthetics impacts related to the proposed rezone on Sites 73 through 79 would not occur under Alternative 2. (*Less*)

AIR QUALITY

GENERAL PLAN

As discussed in Chapter 5, "Air Quality," of this SEIR, the Project would result in less-than-significant impacts related to exposing sensitive receptors to substantial concentration of toxic air contaminants with mitigation and result in less-than-significant impacts related to exposing sensitive receptors to substantial concentration of mobile-source carbon monoxide. Alternative 2 would result in 1,184 more units compared to the Project. Therefore, implementation of this alternative would increase exposure to concentrated mobile-source carbon monoxide and toxic air contaminants compared to the Project. Chapter 5 concluded that the Project would result in significant and unavoidable impacts related to construction and operational air emissions and consistency with an applicable air quality plan. Under this alternative, up to 1,184 more housing units would be allowed as compared with the Project. Similar to the Project, implementation of this alternative would result in future development of additional housing units that are accounted for by the most recent MTP/SCS. Implementation of this alternative would be considered consistent with applicable air quality plans. Alternative 2 would result in increased construction and operational air pollutant emissions because it would consist of up to 1,184 more units, which could also increase potential impacts related to public health. (*Greater*)

FAIR OAKS BOULEVARD CORRIDOR PLAN

As discussed in Chapter 5, the proposed rezone on Site 67 within the Fair Oaks Boulevard Corridor area would result in less-than-significant impacts related to exposing sensitive receptors to substantial concentration of toxic air contaminants with mitigation and result in less-than-significant impacts related to exposing sensitive receptors to substantial

concentration of mobile-source carbon monoxide. However, impacts related to construction and operational air emission and related to consistent with an applicable air quality plan would be significant and unavoidable. The proposed rezone on Site 67 would remain and an additional 10 sites (approximately 15 acres) would be added to the proposed rezone within the Fair Oaks Boulevard Corridor area under this alternative. Therefore, the associated air quality impacts under this alternative would be greater to the impacts disclosed in Chapter 5 of the SEIR for the proposed rezone on Site 67. (*Greater*)

NORTH WATT AVENUE CORRIDOR PLAN

As discussed in Chapter 5, the proposed rezone on Sites 68 through 72 within the North Watt Avenue Corridor area would result in less-than-significant impacts related to exposing sensitive receptors to substantial concentrations of toxic air contaminants with mitigation and result in less-than-significant impacts related to exposing sensitive receptors to substantial concentration of mobile-source carbon monoxide. However, impacts related to construction and operational air emission and related to consistent with an applicable air quality plan would be significant and unavoidable. The proposed rezone on Sites 68 through 72 would remain and an additional site (approximately 2.3 acres) would be added to the proposed rezone within the North Watt Avenue Corridor area under this alternative. Therefore, the associated air quality impacts under this alternative would be slightly greater to the impacts disclosed in Chapter 5 of the SEIR for the proposed rezone on Sites 68 through 72. (*Slightly Greater*)

OLD FLORIN TOWN SPA

Alternative 2 would result in the continuation of existing conditions and planned development for Sites 73 through 79 within the Old Florin Town SPA. No new significant environmental impacts or an increased severity of environmental impacts identified in the Old Florin Town SPA EIR would occur under this alternative because it would retain the existing land use designations and policy provisions. Therefore, air quality impacts related to the proposed rezone on Sites 73 through 79 would not occur under Alternative 2. (*Less*)

CLIMATE CHANGE

GENERAL PLAN

As discussed in Chapter 6, “Climate Change,” of this SEIR, the Project would result in significant and unavailable impacts related to generation of GHG emissions and less-than-significant impacts related to conflicts with applicable GHG emissions reduction plans. This alternative would be similar to the Project, which would result in a more efficient GHG emissions per capita than existing conditions. This alternative would support the goals of the 2022 scoping plan and be consistent with the 2022 scoping plan. Alternative 2 would result in 1,184 more units compared to the Project. More construction and operational GHG emissions would be generated than under the Project. Therefore, construction and operational GHG emissions impacts under this alternative would be greater than under the Project even the operational GHG emissions would be more efficient than the Project. (*Greater*)

FAIR OAKS BOULEVARD CORRIDOR PLAN

As discussed in Chapter 6, the proposed rezone on Site 67 within the Fair Oaks Boulevard Corridor area would result in less-than-significant impacts related to generation of GHG emissions with mitigation and result in less-than-significant impacts related to conflict with applicable GHG emissions reduction plans. The proposed rezone on Site 67 would remain and an additional 10 sites (approximately 15 acres) would be added to the proposed rezone within the Fair Oaks Boulevard Corridor area under this alternative. Therefore, the associated climate change impacts under this alternative would be greater than the impacts disclosed in Chapter 6 of the SEIR for the proposed rezone on Site 67. (*Greater*)

NORTH WATT AVENUE CORRIDOR PLAN

As discussed in Chapter 6, the proposed rezone on Sites 68 through 72 within the North Watt Avenue Corridor area would result in significant and unavoidable impacts related to generation of GHG emissions with mitigation and result in less-than-significant impacts related to conflict with applicable GHG emissions reduction plans. The proposed rezone on Sites 68 through 72 would remain and an additional site (approximately 2.3 acres) would be added to the proposed rezone within the North Watt Avenue Corridor area under this alternative. Therefore, the associated climate change impacts under this alternative would be slightly greater than the impacts disclosed in Chapter 6 of the SEIR for the proposed rezone on Sites 68 through 72. (*Slightly Greater*)

OLD FLORIN TOWN SPA

Alternative 2 would result in the continuation of existing conditions and planned development for Sites 73 through 79 within the Old Florin Town SPA. No new significant environmental impacts or an increased severity of environmental impacts identified in the Old Florin Town SPA EIR would occur under this alternative because it would retain the existing land use designations and policy provisions. Therefore, climate change impacts related to the proposed rezone on Sites 73 through 79 would not occur under Alternative 2. (*Less*)

ENERGY

GENERAL PLAN

As discussed in Chapter 7, “Energy,” of this SEIR, the Project would result in less-than-significant impacts related to wasteful, inefficient, or unnecessary consumption of energy and would not conflict with or obstruct plans for renewable energy or energy efficiency. Similarly, this alternative would not result in significant energy impacts. However, Alternative 2 would have higher energy demands than that of the Project because of the additional 1,184 units that would be developed with higher density residential units. The alternative would be more energy efficient due to closer proximity to transit and urban centers, but the overall energy consumption under this alternative would be greater than those under the Project. (*Greater*)

FAIR OAKS BOULEVARD CORRIDOR PLAN

As discussed in Chapter 7, the proposed rezone on Site 67 within the Fair Oaks Boulevard Corridor area would result in less-than-significant impacts related to wasteful, inefficient, or unnecessary consumption of energy and would not conflict with or obstruct plans for

renewable energy or energy efficiency. The proposed rezone on Site 67 would remain and an additional 10 sites (approximately 15 acres) would be added to the proposed rezone within the Fair Oaks Boulevard Corridor area under this alternative. Therefore, energy impacts under this alternative would be greater than those disclosed in Chapter 7 of the SEIR for the proposed rezone on Site 67. (*Greater*)

NORTH WATT AVENUE CORRIDOR PLAN

As discussed in Chapter 7, the proposed rezone on Sites 68 through 72 within the North Watt Avenue Corridor area would result in less-than-significant impacts related to wasteful, inefficient, or unnecessary consumption of energy and would not conflict with or obstruct plans for renewable energy or energy efficiency. The proposed rezone on Sites 68 through 72 would remain and an additional site (approximately 2.3 acres) would be added to the proposed rezone within the North Watt Avenue Corridor area under this alternative. Therefore, energy impacts under this alternative would be slightly greater than those disclosed in Chapter 7 of the SEIR for the proposed rezone on Sites 68 through 72. (*Slightly Greater*)

OLD FLORIN TOWN SPA

Alternative 2 would result in the continuation of existing conditions and planned development for Sites 73 through 79 within the Old Florin Town SPA. No new significant environmental impacts or an increased severity of environmental impacts identified in the Old Florin Town SPA EIR would occur under this alternative because it would retain the existing land use designations and policy provisions. Therefore, energy impacts related to the proposed rezone on Sites 73 through 79 would not occur under Alternative 2. (*Less*)

NOISE AND VIBRATION

GENERAL PLAN

As discussed in Chapter 8, “Noise and Vibration,” of this SEIR, the Project would result in significant and unavoidable impacts related to noise and vibration during construction and operation, including traffic noise. Impacts related to exposing existing sensitive receptors to new stationary noise sources would be less than significant. Future development under this alternative, like all development under the Project, would be required to adhere to the General Plan policies and County Code related to noise standards and mitigations as summarized under the “Existing Noise Regulatory Setting” section in Chapter 8. As development under this alternative would be more intense than under the Project, it is anticipated that the increase in dwelling units would result in greater impacts related to construction noise and vibration and operation noise (including traffic noise) as compared to the Project. Development under this alternative would not increase operational vibration impacts because residential land use generally is not a substantial source of vibration. (*Greater*)

FAIR OAKS BOULEVARD CORRIDOR PLAN

As discussed in Chapter 8, the proposed rezone on Site 67 within the Fair Oaks Boulevard Corridor area would result in significant and unavoidable impacts related to noise and vibration during construction and operation, including traffic noise. Impacts related to

exposing existing sensitive receptors to new stationary noise sources would be less than significant. The proposed rezone on Site 67 would remain and an additional 10 sites (approximately 15 acres) would be added to the proposed rezone within the Fair Oaks Boulevard Corridor area under this alternative. Therefore, noise and vibration impacts under this alternative would be greater than those disclosed in Chapter 8 of the SEIR for the proposed rezone on Site 67. (*Greater*)

NORTH WATT AVENUE CORRIDOR PLAN

As discussed in Chapter 8, the proposed rezone on Sites 68 through 72 within the North Watt Avenue Corridor area would result in significant and unavoidable impacts related to noise and vibration during construction and operation, including traffic noise. Impacts related to exposing existing sensitive receptors to new stationary noise sources would be less than significant. The proposed rezone on Sites 68 through 72 would remain and an additional site (approximately 2.3 acres) would be added to the proposed rezone within the North Watt Avenue Corridor area under this alternative. Therefore, noise and vibration impacts under this alternative would be slightly greater than those disclosed in Chapter 8 of the SEIR for the proposed rezone on Sites 68 through 72. (*Slightly Greater*)

OLD FLORIN TOWN SPA

Alternative 2 would result in the continuation of existing conditions and planned development for Sites 73 through 79 within the Old Florin Town SPA. No new significant environmental impacts or an increased severity of environmental impacts identified in the Old Florin Town SPA EIR would occur under this alternative because it would retain the existing land use designations and policy provisions. Therefore, noise and vibration impacts related to the proposed rezone on Sites 73 through 79 would not occur under Alternative 2. (*Less*)

PUBLIC SERVICES AND RECREATION

GENERAL PLAN

As discussed in Chapter 9, “Public Services and Recreation,” of this SEIR, the Project would generate additional residents, which would increase the need for additional fire protection and law enforcement services, libraries services, and schools and parks. However, these services are funded through a variety of sources (e.g., mitigation fees, development impact fees, grant funding, and in lieu fees) and are expanded as needed to accommodate additional population growth. This alternative would develop more residences and result in more residents than anticipated by the Project. Because this alternative would result in increased population compared to the Project, the impacts to public services and recreation facilities would be greater than under the Project. (*Greater*)

FAIR OAKS BOULEVARD CORRIDOR PLAN

As discussed in Chapter 9, the proposed rezone on Site 67 would result in less-than-significant impacts related to public services. The proposed rezone on Site 67 would remain and an additional 10 sites (approximately 15 acres) would be added to the proposed rezone within the Fair Oaks Boulevard Corridor area under this alternative. Therefore, public

services and recreation impacts under this alternative would be greater than those disclosed in Chapter 9 of the SEIR for the proposed rezone on Site 67. (*Greater*)

NORTH WATT AVENUE CORRIDOR PLAN

As discussed in Chapter 9, the proposed rezone on Sites 68 through 72 would result in less-than-significant impacts related to public services and recreation. The proposed rezone on Sites 68 through 72 would remain and an additional one site (approximately 2.3 acres) would be added to the proposed rezone within the North Watt Avenue Corridor area under this alternative. Therefore, public services and recreation impacts under this alternative would be slightly greater than those disclosed in Chapter 9 of the SEIR for the proposed rezone on Sites 68 through 72. (*Slightly Greater*)

OLD FLORIN TOWN SPA

Alternative 2 would result in the continuation of existing conditions and planned development for Sites 73 through 79 within the Old Florin Town SPA. No new significant environmental impacts or an increased severity of environmental impacts identified in the Old Florin Town SPA EIR would occur under this alternative because it would retain the existing land use designations and policy provisions. Therefore, public services and recreation impacts related to the proposed rezone on Sites 73 through 79 would not occur under Alternative 2. (*Less*)

TRANSPORTATION

GENERAL PLAN

As discussed in Chapter 10, "Transportation," of this SEIR, the Project would result in less-than-significant impacts related to hazardous design feature, emergency access, and airport safety. Future development under this alternative, like all development under the Project, would be required to adhere to the County's 2018 Improvement Standards or the most recent design standards that address potential design hazards; comply with County standards and specifications to provide adequate emergency access; and comply with height restrictions associated with applicable airport land use plans. The Project would result in significant and unavoidable impacts associated with transit facilities and VMT. Similar to the Project, future development under this alternative would be required to comply existing regulations related to design standards, emergency access requirements, and airport land use requirement. Therefore, impacts related to hazardous design feature, emergency access, and airport safety under this alternative would be similar to those disclosed in Chapter 10 of the SEIR for the Project. (*Similar*)

Although this alternative would result in more concentrated residential development on 50 candidate rezone sites within five Green Zones that are identified for infill development or new transportation options that are within a center, corridor, or established community, it would result in 1,184 more units compared to the Project. Therefore, Alternative 2 would be expected to result in an increase in public transit demand compared to the Project. Implementation of Alternative 2 would result in a greater impact related to transit facilities than the Project. (*Greater*)

As shown in Table TRAN-4 in Chapter 10, the proposed rezone on Sites 2, 4, 6, 13, 14, 17, 18, 24 through 29, 56, 57, 62, 63, 65, and 66 would exceed the 85 percent VMT threshold and would result in a significant VMT impact at the site level. However, these sites would be removed from the Project under Alternative 2. Alternative 2 would only consist of sites located within the five Green Zones. According to SACOG, Green Zones see a 16 percent reduction of VMT per capita, double the regional reduction per capita at percent (SACOG 2023). It is anticipated that implementation of Alternative 2 would avoid the significant and unavailable VMT impact at the site level associated with the Project because all sites would be located within a Green Zone that would result in VMT per capita reduction. (*Less*)

FAIR OAKS BOULEVARD CORRIDOR PLAN

As discussed in Chapter 10, the proposed rezone on Site 67 within Fair Oaks Boulevard Corridor area would result in less-than-significant impacts related to transportation facilities with mitigation and result in less-than-significant impacts related to VMT, hazardous design feature, emergency access, and airport safety. The proposed rezone on Site 67 would remain and an additional 10 sites (approximately 15 acres) would be added to the proposed rezone within the Fair Oaks Boulevard Corridor area under this alternative. Future development under this alternative would be required to adhere to the County's 2018 Improvement Standards or the most recent design standards that address potential design hazards; comply with County standards and specifications to provide adequate emergency access; and comply with height restrictions associated with applicable airport land use plans. Therefore, impacts related to hazardous design feature, emergency access, and airport safety under this alternative would be similar to those disclosed in Chapter 10 of the SEIR for the proposed rezone on Site 67 under the Project. (*Similar*)

Future development on the additional 10 sites would result in a greater impact to transit facilities compared to the proposed rezone on Site 67 under the Project. Therefore, implementation of Alternative 2 would result in a greater impact related to transit facilities than the proposed rezone on Site 67 under the Project. (*Greater*)

Although Alternative 2 would add 10 more sites for the proposed rezone within the Fair Oaks Boulevard Corridor area, all sites would be located within the Fair Oaks Boulevard Green Zone. It is anticipated that VMT impacts at site level under this alternative would be similar to those disclosed in Chapter 10 of the SEIR for the proposed rezone on Site 67. (*Slightly Similar*)

NORTH WATT AVENUE CORRIDOR PLAN

As discussed in Chapter 10, the proposed rezone on Sites 68 through 72 within the North Watt Avenue Corridor area would result in less-than-significant impacts related to transportation facilities, VMT, hazardous design feature, emergency access, and airport safety. The proposed rezone on Sites 68 through 72 would remain and an additional one site (approximately 2.3 acres) would be added to the proposed rezone within the North Watt Avenue Corridor area under this alternative. Future development under this alternative would be required to adhere to the County's 2018 Improvement Standards or the most recent design standards that address potential design hazards; comply with County standards and specifications to provide adequate emergency access; and comply

with height restrictions associated with applicable airport land use plans. Therefore, impacts related to hazardous design feature, emergency access, and airport safety under this alternative would be similar to those disclosed in Chapter 10 of the SEIR for the proposed rezone on Sites 68 through 72 under the Project. (*Similar*)

Future development on the additional one site would result in a slightly greater impact to transit facilities compared to the proposed rezone on Sites 68 through 72 under the Project. Therefore, implementation of Alternative 2 would result in a slightly greater impact related to transit facilities than the proposed rezone on Sites 68 thorough 72 under the Project. (*Slightly Greater*)

Although Alternative 2 would add one more site for the proposed rezone within the North Watt Avenue Corridor area, all sites would be located within the North Watt Corridor Green Zone. It is anticipated that VMT impacts at site level under this alternative would be similar to those disclosed in Chapter 10 of the SEIR for the proposed rezone on Sites 68 through 72. (*Similar*)

OLD FLORIN TOWN SPA

Alternative 2 would result in the continuation of existing conditions and planned development for Sites 73 through 79 within the Old Florin Town SPA. No new significant environmental impacts or an increased severity of environmental impacts identified in the Old Florin Town SPA EIR would occur under this alternative because it would retain the existing land use designations and policy provisions. Therefore, transportation impacts related to the proposed rezone on Sites 73 through 79 would not occur under Alternative 2. (*Less*)

TRIBAL CULTURAL RESOURCES

GENERAL PLAN

As discussed in Chapter 11, “Tribal Cultural Resources,” of this SEIR, the Project would result in less-than-significant impacts to tribal cultural resources with implementation of mitigation measures. Similarly, this alternative would result in less-than-significant tribal cultural resources impacts with mitigation measures. However, this alternative would result in less ground disturbance than the Project (approximately 131.6 acres for Alternative 2 and approximately 235 acres for the Project). Therefore, tribal cultural resources impact under this alternative would be less than those under the Project. (*Less*)

FAIR OAKS BOULEVARD CORRIDOR PLAN

As discussed in Chapter 11, the proposed rezone on Site 67 within the Fair Oaks Boulevard Corridor area would result in less-than-significant impacts to tribal cultural resources with implementation of mitigation measures. The proposed rezone on Site 67 would remain and an additional 10 sites (approximately 15 acres) would be added to the proposed rezone within the Fair Oaks Boulevard Corridor area under this alternative. Therefore, this alternative would have the potential to result in an additional 15 acres of ground disturbance in the Fair Oaks Boulevard Corridor area compared to the proposed rezone on Site 67 under the Project. Alternative 2 would have the potential to result in

greater tribal cultural resources impacts than disclosed in Chapter 11 of the SEIR for the proposed rezone on Site 67 under the Project. (*Greater*)

NORTH WATT AVENUE CORRIDOR PLAN

As discussed in Chapter 11, the proposed rezone on Site 68 through 72 within the North Watt Avenue Corridor area would result in less-than-significant impacts to tribal cultural resources with implementation of mitigation measures. The proposed rezone on Sites 68 through 72 would remain and an additional one site (approximately 2.3 acres) would be added to the proposed rezone within the North Watt Avenue Corridor area under this alternative. Therefore, this alternative would have the potential to result in an additional 2.3 acres of ground disturbance in the North Watt Avenue Corridor area compared to the proposed rezone on Sites 68 through 72 under the Project. Alternative 2 would have the potential to result in greater tribal cultural resources impacts than disclosed in Chapter 11 of the SEIR for the proposed rezone on Sites 68 through 72 under the Project. (Slightly Greater)

OLD FLORIN TOWN SPA

Alternative 2 would result in the continuation of existing conditions and planned development for Sites 73 through 79 within the Old Florin Town SPA. No new significant environmental impacts or an increased severity of environmental impacts identified in the Old Florin Town SPA EIR would occur under this alternative because it would retain the existing land use designations and policy provisions. Therefore, tribal cultural resources impacts related to the proposed rezone on Sites 73 through 79 would not occur under Alternative 2. (*Less*)

UTILITIES

GENERAL PLAN

As discussed in Chapter 12, “Utilities,” of this SEIR, the Project would result in significant and unavoidable impacts related to water supply and less-than-significant impacts related to wastewater treatment and solid waste. Alternative 2 would have the potential to result in 1,184 more units compared to the Project. Therefore, this alternative would result in increased wastewater flows and solid waste disposal. As such, the wastewater treatment and solid waste impacts under this alternative would be greater than the impacts disclosed in Chapter 12 of the SEIR for the Project. (*Greater*)

Although Alternative 2 would result in 1,184 more units compared to the Project, future development under this alternative would be distributed to four water purveyors. Alternative 2 would consists of candidate rezone sites within the five Green Zones in the unincorporated County. These Green Zones are located with the water service areas of California American Water (CalAM), Carmichael Water District (CWD), Golden State Water Company (GSWC), Sacramento Suburban Water District (SSWD), and City of Sacramento. Table ALT-1 provides a summary of estimated water demand for each water purveyor under Alternative 2.

Table ALT-1: Alternative 2 Estimated Water Demand

Water Purveyor	Total Candidate Rezone Site Acreage	Dwelling Units (RD-40)	Water Demand (acre-feet/year)
California American Water	79.01	3,160	4731
Carmichael Water District	11.07	443	62.022
Golden State Water Company	7.5	300	513
Sacramento Suburban Water District	31.92	1,277	2564
City of Sacramento	2.13	85	10.25

1) The water demand is calculated based on the estimated 102 million gallons per year water demand for 2,095 units shown in Tables UTL-11 and UTL-12.

2) The water demand is calculated based on the water use factor of 0.14 acre-feet/dwelling unit utilized in Table UTL-13.

3) The Golden State Water Company Cordova Service Area 2020 Urban Water Management Plan utilizes a water demand factor of 3.46 acre-feet per year/connection to estimate water demand. Because it is uncertain how many units constitute a connection, the SCWA demand factor of 0.17 acre-feet per unit is utilized to estimated water demand resulting from this alternative.

4) The water demand is calculated based on the water use factor of 179 gallon per day/dwelling unit utilized in Table UTL-17.

5) The water demand is calculated based on the water use factor of 0.12 acre-feet/dwelling unit in Table UTL-18.

Alternative 2 would result in approximately 473 acre-feet/year (AFY) (approximately 154 million gallon per year [MG/year]) of water demand in CalAm service area. As shown in Table UTL-21 through UTL-25 in Chapter 12, CalAm would have at least 3,596 MG/year of water surplus during normal, single dry, and multiple dry years through 2045. Therefore, CalAm would have sufficient water supply to serve Alternative 2.

As shown in Table UTL-2 in Chapter 12, CWD would have at least 34,100 AF/year of water surplus during normal, single dry, and multiple dry years through 2045. Therefore, CalAm would have sufficient water supply to serve the additional 62.02 AF/year of water demand resulting from Alternative 2.

SSWD would have at least 9,464 AF/year of water surplus during normal, single dry, and multiple dry years through 2045 (Table UTL-5 of Chapter 12). Therefore, SSWD would have sufficient water supply to serve the additional 256 AF/year of water demand resulting from Alternative 2.

City of Sacramento would have at least 198,436 AF/year of water surplus for retail customers during normal, single dry, and multiple dry years through 2045 (Table UTL-7 of Chapter 12). Therefore, SSWD would have sufficient water supply to serve the additional 10.2 AF/year of water demand resulting from Alternative 2.

GSWC is not discussed in Chapter 12 of the SEIR because no proposed candidate rezone sites under the Project are located within GSWC water service area. Alternative 2 would have the potential to result in the development of 300 units and 51 AF/year of water demand in GSWC Cordova service area. However, GSWC Cordova only has sufficient water to meet its existing water demand, resulting in zero shortfalls or surpluses (GSWC 2021). Therefore, GSWC would not have sufficient water supply to serve the additional 300 units resulting from implementation of Alternative 2.

Therefore, there would not be adequate planned water supply to serve development allowed under Alternative 2 during normal, single dry, and multiple dry years. Alternative 2 would result in a significant and unavoidable water supply impact. Alternative 2 would not avoid the significant and unavoidable water supply impact resulting from Project implementation. (*Similar*)

FAIR OAKS BOULEVARD CORRIDOR PLAN

As discussed in Chapter 12, "Utilities," of this SEIR, the proposed rezone on Site 67 within the Fair Oaks Boulevard Corridor area would result in less-than-significant impacts related to water supply, wastewater treatment, and solid waste. The proposed rezone on Site 67 would remain and an additional 10 sites (approximately 15 acres) would be added to the proposed rezone within the Fair Oaks Boulevard Corridor area under this alternative. The additional 10 sites would be located in CWD and SSWD water serve areas. As discussed above for the General Plan, there would be sufficient water supplies in CWD and SSWD to serve Alternative 2, including the 10 sites in Fair Oaks Boulevard Corridor area. However, future development on the additional 10 sites would result in an increase in water supply demand, wastewater treatment demand, and solid waste disposal compared to future development on the proposed rezone on Site 67 under the Project. Therefore, Alternative 2 would result in greater utilities impacts than disclosed in Chapter 12 of the SEIR for the proposed rezone on Site 67. (*Greater*)

NORTH WATT AVENUE CORRIDOR PLAN

As discussed in Chapter 11, the proposed rezone on Site 68 through 72 within the North Watt Avenue Corridor area would result in less-than-significant impacts related to water supply and wastewater treatment with mitigation and less-than-significant impacts related to solid waste. The proposed rezone on Sites 68 through 72 would remain and an additional one site (approximately 2.3 acres) would be added to the proposed rezone within the North Watt Avenue Corridor area under this alternative. The additional site would be located in SSWD water serve area. As discussed above for the General Plan, there would be sufficient water supply in SSWD to serve Alternative 2, including the additional site in North Watt Avenue Corridor area. Future development on the additional one site would result in a slight increase in water supply demand, wastewater treatment demand, and solid waste disposal compared to future development on the proposed rezone on Sites 68 through 72 under the Project. Therefore, Alternative 2 would result in slightly greater utilities impacts than disclosed in Chapter 12 of the SEIR for the proposed rezone on Sites 68 through 72. (*Slightly Greater*)

OLD FLORIN TOWN SPA

Alternative 2 would result in the continuation of existing conditions and planned development for Sites 73 through 79 within the Old Florin Town SPA. No new significant environmental impacts or an increased severity of environmental impacts identified in the Old Florin Town SPA EIR would occur under this alternative because it would retain the existing land use designations and policy provisions. Therefore, utilities impacts related to the proposed rezone on Sites 73 through 79 would not occur under Alternative 2. (*Less*)

WILDFIRE

GENERAL PLAN

As discussed in Chapter 13, "Wildfire," of this SEIR, the Project would result in less-than-significant impacts related to wildfire. Although this alternative would result in 1,184 more units compared to the Project, this alternative would result in more concentrated residential development on 50 candidate rezone sites compared to 79 candidate rezone sites for the Project. Similar to the Project, this alternative would be required to comply with the County's Operational Area Evacuation Functional Annex, the General Plan Safety Element policies related to fire prevention and protection, Sacramento County Fire Prevention Ordinance, and PRC requirements related to fire safety and wildfire suppression. Therefore, wildfire impacts under this alternative would be similar to those disclosed in Chapter 13 of the SEIR for the Project. (*Similar*)

FAIR OAKS BOULEVARD CORRIDOR PLAN

As discussed in Chapter 13, the proposed rezone on Site 67 within the Fair Oaks Boulevard Corridor area would result in less-than-significant impacts related to wildfire with compliance with existing regulations as discussed above for the General Plan. The proposed rezone on Site 67 would remain and an additional 10 sites (approximately 15 acres) would be added to the proposed rezone within the Fair Oaks Boulevard Corridor area under this alternative. Similarly, future development under this alternative would be required to comply with existing regulations related to wildfire prevention and protection as discussed above for the General Plan. Therefore, wildfire impacts under this alternative would be similar to those disclosed in Chapter 13 of the SEIR for the proposed rezone on Site 67 under the Project. (*Similar*)

NORTH WATT AVENUE CORRIDOR PLAN

As discussed in Chapter 13, the proposed rezone on Sites 68 through 72 within the North Watt Avenue Corridor area would result in less-than-significant impacts related to wildfire with compliance with existing regulations as discussed above for the General Plan. The proposed rezone on Sites 68 through 72 would remain and an additional site (approximately 2.3 acres) would be added to the proposed rezone within the North Watt Avenue Corridor area under this alternative. Similarly, future development under this alternative would be required to comply with existing regulations related to wildfire prevention and protection as discussed above for the General Plan. Therefore, wildfire impacts under this alternative would be similar to those disclosed in Chapter 13 of the SEIR for the proposed rezone on Sites 68 through 72 under the Project. (*Similar*)

OLD FLORIN TOWN SPA

Alternative 2 would result in the continuation of existing conditions and planned development for Sites 73 through 79 within the Old Florin Town SPA. No new significant environmental impacts or an increased severity of environmental impacts identified in the Old Florin Town SPA EIR would occur under this alternative because it would retain the existing land use designations and policy provisions. Therefore, wildfire impacts related to the proposed rezone on Sites 73 through 79 would not occur under Alternative 2. (*Less*)

Alternative 3: No Sites in RLECWD Alternative

Alternative 3 would consist of all the Project's candidate rezone sites, except for Sites 28, 29, 65, and 66 that would not be rezoned to accommodate increased residential densities. This alternative removes these 4 candidate rezones sites primarily due to the significant impact identified in Chapter 12, "Utilities," pertaining to sufficient water supply for future development in the Rio Linda Elverta Water District (RLECWD) service area. Further, as identified in Chapter 10, "Transportation," development allowed under the Project on these 4 candidate rezone sites would exceed the 85 percent threshold for VMT and would result in a significant VMT impact. Absent the 4 candidate rezone sites (which contribute a realistic capacity of 166 lower-income units), this alternative would result in a realistic capacity of 3,691 lower-income and 156 moderate income category units and meet all the Project's objectives.

The proposed candidate rezone sites within the three distinct area plans (Fair Oaks Boulevard Corridor Plan, North Watt Avenue Corridor Plan, and Old Florin Town SPA) would not change under Alternative 3. Therefore, the environmental effects across all resources topics for these distinct area plans under Alternative 3 would be similar to the effects evaluated for the General Plan in Chapter 4 through Chapter 13 of this SEIR.

Aesthetics

General Plan

As discussed in Chapter 4," Aesthetics," of this SEIR, the Project would result in less-than-significant impacts related to changes in visual character and new sources of substantial light or glare from new higher density residential development. Although the Project's contribution to impacts associated with light or glare would not substantially worsen the impacts disclosed in the General Plan EIR, overall impacts would remain significant. Under this alternative, four sites would be removed from the Project and would retain their existing zoning and General Plan designations which include agricultural residential, residential, and commercial/office uses. Because these four sites are located in proximity to the Urban Services Boundary, generally at the point where infill transitions to more rural areas, development of these sites in accordance with their existing zoning and land use designations would avoid the impacts to visual character and new sources of substantial light and glare from new higher density residential development in these areas resulting from the Project. (*Less*)

Air Quality

General Plan

As discussed in Chapter 5, "Air Quality," of this SEIR, the Project would result in less-than-significant impacts related to exposing sensitive receptors to substantial concentration of toxic air contaminants with mitigation and result in less-than-significant impacts related to exposing sensitive receptors to substantial concentration of mobile-source carbon monoxide. Alternative 3 would result in 166 fewer units compared to the Project. Therefore, implementation of this alternative would result in reduced mobile-

source carbon monoxide and toxic air contaminant exposure as compared to the Project. Chapter 5 concluded that the Project would result in significant and unavoidable impacts related to construction and operational air emission and consistent with an applicable air quality plan. Under this alternative, up to 166 fewer housing units would be allowed as compared with the Project. Similar to the Project, implementation of this alternative would result in future development of additional housing units consistent with the most recent MTP/SCS. Implementation of this alternative would be considered consistent with applicable air quality plans. The sites removed from the Project would be built out according to their existing zoning and land use designations, they would still generate construction emissions as all sites are already anticipated for development under the General Plan. However, this alternative would result in reduced operational air pollutant emissions because it would consist of up to 166 fewer units, which could also reduce potential impacts related to public health. (*Slightly Less*)

Climate Change

General Plan

As discussed in Chapter 6, “Climate Change,” of this SEIR, the Project would result in significant and unavailable impacts related to generation of GHG emissions and less-than-significant impacts related to conflict with applicable GHG emissions reduction plans. Implementation of this alternative would be similar to the Project, which would result in a more efficient distribution of GHG emissions per capita than the existing conditions. Therefore, this alternative would support the goals of the 2022 scoping plan and be consistent with the 2022 scoping plan. Under this alternative, four sites would be removed from the Project; therefore, less operational GHG emissions would be generated than under the Project. Construction emissions for this alternative and the Project are anticipated to be similar because the sites would have the same development footprint. Therefore, because operational GHG emissions impacts under this alternative would be less than under the Project and construction GHG emissions would be similar, the total impact would be less. (*Slightly Less*)

Energy

General Plan

As discussed in Chapter 7, “Energy,” of this SEIR, the Project would result in less-than-significant impacts related to wasteful, inefficient, or unnecessary consumption of energy and would not conflict with or obstruct plans for renewable energy or energy efficiency. Similarly, this alternative would also not result in significant energy impacts. However, this Alternative would have lower energy demands than that of the Project because of the removal of the four sites that would not be developed with higher density residential units. Therefore, energy impacts under this alternative would be less than those under the Project. (*Slightly Less*)

Noise and Vibration

General Plan

As discussed in Chapter 8, "Noise and Vibration," of this SEIR, the Project would result in significant and unavoidable impacts related to noise and vibration during construction and operation, including traffic noise. Impacts related to exposing existing sensitive receptors to new stationary noise sources would be less than significant. Future development under this alternative, like all development under the Project, would be required to adhere to the General Plan policies and County Code related to noise standards and mitigations as summarized under the "Existing Noise Regulatory Setting" section in Chapter 8. As development under this alternative would be slightly less intense than under the Project, it is anticipated that the reduction in new dwelling units would result in less impacts related to construction noise and vibration and operation noise (including traffic noise) as compared to the Project. Development under this alternative would not increase operational vibration impacts because residential land use generally is not a substantial source of vibration. (*Slightly Less*)

Public Services and Recreation

General Plan

As discussed in Chapter 9, "Public Services and Recreation," of this SEIR, the Project would generate additional residents, which would increase the need for additional fire protection and law enforcement services, additional libraries services, and additional schools and parks. However, these services are funded through a variety of sources (e.g., mitigation fees, development impact fees, grant funding, and in lieu fees) and are expanded as needed to accommodate additional population growth. This alternative would develop fewer homes and result in fewer residents than anticipated by the Project. Because this alternative would not result in as much of a population increase as the Project, the impacts to public services and recreation facilities would be slightly less than under the Project. (*Slightly Less*)

Transportation

General Plan

As discussed in Chapter 10, "Transportation," of this SEIR, the Project would result in less-than-significant impacts related to hazardous design feature, emergency access, and airport safety. Future development under this alternative, like all development under the Project, would be required to adhere to the County's 2018 Improvement Standards or the most recent design standards that address potential design hazards; comply with County standards and specifications to provide adequate emergency access; and comply with height restrictions associated with applicable airport land use plans. The Project would result in significant and unavoidable impacts associated with transit facilities and VMT. As identified in Table 4 of the SEIR, future development on Sites 28, 29, 65, and 66 under the Project would result in significant VMT impacts. These four sites would be removed from the Project under this alternative. Therefore, this alternative would result in

fewer sites that would exceed the 85 percent VMT and would result in fewer residents that would use transit facilities compared to the Project. (*Slightly Less*).

Tribal Cultural Resources

General Plan

As discussed in Chapter 11, "Tribal Cultural Resources," of this SEIR, the Project would result in less-than-significant impacts to tribal cultural resources with implementation of mitigation measures. Similarly, this alternative would result in less-than-significant tribal cultural resources impacts with mitigation measures. However, this Alternative would remove four sites that would not be developed with higher density residential units and less site disturbance would occur. Therefore, tribal cultural resources impact under this alternative would be less than those under the Project. (*Slightly Less*)

Utilities

General Plan

As discussed in Chapter 12, "Utilities," of this SEIR, the Project would result in less-than-significant impacts related to wastewater treatment and solid waste. However, the Project would contribute to an existing significant water supply impact to RLECWD and Florin County Water District (FCWD), resulting in a significant and unavoidable water supply impact. Alternative 3 would remove Sites 28, 29, 65, and 66 from the Project. These sites are located within the RLECWD water service area. Therefore, this alternative would eliminate the significant and unavoidable water supply impact within the RLECWD water service area. However, the significant and unavoidable water supply impact within the FCWD water service area would remain because the proposed candidate rezone sites within FCWD would remain. The impacts related to wastewater treatment and solid waste under this alternative would be less than the impacts disclosed in Chapter 12 of the SEIR for the Project because of the removal of four candidate rezone sites. (*Slightly Less*)

Wildfire

General Plan

As discussed in Chapter 13, "Wildfire," of this SEIR, the Project would result in less-than-significant impacts related to wildfire. Similar to the Project, this alternative would be required to comply with the County's Operational Area Evacuation Functional Annex, the General Plan Safety Element policies related to fire prevention and protection, Sacramento County Fire Prevention Ordinance, and PRC requirements related to fire safety and wildfire suppression. The alternative would not result in significant wildfire impacts with compliance with existing regulations. However, this Alternative would remove four sites that would not be developed with higher density residential units. Therefore, wildfire impacts under this alternative would be less than those under the Project. (*Slightly Less*)

ENVIRONMENTALLY SUPERIOR ALTERNATIVE

An EIR is required to identify the environmentally superior alternative from among the range of reasonable alternatives that are evaluated. The environmentally superior alternative is generally the alternative that would be expected to generate the least amount of significant impacts. Identification of the environmentally superior alternative is an informational procedure and the alternative selected may not be the alternative that best meets the goals or needs of the County. Section 15126(e)(2) of the State CEQA Guidelines requires that an environmentally superior alternative be designated and states, “If the environmentally superior alternative is the ‘no project’ alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives.” In this case, Alternative 1: No Project Alternative would be considered the environmentally superior alternative, because the candidate rezone sites are assumed to remain under existing land use and zoning designations under the alternative. Consequently, no new or severe significant impacts that previously analyzed under the General Plan EIR and the three distinct area plan EIRs (Fair Oaks Boulevard EIR, North Watt Avenue EIR, and Old Florin Town SPA EIR) would occur under the No Project Alternative.

However, the No Project Alternative would not meet any of the Project objectives and would not fulfill the County’s RHNA requirement. Thus, as stated above, this SEIR must identify another alternative as the environmentally superior alternative. As discussed throughout this Chapter, Alternative 2 (Green Zones Alternative) would result in greater impacts in most of the environmental resource topics than previously analyzed under the General Plan EIR and Fair Oaks Boulevard EIR and North Watt Avenue EIR except for impacts related to VMT and tribal cultural resources, and wildfire. Alternative 2 would avoid the significant and unavoidable VMT impacts at site level associated with the Project. The significant and unavoidable impacts associated with aesthetics, air quality, climate change, noise and vibration, transit facilities and water supply would remain under this alternative. Alternative 2 would not result in new or severe significant impacts that previously analyzed under the Old Florin Town SPA EIR because no candidate rezone sites would be located within the Old Florin Town SPA.

Alternative 3 (No Sites in RLECWD Alternative) would result in less impacts across all resource topics evaluated, when compared to the Project due to the removal of four candidate rezone sites, but significant and unavoidable impacts related to aesthetics, air quality, climate change, noise and vibration, and transit facilities would remain. In addition, the significant and unavoidable impacts associated with water supply capacity within FCWD would not change under this alternative. Alternative 3 would result in similar impact across all resource topics evaluated when compared to the proposed rezone within the three distinct area plans.

Therefore, selection of the environmentally superior alternative is focused on which alternative would reduce significant impacts by the greatest level of intensity. Alternative 2 would avoid the significant VMT impacts associated with the Project. Alternative 2 would result in less impact across all resources topics evaluated for the Old Florin Town SPA because no candidate rezone sites would occur within the Old Florin Town SPA under this alternative. Alternative 3 would result in less impact across all resources topics evaluated for the General Plan and result in similar impacts across all resources topics evaluated for the three distinct area plans. The significant and unavoidable water supply impacts in RLECWD would be avoided under Alternative 3. Because Alternative 3 would avoid the significant and unavoidable water supply impacts in RLECWD associated with the Project and would result in lesser impacts across all resources topics, Alternative 3 would be the environmentally superior alternative.

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4 AESTHETICS

INTRODUCTION

This chapter includes a description of the existing visual characteristics of the Project area and vicinity, the significance thresholds used to determine the significance of visual and aesthetic impacts, and an analysis of the effects the proposed Project could have on views and aesthetics in the vicinity of the candidate rezone sites. The impact discussion evaluates potential impacts to aesthetic and visual resources that could result from implementation of the proposed Project compared to what was previously evaluated in the General Plan EIR and various other EIRs prepared for distinct area plans.

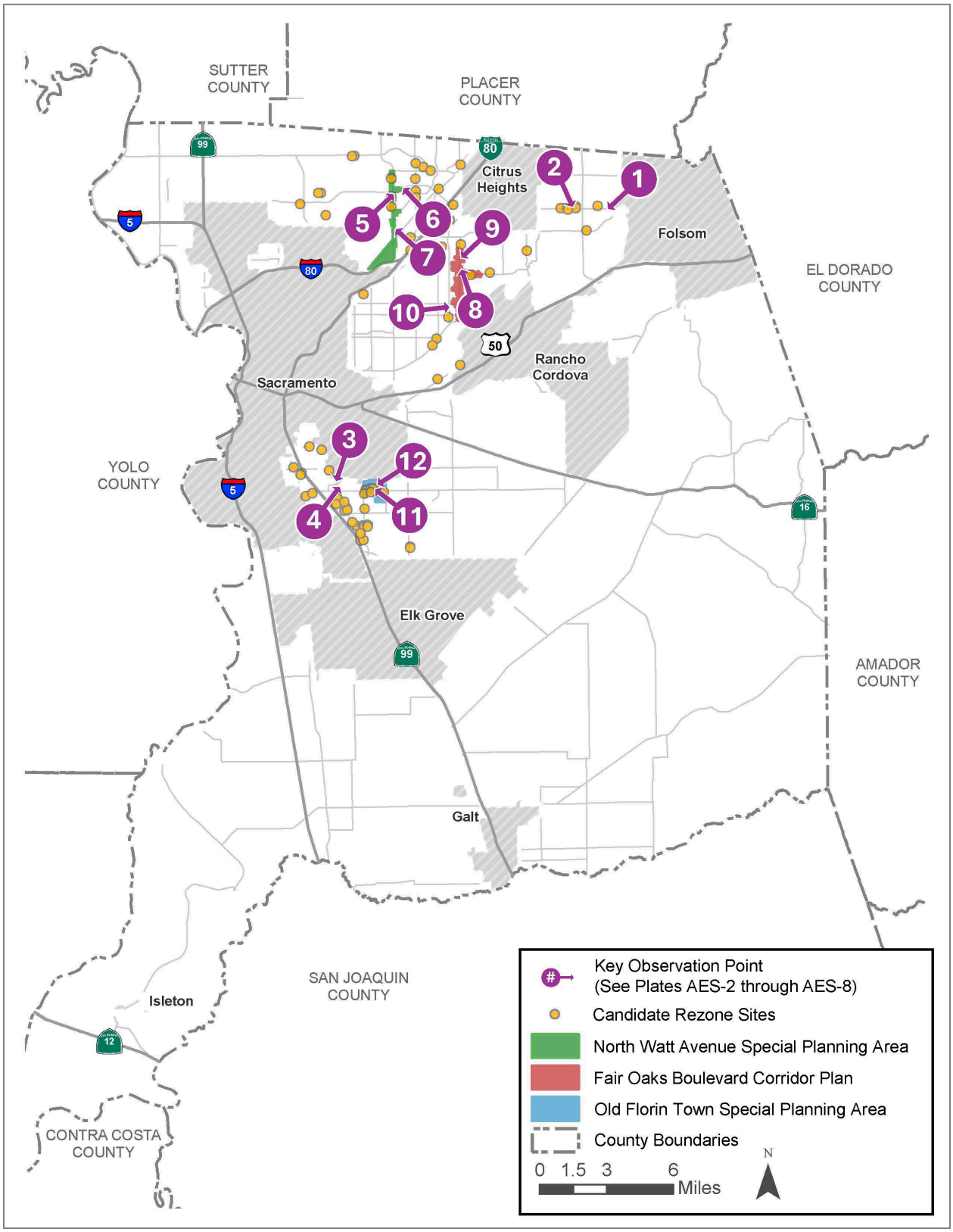
No scoping comments related to aesthetics were received during the notice of preparation (NOP) public review periods. The NOP and comments received in response to the NOP are provided in Appendix INTRO-1.

EXISTING ENVIRONMENTAL AESTHETIC SETTING

State CEQA Guidelines Section 15162 indicates that should a lead agency determine that substantial changes to the project or its circumstances result in a new or more significant impact compared to what was addressed in a project's previous EIR, or new information of substantial importance results in a new or more significant impact, a subsequent EIR (SEIR) should be prepared. Therefore, this document serves as a SEIR to Sacramento County's 2030 General Plan EIR (General Plan EIR), as well as to EIRs prepared for various distinct plan areas within which a portion of the rezone sites are located. Applicable distinct plan area EIRs include the Fair Oaks Boulevard Corridor Plan EIR (Fair Oaks Boulevard EIR), the North Watt Avenue Corridor Plan EIR (North Watt Avenue EIR), and the Old Florin Town Special Planning Area (SPA) EIR (Old Florin Town SPA EIR). The regional housing needs allocation (RHNA) shortfall of 2,884 lower income category units and needed buffer could not have been known at the time of the General Plan EIR certification, and the RHNA is in excess of the number of dwelling units analyzed in the General Plan EIR. The number of additional units required in various distinct plan areas was not known at the time the applicable environmental documents were certified. As required by Section 15162, this SEIR evaluates the potential for the proposed Project or changes in the circumstances to result in new or substantially more severe significant environmental impacts than what was previously analyzed under the General Plan EIR and distinct plan area EIRs. Existing visual character for the unincorporated County, Fair Oaks Boulevard Corridor area, North Watt Avenue Corridor area, and Old Florin Town SPA are summarized below.

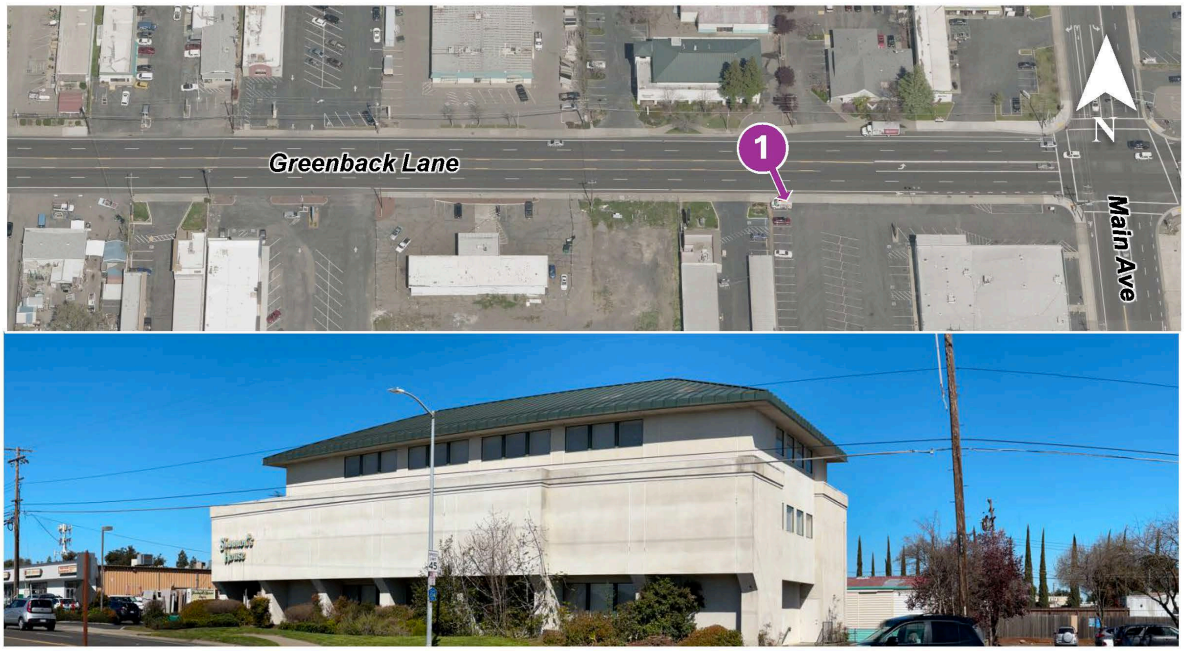
See Plates AES-1 through AES-8 for visuals of the existing environmental aesthetic setting for candidate rezone sites within various infill and corridor areas. Key observation points (KOPs) were selected for areas that contain numerous candidate rezone sites and

Plate AES-1: KOP Location Key



Source: Provided by Sacramento County 2024 and adapted by Ascent 2024.

Plate AES-2: KOP 1 and KOP 2



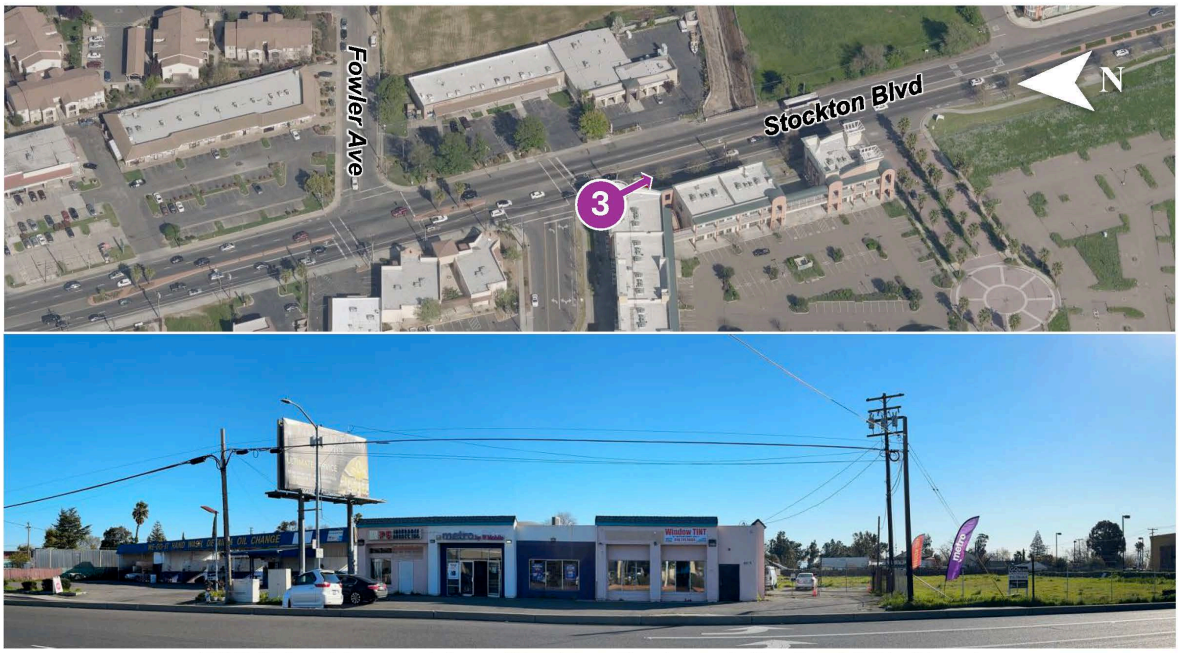
KOP 1: Looking north from Greenback Lane, west of Main Avenue.



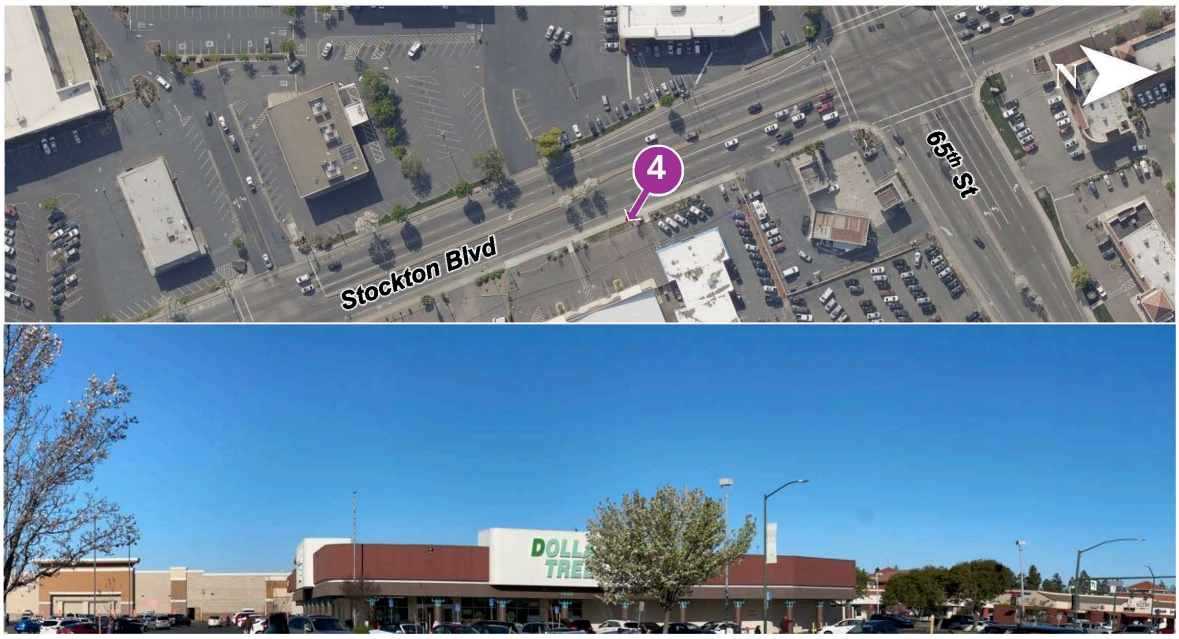
KOP 2: Looking south from Greenback Lane, east of Beech Avenue.

Source: Provided by Sacramento County 2024 and adapted by Ascent 2024.

Plate AES-3: KOP 3 and KOP 4



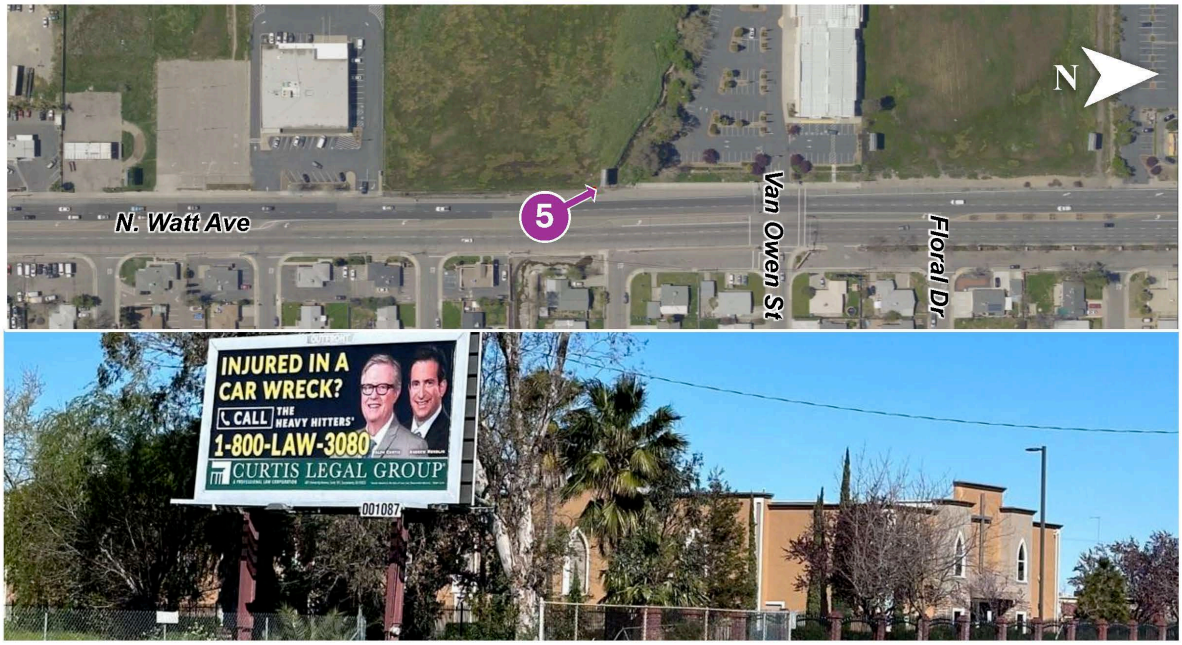
KOP 3: Looking east from Stockton Boulevard, North of 65th Street.



KOP 4: Looking west from Stockton Boulevard, south of 65th Street.

Source: Provided by Sacramento County 2024 and adapted by Ascent 2024.

Plate AES-4: KOP 5 and KOP 6



KOP 5: Looking northwest from the intersection of North Watt Avenue and Channing Drive.



KOP 6: Looking north from Elkhorn Boulevard, east of North Watt Avenue.

Source: Provided by Sacramento County 2024 and adapted by Ascent 2024.

Plate AES-5: KOP 7



KOP 7: Looking west from North Watt Avenue, south of A Street.

Source: Provided by Sacramento County 2024 and adapted by Ascent 2024.

Plate AES-6: KOP 8 and KOP 9



KOP 8: Looking northeast from the intersection of Manzanita Avenue and Lincoln Avenue.



KOP 9: Looking east from the intersection of Manzanita Avenue and Jameson Court.

Source: Provided by Sacramento County 2024 and adapted by Ascent 2024.

Plate AES-7: KOP 10



KOP 10: Looking west from Fair Oaks Boulevard, south of Marconi Avenue.

Source: Provided by Sacramento County 2024 and adapted by Ascent 2024.

Plate AES-8: KOP 11 and KOP 12



KOP 11: Looking south from the intersection of Florin Road and Tokay Avenue.



KOP 12: Looking northwest from the intersection of Florin Road and McComber Street.

Source: Provided by Sacramento County 2024 and adapted by Ascent 2024.

provide an overall setting for the existing visual character and quality of select infill and corridor areas.

General Plan Existing Aesthetics Setting

Sacramento County lies near the center of California's Central Valley, at the southern end of the Sacramento Valley. Aesthetic views within the valley region are generally characterized by broad sweeping panoramas of flat agricultural lands and open space dotted with trees, divided by numerous rivers and creeks, and populated with scattered towns and cities. To the east, the Sierra Nevada and their foothills form a background, and the Coast Range provides a backdrop on the western horizon.

Scenic Views, Resources, And Corridors

Visual resources are classified in two categories: scenic views and scenic resources. Scenic resources are described in the CEQA Environmental Checklist as specific features of a viewing area (or viewshed) such as trees, rock outcroppings, and historic buildings. They are specific features that act as the focal point of a viewshed and are usually foreground elements. Scenic views are elements of the broader viewshed such as mountain ranges, valleys, and ridgelines. They are usually middle ground or background elements of a viewshed that can be seen from a range of viewpoints, often along a roadway or other corridor.

The numerous rivers, creeks, and waterways located within or adjacent to the unincorporated areas of Sacramento County serve as a visual transition from natural scenic corridors to the county's urban, suburban, and rural areas. The important scenic waterway corridors in the unincorporated County include the: Sacramento River and its Delta, American River, Cosumnes River, Dry Creek, Morrison Creek, Laguna Creek, Elder Creek, Deer Creek, and Dry Creek South. The riparian areas associated with these waterways are considered some of the most biologically rich regions in California's Central Valley and greatly enhance the aesthetic and visual character of the area. Visually based opportunities include bird watching, hiking, scenic tours, guided trips, and various seasonal outings.

County parks, parkways, and nature preserves such as the American River Parkway, Dry Creek Parkway, Cosumnes River Preserve, Beach-Stone Lakes, Mather Lake and the Mather Regional Park include both scenic views and scenic resources such as large mature oaks, oak and riparian woodlands, and vernal pools. Additionally, the Lower American River (from the Folsom Dam to its confluence with the Sacramento River) is classified as a "Recreation" river, as defined by the Federal and State Wild and Scenic Rivers System due to its aesthetic qualities and wealth of recreational opportunities that it provides.

The Circulation Element of the existing General Plans designates scenic corridors within the County. These corridors include River Road, Isleton Road, Garden Highway, Scott Road (from White Rock Road south to Latrobe Road), Latrobe Road, Michigan Bar Road, and Twin Cities Road (from State Route [SR] 160 east to Highway 99). SR160/River Road from the Contra Costa County line to the southern city limit of Sacramento is a state

designated scenic highway (Sacramento County 2022a). River Road meanders through the historic Delta agricultural areas and small towns along the Sacramento River. Scenic views along this corridor include the river, agricultural fields, orchards, patches of riparian forest, several historic homes, and buildings.

Visual Character

In general, the dominant visual characteristics within the unincorporated Sacramento County are the open sections of the valley floor, urbanized land uses, agricultural land uses, rivers and creeks, and trees. Because the unincorporated area consists of relatively flat terrain, views of these resources are available from roadways throughout the area including US 50, Highway 99, SR 16, SR 160/River Road, Grant Line Road, and Scott Road. Oak trees, vernal pools, streams, creeks, the Delta region and the historic structures and rural communities such as Locke and Sloughouse are among the County's visual heritage that many residents value as part of their quality of life. Distant views of the Sierra Nevada, the Coast Range, Mount Diablo, and the Sutter Buttes can be visible under clear conditions and are also considered part of the County's visual heritage.

Light and Glare

The unincorporated rural and agricultural areas of the County are sparsely developed and used for agriculture. These rural land uses typically do not generate substantial amounts of glare, lighting, or illumination, and the ambient nighttime lighting and illumination levels are very low. The unincorporated urban areas of the County include existing sources of daytime glare and nighttime lighting and illumination. Sources of daytime glare include direct beam sunlight and reflections from windows, architectural coatings, glass and other shiny reflective surfaces. Nighttime light illumination and associated glare can be divided into stationary and mobile sources. Stationary sources of nighttime light include structure illumination, decorative landscape lighting, and lighted parking lots. Mobile sources of light include headlights from moving vehicles on roadways throughout the unincorporated County.

Fair Oaks Boulevard Corridor Plan Existing Aesthetics Setting

The Fair Oaks Boulevard Corridor Plan area is located along major roadways in a highly developed area of the Carmichael Community. The existing visual character of the Fair Oaks Boulevard Corridor Plan is described below and depicted in Plate AES-6 and Plate AES-7.

Visual Character

The dominant visual characteristics of the Fair Oaks Boulevard Corridor Plan are consistent with an urbanized commercial corridor within the unincorporated County. Much of the corridor is developed with aging auto-oriented uses though the area has seen some recent redevelopment. In addition to commercial uses, the corridor has a mixture of low-to-mid density residential uses along with some apartment communities. Visually, most buildings are 1-2 stories in height surrounded by vehicular parking and landscaping. Some parts of the corridor have large scale strip-mall commercial while others are small scale and built closer to the right-of-way. Overall, there is no singular architectural or massing theme to the corridor. Visually this type of development can be characterized by

low to mid-rise buildings, parking areas, light poles, parking area landscaping, signs, and utility poles and lines.

Most of the vegetation within the corridor consists of typical roadside and urban landscape vegetation as well as native and non-native trees commonly found in developed areas. Although some parcels in the corridor are vacant, there are no large contiguous tracts of open natural space. Topography across the Fair Oaks Corridor Plan area is flat with some drainage features including Verde Cruz and Carmichael Creeks, and small tributaries to them. Many of these features have been significantly impacted by development on the corridor and are often piped underground; therefore, open waterways are not a visual characteristic within the corridor.

Scenic Views, Resources, And Corridors

As mentioned above, the Fair Oaks Boulevard Corridor Plan area is visually characterized as an urbanized commercial corridor with minimal visual cohesiveness. There are no designated scenic vistas within the corridor, and none are visible from the Fair Oaks Boulevard Corridor Plan area. Additionally, the Fair Oaks Boulevard Corridor Plan is not located near any designated scenic highways or corridors. There are some vacant parcels but no large tracts of open natural space. Carmichael Park is located within the Fair Oaks Corridor Plan area and provides open visually appealing views; however, the views are not considered scenic vistas or corridors.

Light and Glare

Like most of the existing commercial corridors and infill areas within the unincorporated County, the Fair Oaks Boulevard Corridor Plan area has existing sources of light and glare. Sources of daytime glare include direct beam sunlight and reflections from windows, architectural coatings, glass and other shiny reflective surfaces. Nighttime light illumination and associated glare can be divided into stationary and mobile sources. Stationary sources of nighttime light include structure illumination, decorative landscape lighting, streetlights, and lighted parking lots. Mobile sources are predominantly vehicular headlights.

North Watt Avenue Corridor Plan Existing Aesthetics Setting

The North Watt Avenue Corridor Plan area is located along North Watt Avenue in the North Highlands Community. Watt Avenue is a major north-south running thoroughfare that connects numerous unincorporated communities. This portion of Watt Avenue was developed in support of the adjacent and former McClellan Air Force Base. The existing visual character of the North Watt Avenue Corridor Plan is described below and depicted in Plate AES-4 and Plate AES-5.

Visual Character

The dominant visual characteristics of the North Watt Avenue Corridor Plan have been largely dictated by the adjacent and former McClellan Air Force Base (McClellan AFB). Areas located within the southern portion of the North Watt Avenue Corridor Plan area were developed with auto-oriented and strip-commercial uses to support employees located at McClellan AFB. Areas located along the northwest portion of the corridor are

more sparsely developed because strict policies were in place to restrict incompatible uses within the areas adjacent to McClellan AFB. This is due to the orientation of runways and flight patterns at the former base, which resulted in military planes taking off in a northerly direction on a regular basis. As military operations slowed and eventually stopped with the closure of the McClellan AFB, some development and redevelopment occurred along the northwest portion of the corridor starting in the 1980s. Even with the closure of the former AFB, now the McClellan business park, McClellan remains a visual and economic fixture along the corridor.

Much of the developed areas along the corridor contain aging auto-oriented uses, though the area has a mix of multi-family, light industrial and civic uses. In the developed areas, most buildings are 1-2 stories in height surrounded by vehicular parking and sparse landscaping. Some parts of the North Watt Avenue Corridor Plan area have large scale big-box and strip-mall commercial uses while the northerly areas are interrupted by large vacant parcels vegetated with non-native grasses. Overall, there is no singular architectural or visual theme to the corridor. Visually the development along the corridor is characterized by low to mid-rise buildings, parking areas, light poles, parking area landscaping, signs, gateway monuments, and utility poles and lines.

Most of the vegetation within the corridor consists of typical roadside and urban landscape vegetation as well as some native and non-native trees commonly found in developed areas. The area around Sites 68 through 72 includes several water-features including Dry Creek, two branches of Robla Creek, Magpie Creek, and Don Julio Creek. Many of these features have been significantly impacted by development on the corridor and are often piped underground; therefore, open waterways are not a significant visual characteristic. Overall, most of the North Watt Avenue Corridor Plan area, including areas that are vacant or semi-rural, have been subjected to site modifications and the areas around Sites 68 through 72 do not contain pristine habitat or related natural visual resources.

Scenic Views, Resources, And Corridors

There are no designated scenic vistas within or visible from the North Watt Avenue Corridor Plan area. Additionally, the North Watt Avenue Corridor Plan is not located or visible to any designated scenic highways or corridors. Located on the west side of Watt Avenue, north of I Street, are several vacant parcels interspersed between developed commercial properties. Some of these parcels offer views of adjacent agricultural-residential properties located along 34th Street. Views in this area can include non-native grasslands, open fields, pastures, native and non-native trees, and small-scale animal husbandry operations. Small segments of creek tributaries run through some of these vacant parcels and the creek corridor is visible from Watt Avenue. This portion of the corridor offers short expanses of natural scenic views and views characteristic of semi-rural development; however, these views are interrupted by commercial, civic, and residential uses fronting Watt Avenue.

Light and Glare

Like most of the existing commercial corridors and infill areas within the unincorporated County, the North Watt Avenue Corridor Plan area has existing sources of light and glare.

Sources of daytime glare include direct beam sunlight and reflections from windows, architectural coatings, glass and other shiny reflective surfaces. Nighttime light illumination and associated glare can be divided into stationary and mobile sources. Stationary sources of nighttime light include structure illumination, decorative landscape lighting, streetlights, and lighted parking lots. Mobile sources are predominantly vehicular headlights. Existing light and glare sources vary along the North Watt Avenue Corridor Plan area; in the sparsely developed portion of the corridor (west side of Watt Avenue north of I street), daytime and nighttime lighting and glare are minimized compared to the areas developed with commercial, residential, light industrial, and civic uses.

OLD FLORIN TOWN SPA EXISTING AESTHETICS SETTING

The Old Florin Town SPA is located along Florin Road in the South Sacramento Community. The Old Florin Town SPA comprises the historic town of Florin that has a unique history dating back to the 1850s. The existing visual character of the Old Florin Town SPA is described below and depicted in Plate AES-8.

VISUAL CHARACTER

The visual characteristics of the Old Florin Town SPA are consistent with those of a small historic town with a mix of uses including commercial, residential, industrial, civic, and institutional uses. Some portions of the Old Florin Town SPA contain historic buildings consistent with Florin Town's vibrant history while the remainder of the Old Florin Town SPA area is made up of contemporary structures, industrial yards, and vacant or underutilized parcels. The historic Florin Town is the core of the Old Florin Town SPA and it is bisected by the Southern Pacific Railroad line.

Like other vehicular corridors in the unincorporated County, the developed areas within the Old Florin Town SPA contain aging auto-oriented uses, historic commercial and institutional uses, and numerous industrial warehouse buildings and associated yards. The commercial, residential, and institutional development is typically 1-2 story buildings surrounded by vehicular parking and sparse roadside landscaping. In the historic core, many buildings are located at the sidewalk and may contain parking to the rear of the structure. This section of Florin Road has a number of vacant parcels that are either in open grasslands or contain remnants of past development (concrete parking areas and foundation slabs).

While there is no singular architectural or visual theme to the Old Florin Town SPA, there is some visual consistency in the historic core. Additionally, due to streetscape beautification there is a consistent visual streetscape made up of monumentation, landscaping, unique light poles, and gateway structures. Monumentation and signage includes a flower motif because the town name likely came from the Spanish word *flor*, meaning flower. Utility poles and lines are a dominant visual characteristic along the Florin Road corridor.

Most of the vegetation within the Old Florin Town SPA consists of streetscape landscaping and vacant and underutilized parcels typically covered in annual non-native grasses. Florin Creek, which has mostly been channelized and/or conveyed in pipes, is

within the vicinity of Sites 73 through 79. Though there are areas of Florin Creek that are more naturalized and visually appealing, Florin Creek is not a significant visual resource from Florin Road. On the whole, most of the Old Florin Town SPA, including those areas that are vacant or semi-rural, have been subjected to site modifications and the vicinity of Sites 73 through 79 does not contain pristine habitat or related natural visual resources.

Scenic Views, Resources, And Corridors

There are no designated scenic vistas within or visible from the Old Florin Town SPA. Additionally, the Old Florin Town SPA is not located or visible to any designated scenic highways or corridors. The SPA does contain the historic town of Florin, which has buildings and visual resources that represent this unique community. While this area is not a designated scenic corridor, the Board of Supervisors has recognized the importance of this area as a piece of local heritage. Board adopted plans focused on this area are aimed at preserving the fragile historic community of Florin and have included the "downgrade" of Florin Road, investment in streetscape amenities, and the adoption of the Old Florin Town SPA. The Old Florin Town SPA contains specific design standards to preserve and enhance the community both visually and economically. Natural scenic resources are limited to short expanses of vacant and underutilized parcels covered in non-native grasslands and views of the Florin Creek corridor.

Light and Glare

The Old Florin Town SPA has existing sources of light and glare. Sources of daytime glare include direct beam sunlight and reflections from windows, architectural coatings, glass and other shiny reflective surfaces. Nighttime light illumination and associated glare can be divided into stationary and mobile sources. Stationary sources of nighttime light include structure illumination, decorative landscape lighting, streetlights, and lighted parking lots. Mobile sources are predominantly vehicular headlights.

Regulatory Setting

Federal

No federal plans, policies, regulations, or laws related to aesthetics, light, and glare are applicable to the Project.

State

California Scenic Highway Program

California's Scenic Highway Program was created by the Legislature in 1963 and was designed to protect scenic state highway corridors from changes that would diminish the aesthetic value of the land adjacent to the highways. The Program is administered by the California Department of Transportation (Caltrans). A California highway may be designated as scenic depending on how much of the natural landscape can be seen by

travelers, the scenic quality of the landscape, and the extent to which development intrudes on the traveler's enjoyment of the view.

California Building Code

The California Building Code (California Code of Regulations, Title 24, Part 2) contains various building standards derived and adapted from the International Building Code, authorized by the California legislature, that addresses California building issues. They include standards for outdoor lighting intended to improve energy efficiency, minimize light pollution and nighttime glare, and provide design solutions to shield and control outdoor lighting fixtures.

Title 24 Outdoor Lighting Standards

As published in Section 6 of the California Code of Regulations, Title 24 is a broad set of requirements for energy conservation, green design, construction and maintenance, fire and life safety, and accessibility that apply to the structural, mechanical, electrical, and plumbing systems in a building. The code applies to all buildings in California. California updates its energy code every three years. Construction projects with permit applications applied for on or after January 1, 2023 must follow the 2022 Energy Code. If a permit is applied for before then, buildings follow the 2019 Building Efficiency Standards. The code includes energy efficiency standards for outdoor lighting for both the public and private sector. The standards regulate lighting characteristics such as maximum power and brightness, shielding, and sensor controls to turn lighting on and off.

Local

Sacramento County General Plan

The *Sacramento County General Plan of 2005–2030* (Sacramento County 2022b) includes the following policies related to aesthetics that would apply to the proposed Project:

Land Use Element

LU-16. Apply the "Community Design Guidelines" and design review authority to all long-range planning efforts, including but not limited to Specific Plans, Comprehensive Plans, Community Plans, and Commercial Corridor Plans.

LU-17. Support implementation of the design review program on a project-by-project basis to ensure that all development applications positively contribute to the immediate neighborhood and the surrounding community.

LU-18. Encourage development that complements the aesthetic style and character of existing development nearby to help build a cohesive identity for the area.

LU-19. Incompatible urban land uses should be buffered from one another by methods that retain community character, and do not consume large land areas or create pedestrian barriers.

LU-20. Planning processes for existing communities, commercial corridors, and new growth areas shall provide for distinct and identifying physical elements, which may include gateways, signage, public art, common site or street layout, shared design qualities of buildings or infrastructure, or prominent landmarks or destinations.

LU-21. Promote a better balance of employment, neighborhood services, and different housing types by reviewing development projects and the surrounding community and designing new projects wherever feasible so that they maintain or improve the mix of uses in the community.

LU-22. Specific Plans and Community Plans should provide a balance of employment, neighborhood services, and different housing types wherever feasible.

LU-31. Strive to achieve a natural nighttime environment and an uncompromised public view of the night sky by reducing light pollution.

LU-94. Use design review to ensure that new commercial and residential development projects are designed to be compatible with existing neighborhoods and improve quality of life.

LU-102. Ensure that the structural design, aesthetics and site layout of new developments is compatible and interconnected with existing development.

CIRCULATION ELEMENT

CI-65. Incorporate Low Impact Design (LID) techniques to the greatest extent feasible to improve water quality runoff and erosion control, infiltration, groundwater recharge, visual aesthetics, etc. LID techniques may include but are not limited to:

- Bioretention techniques, such as filtration strips, swales, and tree box filters
- Permeable hardscape
- Green roofs
- Erosion and sediment controls
- Reduced street and lane widths where appropriate

SACRAMENTO COUNTY ZONING CODE

The Sacramento County Zoning Code provides development standards to all multi-family projects not located within a distinct area plan. The Zoning Code regulates standards such as, but not limited to, setbacks, height, open space, and lighting. These standards work in concert with the Multifamily Design Standards contained within the Countywide Design Guidelines to ensure visually high-quality projects that integrate the character of existing neighborhoods.

Additionally, the Zoning Code contains standards requiring that illumination of buildings, landscaping, signs, and parking and loading areas be shielded and directed so that no

light trespasses onto adjacent properties. Chapter 5 (Development Standards) requires that lighting shall be directed away from residential areas and public streets so that glare is not produced that could affect the general safety of vehicular traffic and the privacy and well-being of residents.

SACRAMENTO COUNTY DESIGN GUIDELINES

The *Sacramento Countywide Design Guidelines* (Sacramento County 2022a) (Guidelines) were adopted to promote high quality, sustainable, and healthy community design. The objectives of the Guidelines, in conjunction with the County's Design Review Program, are to achieve high standards for the quality of the built environment, advance sustainable development, and provide business and user-friendly practices. The Guidelines incorporate sustainability practices that include green building and construction that can facilitate sustainability by generating jobs; and increasing energy efficiency, water conservation, and air quality and waste reduction.

Chapter 3.0 of the Guidelines presents objective design standards for multi-family residential uses. The Multifamily Design Standards were developed to provide objective planning and design standards for multi-family development that supports the goals and objectives of the Sacramento County General Plan, providing for residential development that contributes to the health, sustainability, and quality of life of the unincorporated communities within the County. Objective design standards for site design, architectural elements, and lighting were adopted to provide consistent standards ensuring new development is integrated with surrounding development, provide visually appealing projects, and reduce light and glare pollution. Specific design standards to achieve these goals are discussed, as applicable, in the impact analysis below.

DISTINCT AREA PLANS

The County contains many distinct area planning efforts and associated documents. The distinct area planning efforts provide community-specific regulations that supplement the County Zoning Code. Some of the candidate rezone sites are located within distinct area plans such as Special Planning Areas (SPAs), Specific Plans, Comprehensive Plans, Community Plans, Corridor Plans, and Neighborhood Preservation Areas (NPAs). These distinct area plans are created when the countywide zoning regulations do not adequately address local concerns (County of Sacramento 2023). As shown in Chapter 2, "Project Description," 13 candidate rezone sites are located in distinct area plans. Relevant aesthetics policies included in the area planning efforts are summarized below.

FAIR OAKS BOULEVARD CORRIDOR PLAN

SS-1. Incorporate Low Impact Design (LID) techniques to the greatest extent feasible to improve water quality runoff and erosion control, infiltration, groundwater recharge, visual aesthetics, etc. LID techniques may include but are not limited to:

- Bio retention techniques, such as filtration strips, swales, and tree box filters
- Permeable hardscape

- Green roofs
- Erosion and sediment controls
- Reduced street and lane widths where appropriate

CDP-18. Light Pollution. Prohibit unnecessary and intrusive lighting that detracts from the beauty and view of the night sky.

NORTH WATT AVENUE CORRIDOR PLAN

The purpose of the North Watt Avenue Corridor Plan is to guide infill growth and public improvements along North Watt Avenue and throughout the North Watt Avenue Corridor Plan area within a planning horizon of 20 years. Chapters 3 and 5 of the North Watt Avenue Corridor Plan provide guidance related to Urban Design and Public Realm Design, respectively. Chapter 3 provides specific development standards and design guidelines for defined districts that will promote the desired urban form and character of the corridor. Specific development standards and design guidelines include site orientation and design, circulation, building design. Chapter 5 provides guidelines that specifically address the pedestrian experience and the appearance of the public realm, including streetscape standards, landscaping improvements, pedestrian amenities, signage and gateways, and public art. These chapters promote the desired urban form of the corridor through high-quality design and distinct visual character and improve the overall appearance of the public realm.

OLD FLORIN TOWN SPECIAL PLANNING AREA

The intent of the Old Florin Town SPA is to preserve the historic community of Florin. Unique development standards and design guidelines are provided in the SPA to ensure that new and rehabilitated development retain the historic character and architectural style of the community. Development standards contained in the adopted plan include structure heights, structure size, and landscaping improvements The adopted plan also provides design guidelines for building materials, architectural design features, and exterior treatments and fixtures for structures.

OTHER DISTINCT AREA PLANS

In addition to the distinct planning areas above there are rezone sites included in the Stockton Boulevard NPA, Victory Avenue NPA, Greenback Lane SPA, and Downtown Rio Linda SPA. Relevant aesthetics policies and guidance from these area plans are provided below.

STOCKTON BOULEVARD AND VICTORY AVENUE NPAS

The Stockton Boulevard and Victory Avenue NPAs were created to buffer incompatible commercial and industrial uses from neighboring low-density residential uses in their respective plan areas. Specifically, both NPAs contain the following standards related to light and glare:

- Lighting. No unshielded reflectors, spotlights, floodlights, or other sources of illumination, shall be located and directed such that they shine toward or are directly visible from adjacent residential or agricultural-residential property.

GREENBACK LANE SPA

No plans, policies, regulations, or laws of the Greenback Lane SPA related to aesthetics, light, and glare are applicable to the Project.

DOWNTOWN RIO LINDA SPA

The Downtown Rio Linda SPA contains unique development standards and guidelines to ensure that properties are developed consistent with the goals of the community expressed in the Rio Linda Vision Plan.

SIGNIFICANCE CRITERIA AND METHODOLOGY

SIGNIFICANCE CRITERIA

An impact on aesthetics, light, and glare is considered significant if implementation of the project would do any of the following:

- have a substantial adverse effect on a scenic vista;
- damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway;
- substantially degrade the existing visual character or quality of public views of the site and its surroundings;
- would conflict with applicable zoning and other regulations governing scenic quality; and/or
- create a new source of substantial light or glare which would adversely affect day or nighttime views in the area

ISSUES NOT DISCUSSED FURTHER

SCENIC VISTAS

There are no designated scenic vistas or viewing areas located near any of the candidate rezone sites. Given that established scenic vistas are not located on or adjacent to the candidate rezone sites, the Project would not have a substantial adverse effect on a scenic vista. The Project would result in no impact to scenic vistas and this impact is not discussed further.

STATE SCENIC HIGHWAY

There are no State Scenic Highways located in or near any of the candidate rezone sites. Future development allowed on the candidate rezone sites, would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and

historic buildings within a State Scenic Highway. The Project would result in no impact to State Scenic Highways and their related scenic resources and this impact is not discussed further.

Scenic Quality Zoning

The Project includes zoning revisions of candidate rezone sites to be consistent with General Plan land use changes and RHNA requirements. There would be no conflict with applicable zoning and other regulations governing scenic quality with the proposed Project. A reasonably foreseeable consequence of the Project is that future development of the candidate rezone sites with multi-family uses would occur. Future development under the Project would be consistent with the zoning code and the objective design standards of the Guidelines. Alternatively, if developers propose amendments to zoning or design standards, the developer would need to seek approval of a discretionary entitlement subject to approval by the appropriate hearing body. Therefore, the Project would not conflict with applicable zoning and other regulations governing scenic quality and impacts are less than significant and this impact is not discussed further.

Methodology

Impacts related to aesthetics are analyzed qualitatively based on a review of the Project elements and their potential to result in physical changes to the environment if the development under the Project is approved and implemented. Each issue area is analyzed in the context of existing laws and regulations as well as policies adopted in the General Plan EIR, Fair Oaks Boulevard EIR, North Watt Avenue EIR, and Old Florin Town SPA EIR, and the extent to which these existing regulations and policies adequately address and minimize the potential for impacts associated with implementation of the Project. Because this SEIR addresses changes to General Plan, Fair Oaks Boulevard, North Watt Avenue, and Old Florin Town distinct area plans designated land uses and whether these changes create new significant visual impacts or a substantial increase in severity of visual impacts identified in the respective EIRs, all relevant EIR mitigation measures are applicable to the Project as needed to avoid or minimize project impacts and are considered part of the Project.

Impact and Analysis

This impact and analysis section is organized by impact-area, then by analysis of Project buildout as compared to the General Plan EIR, and finally by distinct plan area. Mitigation is included or updated, where applicable, from the original environmental documents prepared for the General Plan and distinct area plans.

IMPACT AES-1: DEGRADE EXISTING VISUAL CHARACTER OR QUALITY OF PUBLIC VIEWS

SACRAMENTO COUNTY GENERAL PLAN

GENERAL PLAN ENVIRONMENTAL IMPACT REPORT DETERMINATION

The General Plan EIR analyzed potential degradation of existing visual character and/or visual quality due to buildout of the growth anticipated in the General Plan. The General Plan EIR addressed this impact for anticipated growth and development in both the infill areas and commercial corridors. For infill areas, the General Plan EIR determined that development would occur on vacant or underutilized lots and that development of these areas would be consistent with surrounding development.

For commercial corridors, the General Plan EIR determined that development would be consistent with surrounding development and uses and may improve existing visual quality by updating aging corridors with modern, cohesive, and new buildings. The General Plan EIR concluded that infill and commercial corridor development would not substantially degrade visual character or quality, given that the visual character would be like that of surrounding development. The General Plan EIR determined assumed growth, related to degradation of existing visual character or quality of public views, would be less than significant for infill and commercial corridor areas without mitigation.

PROPOSED PROJECT IMPACT EVALUATION

The Project does not propose or authorize development and only provides an increase in potential development capacity. Additionally, all candidate rezone sites are allowed to develop uses consistent with current zoning, applicable development standards, and the Guidelines. As discussed above, one of the intents of development standards and design guidelines is to reduce the likelihood that development would significantly degrade existing visual character or quality of public views in areas proposed for development. From the perspective of Project public views (from the right-of way, sidewalk or public park), one of the development standards that has the potential to change public perception of visual character or quality is building height.

The Project would result in the rezone of candidate sites, which under certain circumstances would change allowable structure height. Future development on candidate rezone sites may result in structure heights that are increased, decreased, or unchanged dependent upon the site-specific change in zoning. Table AES-1, below, outlines the number of candidate rezone sites that would have potential increases, decreases, or unchanged structure heights with the Project.

Table AES-1: Structure Height Change

Structure Height Change	**No. of Candidate Rezone Sites**
Decrease	11
Unchanged	33
Increase	35
Total	79

Table AES-1 indicates that 44 (56 percent) candidate rezone sites would have no change or a decrease in maximum allowable structure heights. For the remaining 35 (44 percent) of candidate rezone sites, the Project would result in allowed increase in structure heights compared to what is permitted under existing conditions. Table AES-2 outlines the total maximum change in height under the Project from existing maximum standards and the number of candidate rezone sites that would be allowed that height increase.

Table AES-2: Degree of Structure Height Change

Maximum Height Increase from Existing Allowed	**No. of Candidate Rezone Sites**
6 feet	2
10 feet	23
16 feet	1
20 feet	1
105 feet	8
Total	35

For a comprehensive list of height permissions comparing existing and proposed maximum height for each of the candidate rezone sites, see Appendix AES-1. As shown in Table AES-2, most potential height increases consist of 10 feet and these candidate rezone sites would be permitted to develop building height from allowed 30 feet to proposed 40 feet. However, there are eight sites that have a maximum increase in height of 105 feet (45 feet to 150 feet). For these eight sites, the increase in height would be allowed under the Project because the candidate rezone sites are adjacent to commercial or multi-family residential zones (i.e., non-low density residential zoned sites), which allows structure heights of 50 feet and 45 feet by-right, respectively. Although this is a sizable increase in structure height (up to 105 feet increase), these candidate rezone sites are located in identified commercial corridors and urban residential infill areas, where the urbanized character of this type development would be appropriate, is planned for, and is desired. The remaining four sites are located within special planning areas or neighborhood preservation areas with slightly different height standards from the Zoning Code. For one of these sites, located in the Victory Avenue NPA, height allowances would change by 20 feet (from 20 to 40 feet). The three other sites are located within the Greenback Lane SPA and one of the site's height allowances would change by 16 feet (from 24 to 40 feet) and two sites would change by 6 feet (from 24 to 30 feet).

Most of the increases in allowed heights would occur due to rezones to RD-30 and RD-40 zones. As discussed therein, candidate rezone sites that are being rezoned to meet

RHNA allocations for lower income categories are being rezoned to RD-30 or RD-40. Development of these sites would be required to meet a minimum density of 22.5 and 30 units per acre, respectively, and in addition to height, may result in other changes in visual character due to changes in setbacks, massing, scale, and landscaping standards. However, future development under the Project on the candidate rezone sites would be subject to applicable development standards of the Zoning Code for lot area, setbacks, height limit, landscaping, open space, parking, lighting, signage and other applicable standards. Future residential development would be required to comply with applicable guidelines and regulations related to visual quality, including the Guidelines and specific design guidelines contained in relevant distinct area plans.

Chapter 3.0 “Multifamily Design Standards” of the Guidelines provides objective Design Standards for multi-family development within the unincorporated areas of Sacramento County. A core purpose of the Multifamily Design Standards is to “[r]equire safe and functional development that contributes to the fabric of the community.” Special attention is paid in the Design Standards to ensure that new multi-family development is integrated with surrounding development and provide visually appealing projects.

For example, Section 3.6.1. of the Multifamily Design Standards require that “[m]ultifamily development architectural designs shall be well thought out and provide a defined concept to contribute to the visual interest of the community.” Furthermore, Section 3.6.2. states “Stepping back building height, breaking up the mass of a building, and shifting building placement can be used to mitigate impacts of differing building scales, architectural designs, and intensities as well as contribute to the character and identity of the building.”

Compliance with such standards would reduce potential impacts to the visual character and quality as a result of the Project due to future development and would ensure that the Project would not conflict with applicable zoning and other regulations governing quality of public views at the time of development.

As discussed, in the General Plan EIR, development and redevelopment within the infill and commercial corridors would typically be consistent with surrounding development and would not substantially degrade visual character or quality. Maximum allowable heights for all urban uses within infill areas and commercial corridors have increased since the adoption of the General Plan EIR. A comprehensive update to the Zoning Code was adopted in September 2015 that increased the allowable heights for all multi-family, commercial, and industrial development. Therefore, the conditions and character of the previously analyzed infill and commercial corridors have changed such that projects with heights up to 150 feet would be consistent with the current urban visual character of these areas. Candidate rezone sites are located within these infill and commercial corridor areas and development on candidate rezone sites would be considered within this context.

Although the rezone of candidate sites would result in some modifications to development standards that are associated with the visual landscape in the infill and corridor plan areas, the modifications would not result in substantial changes in the visual character of these areas of the County. Under existing conditions, the visual characteristics of the infill and corridor plan areas are extremely varied largely because zoning designations are mixed

to encourage a variety of uses and services; thus, development standards, and thereby visual characteristics associated with structure height, utility structures, structure massing and scale, and landscaping are by their nature variable. Additionally, as discussed above, all future development on candidate rezone sites would be subject to non-discretionary design review to ensure compliance with the Design Guidelines. Although the Zoning Code and Design Guidelines have changed since adoption of the General Plan, the changes are intended to improve development and associated visual quality across the entire County. Furthermore, with changes that have occurred to the Zoning Code, other sites within the infill and commercial corridor areas are already developed consistent with the new standards. Therefore, overall public views may not vary substantially from what could occur or what is occurring at the time of the writing of this SEIR.

Surrounding development and its visual characteristics are one of the paramount considerations during non-discretionary design review process for all projects. This is consistent with the considerations and findings discussed in the General Plan EIR. The Project would not result in a substantially greater degradation of existing visual character and quality of public views. Pursuant to CEQA Guidelines Section 15162, the proposed Project would not result in new substantial adverse physical impacts associated with degradation of existing visual character or quality of public views than would occur with implementation of the General Plan. The Project's contribution to impacts from rezoning the candidate rezone sites would not be substantial and overall impacts remain less than significant.

MITIGATION MEASURES

Mitigation not required.

DISTINCT AREA PLANS

FAIR OAKS BOULEVARD CORRIDOR PLAN

ENVIRONMENTAL IMPACT REPORT DETERMINATION

Aesthetics are mentioned in the Fair Oaks Boulevard Corridor Plan EIR in the context of land use goals to improve visual quality on the corridor through undergrounding utility poles and incorporating visually appealing Low Impact Design (LID) into future developments; however, there is no discussion or impact conclusion related to degradation of existing visual character or quality of public views from implementation of the Fair Oaks Boulevard Corridor Plan in the EIR.

IMPACT EVALUATION

The Project would result in the rezone of one candidate site (Site 67) with a potential maximum net increase of 12 units within the Fair Oaks Boulevard Corridor Plan area. This site is currently zoned BP (Business Professional zone) and would be rezoned to RD-30 with the Project. While Site 67 would be allowed increased density as part of the Project, overall massing and scale of potential development would not change significantly. In some instances, development consistent with the Project proposed zoning may reduce

impacts to perceived visual quality and character from Corridor development because allowed height on Site 67 would be reduced from 50 to 40 feet with the Project.

As discussed above, all future development is subject to applicable development standards of the Zoning Code and/or the Corridor Plan. Residential development on Site 67 would be required to comply with applicable guidelines and regulations related to visual quality, including the Guidelines and specific design guidelines contained in the Fair Oaks Boulevard Corridor Plan related building heights, landscaping and lighting requirements, and consistency with adjacent neighborhoods.

Although there was no discussion or impact conclusion related to degradation of existing visual character or quality of public views in the Fair Oaks Boulevard EIR, development on Site 67 as allowed under the Project would not significantly change the planned visual character or quality of public views. Compliance with development standards and design guidelines would ensure impacts are reduced and no mitigation is required. Therefore, pursuant to State CEQA Guidelines Section 15162, the proposed rezone of Site 67 would not result in new or more severe significant impacts related to degradation of existing visual character or quality of public views than would occur with implementation of the Fair Oaks Boulevard Corridor Plan. The contribution to impacts from the proposed rezone of Site 67 would not be substantial, and overall impacts would be less than significant.

MITIGATION MEASURES

Mitigation not required.

NORTH WATT AVENUE CORRIDOR PLAN

ENVIRONMENTAL IMPACT REPORT DETERMINATION

Aesthetics are generally discussed in the North Watt Avenue Corridor Plan EIR in the context of one of the land use priorities of the North Watt Corridor Plan being to improve aesthetics along North Watt Avenue, including updated architecture, signage, and site planning. Aesthetics are also mentioned to improve visual quality on the corridor through incorporation of visually appealing LID features into future developments. The North Watt Avenue Corridor Plan EIR concluded in the environmental checklist (Chapter 17) that the development as part of the North Watt Avenue Corridor Plan would not substantially alter the visual character or quality of the corridor or vicinity and concluded that there would be a less than significant impact related to degradation of existing visual character or quality of public views from implementation of the North Watt Avenue Corridor Plan.

IMPACT EVALUATION

The Project would result in the rezone of five candidate sites (Sites 68 through 72) with a potential maximum net increase of 230 units within the North Watt Avenue Corridor Plan area. All candidate rezone sites in the North Watt Avenue Corridor Area are zoned SPA with four sites located in the RMU-1 subzone and one site located in RMU-2 subzone. These sites would be rezoned to the RD-30 (2 sites) and RD-40 zones (3 sites) under the Project. While the uses on Sites 68 through 72 would change as allowed under the Project (RMU zones allow for mixed use development including commercial), overall massing and scale of potential development would not change from what was analyzed in the

North Watt Avenue Corridor Plan EIR. For example, the allowed structure height on Sites 68 through 72 would be 45 feet with or without approval of the Project.

As discussed, all future development would be subject to applicable development standards of the Zoning Code and/or the North Watt Avenue Corridor Plan. Residential development on Sites 68 through 72 would be required to comply with applicable guidelines and regulations related to visual quality, including the Guidelines and specific design guidelines contained in the North Watt Avenue Corridor Plan related to building heights, consistency with existing architecture features, and landscaping requirements.

Development on Sites 68 through 72 as allowed under the Project would not substantially alter the planned visual character or quality of public views. Compliance with development standards and design guidelines would ensure impacts are reduced. Therefore, pursuant to State CEQA Guidelines Section 15162, the proposed rezone of Sites 68 through 72 would not result in new or more severe significant impacts related to degradation of existing visual character or quality of public views than would occur with implementation of the North Watt Avenue Corridor Plan. The contribution to impacts from the proposed rezone of Sites 68 through 72 would not be substantial, and overall impacts would be less than significant.

MITIGATION MEASURES

Mitigation not required.

OLD FLORIN TOWN SPA

ENVIRONMENTAL IMPACT REPORT DETERMINATION

Aesthetics are generally discussed in the Old Florin Town SPA EIR in the context of the proposed Old Florin Town Streetscape Master Plan, which was analyzed in the Old Florin Town SPA EIR. The primary purpose and intent of the Streetscape Master Plan was to improve aesthetics and safety in the corridor area. The Old Florin Town SPA EIR concluded in the environmental checklist (Chapter 15) that the Old Florin Town SPA would not substantially alter the visual character or quality of the SPA or vicinity and concluded that there would be a less than significant impact related to degradation of existing visual character or quality of public views from implementation of the Old Florin Town SPA.

IMPACT EVALUATION

The Project would result in the rezone of seven candidate sites (Sites 73 through 79) with a potential maximum net increase of 274 units within Old Florin Town SPA. All sites are zoned SPA with six located in the MUR subzone and one site located in MUR/MUC subzone. Sites 73 through 79 would be rezoned to the RD-30 (6 sites) and RD-40 (1 site) zones under the Project. While the allowed uses on Sites 73 through to 79 would change under the Project (MUR/MUC subzones allow for mixed use development including commercial), overall massing and scale of potential development would not change from what was analyzed in the Old Florin Town SPA EIR. For example, the allowed structure height on Sites 73 through 79 would be 50 feet with or without Project approval.

As discussed, all future development would be subject to applicable development standards of the Zoning Code and/or the Old Florin Town SPA. Residential development

on Sites 73 through 79 would be required to comply with applicable guidelines and regulations related to visual quality, including the Guidelines and specific design guidelines contained in the Old Florin Town SPA related to building heights, landscaping improvements, and building materials.

Development on Sites 73 through 79 under the Project would not substantially alter the planned visual character or quality of public views. Compliance with development standards and design guidelines would ensure impacts would be reduced. Therefore, pursuant to State CEQA Guidelines Section 15162, the proposed rezone of Sites 73 through 79 would not result in new or more severe significant impacts related to degradation of existing visual character or quality of public views than would occur with implementation of the Old Florin Town SPA. The contribution to impacts from the proposed rezone of Sites 73 through 79 would not be substantial, and overall impacts would be less than significant.

MITIGATION MEASURES

Mitigation not required.

IMPACT AES-2: CREATE A NEW SOURCE OF SUBSTANTIAL LIGHT OR GLARE

SACRAMENTO COUNTY GENERAL PLAN

GENERAL PLAN ENVIRONMENTAL IMPACT REPORT DETERMINATION

The General Plan EIR includes a discussion of lighting and glare impacts associated with planned growth. The lighting and glare discussion focused primarily on buildout of new growth areas located within rural areas. There is no discussion specific to lighting and glare impacts within infill and commercial corridor areas of the County. The General Plan EIR does indicate that General Plan Update Policy LU-33 [Policy LU-31] is intended to reduce the incidence of light pollution through zoning code updates, community and specific plans, corridor plans, district plans, transit station plans and other planning programs. The General Plan EIR concluded that implementation of this policy, and subsequent zoning code amendments and plans, may help to reduce the effects of light pollution; however, complete elimination of light and glare would not be possible. Impacts were determined to be significant and unavoidable.

PROPOSED PROJECT IMPACT EVALUATION

The candidate rezone sites are located within the infill and commercial corridor growth areas analyzed within the General Plan EIR. All candidate rezone sites are vacant or underutilized, therefore, some level of growth was assumed for these sites consistent with their General Plan land use designation. The Project would result in the rezone of all candidate sites and a general plan amendment for some sites to ensure consistency between zoning and the General Plan. From a zoning perspective, the Project would result in a potential maximum net increase of 4,081 new housing units (3,565 units in the infill areas and not within one of the three commercial corridors analyzed herein: including Fair Oaks Boulevard Corridor Plan (12 units), North Watt Avenue Corridor Plan (230 units), and Old Florin Town SPA (274 units)).

Although no development is proposed or authorized by the proposed Project, future development as a result of the Project would consist of higher density residential development projects; with most sites zoned for a RD-30 or RD-40 density. The candidate rezone sites zoned RD-30 and RD-40 would be developed with multi-family residential uses. Under existing conditions, without the Project, candidate rezone sites can be developed with a mix of uses with the majority of sites currently zoned for multi-family residential uses (RD-20 zoned) or commercial uses. Multi-family residential uses and commercial development can be a source of light and glare; however, consistent with Land Use Element Policies (LU-22, LU-23, and LU-31) the General Plan encourages a mix of uses and housing types in infill and commercial corridor areas to promote healthy neighborhoods and needed services in the unincorporated County. Therefore, multi-family residential uses have been considered and are encouraged in the infill and commercial corridors of the County.

As noted previously, all future projects on candidate rezone sites are subject to applicable development standards of the Zoning Code and/or distinct area plans. Additionally, future projects would be required to comply with applicable guidelines and regulations related to light and glare, including the Countywide Design Guidelines and specific design guidelines contained in distinct area plans.

For example, Section 3.6.2. of the Multifamily Design Standards implements various mitigative efforts that reduce excessive light and glare onto adjacent low-density residential zones such as stepping back second and higher floors from the first floor, screen tree plantings, and/or requires all windows facing adjacent properties to either be clearstory and/or opaque. Additionally, Section 5.4.3.B. Table 5.8.B. of the Zoning Code requires all lighting for multi-family development to be placed on a timer, so lights are turned off during nighttime hours, and requires all lighting to be constructed with full shielding to reduce excessive glare on adjoining properties.

Furthermore, Title 24 of the California Code of Regulations (CALGreen – California Green Building Code) requires all multi-family development to provide no more illumination than is necessary and proper shielding is required to reduce glare onto areas where illumination is not necessary or intended, such as neighboring properties or the night sky.

The Project would not introduce new sources of substantial light or glare that were not considered and would not substantially worsen the impacts disclosed in the General Plan EIR. The Project's contribution to light and glare would not be substantial. No feasible mitigation was added to the General Plan and no additional mitigation is required of the Project beyond compliance with existing development standards, design guidelines, and Title 24 that are intended to reduce impacts associated with light and glare. Pursuant to CEQA Guidelines Section 15162, the proposed Project would not result in new substantial adverse physical impacts associated with creation of a new source of substantial light or glare than would occur with implementation of the General Plan. The Project's contribution to impacts would not be substantial; however, overall impacts remain significant.

MITIGATION MEASURES

No feasible mitigation.

SIGNIFICANCE AFTER MITIGATION

Consistent with the General Plan, impacts remain significant and unavoidable.

DISTINCT AREA PLANS

FAIR OAKS BOULEVARD CORRIDOR PLAN

ENVIRONMENTAL IMPACT REPORT DETERMINATION

Aesthetics are only mentioned generally in the Fair Oaks Boulevard Corridor Plan EIR. There is brief mention of lighting and glare impacts in the land use discussion on compatibility with surrounding uses. The Fair Oaks Boulevard EIR indicated that there are existing lighting and glare sources within the Fair Oaks Boulevard Corridor and that future development would be required to meet the Zoning Code standards and review, which would ensure no unnecessary or obtrusive lighting. The Fair Oaks Boulevard Corridor Plan EIR does not include an impact conclusion related to creating a new source of substantial light or glare.

IMPACT EVALUATION

The Project would result in the rezone of one candidate site (Site 67) with a potential maximum net increase of 12 units within the Fair Oaks Boulevard Corridor Plan area. Site 67 is currently zoned BP (Business Professional zone) and would be rezoned to RD-30 with the Project. While residential development on Site 67 would be denser under the Project as proposed to existing zoning allowances, overall lighting and glare would not change significantly from an office building that could be built on the site under existing zoning. Multi-family residential uses, like BP uses, would have lighting on buildings, at walkways, and in parking areas. Additionally, glare from windows and cars would be similar between multi-family residential and business professional office building uses.

All future development would be subject to applicable lighting development standards of the Zoning Code and/or the Fair Oaks Boulevard Corridor Plan Policy CDP-18 which prohibits unnecessary and intrusive lighting that detracts from the beauty and view of the night sky. Residential development on Site 67 would be required to comply with applicable guidelines and regulations related to lighting and glare, including the Guidelines and specific design guidelines contained in the Fair Oaks Boulevard Corridor Plan, as applicable.

Although there was no impact conclusion regarding creation of new sources of substantial light and glare in the Fair Oaks Boulevard Corridor Plan EIR, the Project would not result in a new source of light or glare not already considered. Compliance with development standards and design guidelines would reduce light and glare impacts. Therefore, pursuant to State CEQA Guidelines Section 15162, the proposed rezone of Site 67 would not result in new or more severe significant impacts related to creation of a new source of substantial light or glare than would occur with implementation of the Fair Oaks Boulevard Corridor Plan. The contribution to impacts from the proposed rezone of Site 67 would not be substantial, and overall impacts would be less than significant.

MITIGATION MEASURES

Mitigation not required.

NORTH WATT AVENUE CORRIDOR PLAN

ENVIRONMENTAL IMPACT REPORT DETERMINATION

The North Watt Avenue Corridor EIR included a discussion of lighting and glare in the land use discussion on compatibility with surrounding and established uses. The North Watt Avenue Corridor EIR indicated that there are existing lighting and glare sources within the North Watt Avenue Corridor and that future development could add nuisance level lighting to developed properties. The North Watt Avenue EIR indicated that the Corridor Plan and the Zoning Code include lighting standards to ensure no unnecessary or obtrusive lighting. The North Watt Avenue Corridor Plan EIR concluded in the environmental checklist (Chapter 17) that the North Watt Avenue Corridor Plan would result in new sources of light and glare, but compliance with development and lighting standards would ensure impacts related to creating a new source of light or glare from implementation of the North Watt Avenue Corridor Plan would be less than significant.

IMPACT EVALUATION

The Project would result in the rezone of five candidate sites (Site 68 through 72) with a potential maximum net increase of 230 units within the North Watt Avenue Corridor Plan area. Sites 68 through 72 are zoned SPA with four located in the RMU-1 subzone and one site located in RMU-2 subzone. Sites 68 through 72 would be rezoned to the RD-30 (2 sites) and RD-40 zones (3 sites) under the Project. While the allowed residential density on Sites 68 through 72 would change under the Project, RMU zones also allow for mixed use development including commercial uses; therefore, overall lighting and glare would not change significantly because mixed use, commercial and multi-family residential uses all require similar levels of outdoor lighting. Multi-family residential uses, like mixed use development, have lighting on buildings, at walkways, and in parking areas. Additionally, glare from windows and cars would be virtually the same, and possibly reduced, with residential-only multi-family uses proposed with the Project compared to commercial and mixed-use developments that are allowed under existing conditions.

As discussed, all future development on Sites 68 through 72 under the Project would be subject to applicable lighting development standards of the Zoning Code and/or the North Watt Avenue Corridor Plan. Residential development on Sites 68 through 72 would be required to comply with applicable guidelines and regulations related to lighting and glare, including the Guidelines and specific design guidelines pertaining to site orientation and design, and building design contained in the North Watt Avenue Corridor Plan, as applicable.

The Project would not substantially alter lighting and glare in the North Watt Avenue Corridor because there would be a minimal amount of new development and Sites 68 through 72 were previously assumed to be developed. Compliance with development standards and design guidelines would reduce impacts from new lighting and glare associated with future development on Sites 68 through 72 as part of the Project. Therefore,

pursuant to State CEQA Guidelines Section 15162, the proposed rezone of Sites 68 through 72 would not result in new or more severe significant impacts related to creation of a new source of substantial light or glare than would occur with implementation of the North Watt Avenue Corridor Plan. The contribution to impacts from the proposed rezone of Sites 68 through 72 would not be substantial, and overall impacts would be less than significant.

MITIGATION MEASURES

Mitigation not required.

OLD FLORIN TOWN SPA

ENVIRONMENTAL IMPACT REPORT DETERMINATION

The Old Florin Town SPA EIR included a discussion of lighting and glare in the land use discussion on compatibility with surrounding and established uses. The Old Florin Town SPA EIR indicated that there are existing lighting and glare sources within the Old Florin Town SPA and that future development could add nuisance level lighting to developed properties. The Old Florin Town SPA EIR indicated that the Old Florin Town SPA and the Zoning Code include lighting standards to ensure no unnecessary or obtrusive lighting. The Old Florin Town SPA EIR concluded in the environmental checklist (Chapter 15) that the Old Florin Town SPA would result in new sources of light and glare, but compliance with development and lighting standards would reduce impacts related to creating a new source of light or glare. Impacts were determined to be less than significant.

IMPACT EVALUATION

The Project would result in the rezone of seven candidate sites (Site 73 through 79) with a potential maximum net increase of 274 units within Old Florin Town SPA. Sites 73 through 79 are zoned SPA with six located in the MUR subzone and one site located in MUR/MUC subzone. Sites 73 through 79 be rezoned under the Project to the RD-30 (6 sites) and RD-40 zones (1 site). While the allowed residential density on Sites 73 through 79 would change under the Project, MUR/MUC zones also allow for mixed use development including commercial uses; therefore, overall lighting and glare would not change significantly because mixed use, commercial and multi-family residential uses all require similar levels of outdoor lighting. Multi-family residential uses, like mixed use development, have lighting on buildings, at walkways, and in parking areas. Additionally, glare from windows and cars would be virtually the same, and possibly reduced, with residential-only multi-family uses proposed with the Project compared to commercial and mixed-use developments that are allowed under existing conditions.

As discussed, all future development would be subject to applicable lighting development standards of the Zoning Code and/or the SPA. Residential development on Sites 73 through 79 would also be required to comply with applicable guidelines and regulations related to lighting and glare, including the Guidelines and specific design guidelines pertaining to building materials, architectural design features, and exterior treatments and fixtures for structures contained in the SPA, as applicable.

The proposed Project would not substantially alter lighting and glare in the SPA because Sites 73 through 79 were previously analyzed for development. Compliance with

development standards and design guidelines would ensure there would not be a substantial increase in light and glare from development on Sites 73 through 79. Therefore, pursuant to State CEQA Guidelines Section 15162, the proposed rezone of Sites 73 through 79 would not result in new or more severe significant impacts related to creation of a new source of substantial light or glare than would occur with implementation of the Old Florin Town SPA. The contribution to impacts from the proposed rezone of Sites 73 through 79 would not be substantial, and overall impacts would be less than significant.

MITIGATION MEASURES

Mitigation not required.

CUMULATIVE AESTHETICS

CUMULATIVE SETTING – GENERAL PLAN AND DISTINCT AREA PLANS

This chapter describes the Existing Environmental Setting, Regulatory Context, and Impacts and Mitigation Measures for aesthetics at both the General Plan level and for some distinct area plans. The cumulative setting is the General Plan area. Since this Project EIR is a subsequent EIR to the General Plan EIR, some Project impacts compared to the analysis of the entire General Plan may be cumulative by nature. Aesthetics is one of these resource areas where some cumulative impacts are described in the Project analysis above. This is because the General Plan considers all foreseeable growth in the unincorporated County. Additionally, some types of impacts to aesthetic resources are localized and not cumulative in nature. For example, the creation of glare at one location is not worsened by glare created at another location. Rather these effects are independent. Projects that block a view or affect the visual quality of a site also have localized aesthetic impacts. The impact occurs specifically to an area and remains independent from another project elsewhere that may block a view or degrade the visual environment of a specific area.

Two types of aesthetic impacts may be additive in nature and thus cumulative, including night sky lighting and overall changes in the visual environment as the result of increasing urbanization of large areas. As development in one area increases and possibly expands over time and meets or connects with development in an adjoining ex-urban area, the effect of night sky lighting experienced outside of the region may increase in the form of larger and/or more intense nighttime glow in the viewshed. Similarly, as development in one area changes from rural to urban, and this pattern continues to occur throughout the undeveloped areas of a jurisdiction, the changes in visual character may become additive and cumulatively considerable. The proposed Projects' incremental contribution to night sky lighting and changes in visual character are addressed below.

CUMULATIVE IMPACTS EVALUATION

IMPACT AES-3: THE PROJECT, IN COMBINATION WITH PAST, PRESENT, AND REASONABLY FORESEEABLE PROJECTS, COULD RESULT IN A SIGNIFICANT CUMULATIVE IMPACT WITH RESPECT TO VISUAL CHARACTER AND QUALITY

GENERAL PLAN

As described throughout this EIR, candidate rezone sites are located in infill and corridor plan areas of the County. Furthermore, candidate rezone sites were chosen based upon criteria, that amongst other things, strives to place multi-family uses in close proximity to a myriad of resources including employment centers, community amenities, schools, and transit. The setting of these sites is urban and located within the Urban Policy Area of the General Plan and is not located in rural or agricultural areas. Some of the candidate sites may be located in transition-zones between existing urban areas and semi-rural large lot residential. However, all occur in areas where development has been considered or constructed in the vicinity. As described above, buildout of growth assumed in the General Plan in infill and corridor plan areas would result in less than significant impacts as described in the General Plan EIR. With the addition of the Project, impacts to the visual character and quality at the General Plan scale are considered to be unsubstantial. Therefore, from a cumulative basis, impacts of the Project together with development consistent with the General Plan (including the distinct area plans), is not cumulatively considerable. Cumulative impacts related to visual character and quality are less than significant.

FAIR OAKS BOULEVARD CORRIDOR PLAN, NORTH WATT AVENUE CORRIDOR PLAN, AND OLD FLORIN TOWN SPA

All of the distinct area plans were contemplated for growth, as Corridor Plans, in the General Plan and each one was analyzed for environmental impacts in separate comprehensive EIRs. None of the EIRs determined there were aesthetic impacts associated with the buildout of the Corridor Plan. As discussed above, these corridor plan areas were contemplated for significant urban development and redevelopment because of their locations and access to resources and transit. The additional development contemplated in the three distinct plan areas is unsubstantial to the overall planned growth. Further, additional urban levels of density centered in the commercial corridors is an overarching goal of the General Plan and is considered one of the primary growth management tools for curbing urban sprawl. Through further urbanization of the infill and corridor plan areas, there is a reduced potential for impacts, including aesthetic impacts, to occur due to sprawl. Therefore, the Project does not result in cumulatively considerable aesthetic impacts that were not already described at the General Plan or Corridor Plan level. Cumulative impacts related to visual character and quality for the three distinct plan areas are less than significant.

IMPACT AES-4: THE PROJECT, IN COMBINATION WITH PAST, PRESENT, AND REASONABLY FORESEEABLE PROJECTS, COULD RESULT IN A SIGNIFICANT CUMULATIVE IMPACT WITH RESPECT TO LIGHT AND GLARE

GENERAL PLAN

The General Plan EIR concluded that impacts to light and glare from cumulative development under the General Plan would be significant and unavoidable. The General Plan EIR identifies impacts associated with more intense nighttime glow due to buildout of the General Plan. As discussed, all growth assumed for the Project would occur in infill and corridor plan areas. As these area plans are built out along with some of the currently rural areas that are slated for growth in the General Plan, there would be a more intense nighttime glow emanating from the urban areas. This nighttime glow would impact the night sky for rural agricultural areas of the County and may include some localized impacts. Development of the candidate rezone sites incrementally adds to the impact but alone is not considered a substantial increase. Although the Project's contribution is not substantial, it does incrementally add to a significant and unavoidable impact related to light and glare.

FAIR OAKS BOULEVARD CORRIDOR PLAN, NORTH WATT AVENUE CORRIDOR PLAN, AND OLD FLORIN TOWN SPA

While singular impacts associated with light and glare for each of the distinct area plans was considered less than significant, the Project along with buildout of the corridors and the entire general plan area would incrementally add to the impacts associated with light and glare described above.

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5 AIR QUALITY

INTRODUCTION

This chapter includes a discussion of existing air quality conditions, a summary of applicable air quality regulations, and an analysis of potential short-term and long-term air quality impacts that could result from implementation of the Project. The primary source of information used for this analysis is the Sacramento County General Plan EIR (General Plan EIR), the Fair Oaks Boulevard Corridor Plan EIR (Fair Oaks Boulevard EIR), the North Watt Avenue Corridor Plan EIR (North Watt Avenue EIR), and the Old Florin Town Special Planning Area (SPA) EIR (Old Florin Town SPA EIR).

No scoping comments pertaining to air quality were received during the notice of preparation (NOP) public review periods. See Appendix INTRO-1 for all NOP comments received.

ENVIRONMENTAL SETTING

State CEQA Guidelines Section 15162 indicates that should a lead agency determine that substantial changes to the project or its circumstances result in a new or more significant impact compared to what was addressed in a project's previous EIR, or new information of substantial importance results in a new or more significant impact, a subsequent EIR (SEIR) should be prepared. Therefore, this document serves as a SEIR to the General Plan EIR, as well as to EIRs prepared for various distinct area plans within which a portion of the rezone sites are located. Applicable distinct area plan EIRs include the Fair Oaks Boulevard EIR, the North Watt Avenue EIR, and Old Florin Town SPA EIR. The regional housing needs allocation (RHNA) shortfall of 2,884 lower income category units and needed buffer could not have been known at the time of the General Plan EIR certification, and the RHNA is in excess of the number of dwelling units analyzed in the General Plan EIR. The number of additional units required in the distinct area plans was not known at the time the applicable environmental documents were certified. As required by Section 15162, this SEIR evaluates the potential for the proposed Project or changes in the circumstances to result in new or substantially more severe significant environmental impacts than previously analyzed under the General Plan EIR and distinct area plan EIRs. Existing air quality settings are inherently cumulative, the following environmental settings apply to the Project as a whole, which includes the distinct area plans.

LOCATION, CLIMATE, AND ATMOSPHERIC CONDITIONS

Sacramento County is located in the Sacramento Valley Air Basin (SVAB). SVAB includes all of Butte, Colusa, Glenn, Sacramento, Shasta, Sutter, Tehama, Yolo, and Yuba counties; the western portion of Placer County; and the eastern portion of Solano County. The ambient concentrations of air pollutants are determined by the amount of emissions released by the sources of air pollutants and the atmosphere's ability to transport and

dilute such emissions. Natural factors that affect transport and dilution include terrain, wind, atmospheric stability, and sunlight. Therefore, existing air quality conditions in the area are determined by such natural factors as topography, meteorology, and climate, in addition to the amount of emissions released by existing air pollutant sources, as discussed separately below.

SVAB is a relatively flat area bordered by the north Coast Ranges to the west and the northern Sierra Nevada to the east. Air flows into SVAB through the Carquinez Strait, the only breach in the western mountain barrier, and moves across the Sacramento River–San Joaquin River Delta (Delta) from the San Francisco Bay area. The Mediterranean climate type of SVAB is characterized by hot, dry summers and cool, rainy winters. During the summer, daily temperatures range from 50 degrees Fahrenheit (°F) to more than 100°F. The inland location and surrounding mountains shelter the area from much of the ocean breezes that keep the coastal regions moderate in temperature. Most precipitation in the area results from air masses that move in from the Pacific Ocean, usually from the west or northwest, during the winter months. More than half the total annual precipitation falls during the winter rainy season (November through February); the average winter temperature is a moderate 49°F. Another characteristic of SVAB winters are periods of dense and persistent low-level fog, which are most prevalent between storms. The prevailing winds are moderate in speed and vary from moisture-laden breezes from the south to dry land flows from the north. The mountains surrounding the SVAB create a barrier to airflow, which leads to the entrapment of air pollutants when meteorological conditions are unfavorable for transport and dilution. The highest frequency of poor air movement occurs in the fall and winter when high-pressure cells are often present over the SVAB. The lack of surface wind during these periods, combined with the reduced vertical flow caused by a decline in surface heating, reduces the influx of air and leads to the concentration of air pollutants under stable metrological conditions. Surface concentrations of air pollutant emissions are highest when these conditions occur in combination with agricultural burning activities or with temperature inversions, which hamper dispersion by creating a ceiling over the area and trapping air pollutants near the ground. May through October is ozone season in SVAB. This period is characterized by poor air movement in the mornings with the arrival of the Delta breeze from the southwest in the afternoons. In addition, longer daylight hours provide a plentiful amount of sunlight to fuel photochemical reactions between reactive organic gases (ROG) and oxides of nitrogen (NO_x), which result in ozone formation. Typically, the Delta breeze transports air pollutants northward out of SVAB; however, a phenomenon known as the Schultz Eddy prevents this from occurring during approximately half of the time from July to September. The Schultz Eddy phenomenon causes the wind to shift southward and blow air pollutants back into the SVAB. This phenomenon exacerbates the concentration of air pollutant emissions in the area and contributes to the area violating the ambient air quality standards.

The local meteorology of the Project area is represented by measurements recorded at the Western Regional Climate Center Sacramento 5 ESE station. The normal annual precipitation is approximately 18 inches. January temperatures range from a normal minimum of 40°F to a normal maximum of 54°F. July temperatures range from a normal minimum of 59°F to a normal maximum of 92°F (WRCC 2016). The predominant wind direction is from the south (WRCC 2017).

CRITERIA AIR POLLUTANTS

Concentrations of emissions from criteria air pollutants are used to indicate the quality of the ambient air. A brief description of key criteria air pollutants in SVAB and their health effects is provided below. Criteria air pollutants include ozone, carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), particulate matter 10 micrometers or less in diameter (PM_{10}), particulate matter 2.5 micrometers or less in diameter ($PM_{2.5}$), and lead. However, for the purposes of this analysis, criteria air pollutants of primary concern due to their nonattainment status include ozone (and ozone precursors) and particulate matter. The California ambient air quality standards (CAAQS) and the national ambient air quality standards (NAAQS) are summarized in Table AQ-1 and Sacramento County's attainment status under CAAQS and NAAQS is shown in Table AQ-2.

Table AQ-1: State and Federal Ambient Air Quality Standards

Pollutant	Averaging Time	California (CAAQS)[a,b]	National (NAAQS)[c]	
			Primary[b,d]	Secondary[b,e]
Ozone	1-hour	0.09 ppm (180 µg/m^3)	–[e]	Same as primary standard
	8-hour	0.070 ppm (137 µg/m^3)	0.070 ppm (147 µg/m^3)	
CO	1-hour	20 ppm (23 mg/m^3)	35 ppm (40 mg/m^3)	Same as primary standard
	8-hour	9 ppm[f] (10 mg/m^3)	9 ppm (10 mg/m^3)	
NO_2	Annual arithmetic mean	0.030 ppm (57 µg/m^3)	53 ppb (100 µg/m^3)	Same as primary standard
	1-hour	0.18 ppm (339 µg/m^3)	100 ppb (188 µg/m^3)	—
SO_2	24-hour	0.04 ppm (105 µg/m^3)	—	—
	3-hour	—	—	0.5 ppm (1300 µg/m^3)
	1-hour	0.25 ppm (655 µg/m^3)	75 ppb (196 µg/m^3)	—
PM_{10}	Annual arithmetic mean	20 µg/m^3	—	Same as primary standard
	24-hour	50 µg/m^3	150 µg/m^3	
$PM_{2.5}$	Annual arithmetic mean	12 µg/m^3	9.0 µg/m^3	15.0 µg/m^3
	24-hour	—	35 µg/m^3	Same as primary standard
Lead[f]	Calendar quarter	—	1.5 µg/m^3	Same as primary standard
	30-Day average	1.5 µg/m^3	—	—
	Rolling 3-Month Average	–	0.15 µg/m^3	Same as primary standard
Hydrogen sulfide	1-hour	0.03 ppm (42 µg/m^3)	No national standards	
Sulfates	24-hour	25 µg/m^3		
Vinyl chloride[f]	24-hour	0.01 ppm (26 µg/m^3)		
Visibility-reducing particulate matter	8-hour	Extinction of 0.23 per km		

Notes: PM_{10} = respirable particulate matter, $PM_{2.5}$ = fine particulate matter, CO = carbon monoxide, NO_2 = Nitrogen dioxide, SO_2 = Sulfur dioxide µg/m^3 = micrograms per cubic meter; km = kilometers; ppb = parts per billion; ppm = parts per million.

1. California standards for ozone, CO, SO_2 (1- and 24-hour), NO_2, particulate matter, and visibility-reducing particles are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
2. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based on a reference temperature of 25 degrees Celsius (°C) and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
3. National standards (other than ozone, particulate matter, and those based on annual averages or annual arithmetic means) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration in a year, averaged over three years, is equal to or less than the standard. The PM_{10} 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m^3 is equal to or less than one. The $PM_{2.5}$ 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. Environmental Protection Agency for further clarification and current federal policies.
4. National primary standards: The levels of air quality necessary, with an adequate margin of safety to protect public health.
5. National secondary standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
6. The California Air Resources Board has identified lead and vinyl chloride as toxic air contaminants with no threshold of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

Source: CARB 2016.

Table AQ-2: Sacramento County Attainment Status

Pollutant	National Ambient Air Quality Standard	California Ambient Air Quality Standard
Ozone	Attainment (1-hour)[1]	Nonattainment (1-hour) Classification-Serious[2]
	Nonattainment (8-hour)[3] Classification=Severe	Nonattainment (8-hour)
	Nonattainment (8-hour)[4] Classification=Serious	Nonattainment (8-hour)
Respirable particulate matter (PM_{10})	Attainment (24-hour)	Nonattainment (24-hour)
	Attainment (24-hour)	Nonattainment (Annual)
Fine particulate matter ($PM_{2.5}$)	Nonattainment (24-hour)	(No State Standard for 24-Hour)
	Attainment (Annual)	Attainment (Annual)
Carbon monoxide (CO)	Attainment (1-hour)	Attainment (1-hour)
	Attainment (8-hour)	Attainment (8-hour)
Nitrogen dioxide (NO_2)	Unclassified/Attainment (1-hour)	Attainment (1-hour)
	Unclassified/Attainment (Annual)	Attainment (Annual)
Sulfur dioxide (SO_2)[5]	(Attainment Pending) (1-Hour)	Attainment (1-hour)
	(Attainment Pending) (1-Hour)	Attainment (24-hour)
Lead (Particulate)	Attainment (3-month rolling average)	Attainment (30-day average)
Hydrogen Sulfide	No Federal Standard	Unclassified (1-hour)
Sulfates		Attainment (24-hour)
Visibly Reducing Particles		Unclassified (8-hour)
Vinyl Chloride		Unclassified (24-hour)

[1] Air quality meets federal 1-hour Ozone standard (77 FR 64036). EPA revoked this standard, but some associated requirements still apply. SMAQMD attained the standard in 2009. SMAQMD has requested EPA recognize attainment to fulfill the requirements.

[2] Per Health and Safety Code (HSC) § 40921.5(c), the classification is based on 1989 – 1991 data, and therefore does not change.

[3] 2008 Standard.

[4] 2015 Standard.

[5] 2010 Standard.

Source: EPA 2023a and CARB 2022a.

Ozone

Ozone is a photochemical oxidant (a substance whose oxygen combines chemically with another substance in the presence of sunlight) and the primary component of smog. Ozone is not directly emitted into the air but is formed through complex chemical reactions between precursor emissions of ROG and NO_X in the presence of sunlight. ROG are volatile organic compounds (VOCs) that are photochemically reactive. For the purposes of CEQA analyses, ROG and VOCs are terms used interchangeably and represent the same group of emissions. ROG emissions result primarily from incomplete combustion and the evaporation of chemical solvents and fuels. NO_X are a group of gaseous compounds of nitrogen and oxygen that result from the combustion of fuels. Emissions of the ozone precursors ROG and NO_X have decreased over the past several years because of more stringent motor vehicle standards and cleaner burning fuels. Emissions of ROG and NO_X decreased from 2000 to 2010 and are projected to continue decreasing from 2010 to 2035 (CARB 2013).

Acute health effects of ozone exposure include increased respiratory and pulmonary resistance, cough, pain, shortness of breath, and lung inflammation. Chronic health effects include permeability of respiratory epithelia and possibility of permanent lung impairment (EPA 2023b).

Nitrogen Dioxide

NO_2 is a brownish, highly reactive gas that is present in all urban environments. The major human-made sources of NO_2 are combustion devices, such as boilers, gas turbines, and mobile and stationary reciprocating internal combustion engines. Combustion devices emit primarily nitric oxide (NO), which reacts through oxidation in the atmosphere to form NO_2. The combined emissions of NO and NO_2 are referred to as NO_X and are reported as equivalent NO_2. Because NO_2 is formed and depleted by reactions associated with photochemical smog (ozone), the NO_2 concentration in a geographical area may not be representative of the local sources of NO_X emissions (EPA 2023b).

Acute health effects of exposure to NO_x includes coughing, difficulty breathing, vomiting, headache, eye irritation, chemical pneumonitis, or pulmonary edema, breathing abnormalities, cough, cyanosis, chest pain, rapid heartbeat, and death. Chronic health effects include chronic bronchitis and decreased lung function (EPA 2023b).

Particulate Matter

Respirable particulate matter with an aerodynamic diameter of 10 micrometers or less is referred to as PM_{10}. PM_{10} consists of particulate matter emitted directly into the air, such

as fugitive dust, soot, smoke from mobile and stationary sources, construction operations, fires and natural windblown dust, and particulate matter formed in the atmosphere by reaction of gaseous precursors (CARB 2013). PM_{10} emissions in SVAB are dominated by emissions from area sources, primarily fugitive dust from vehicle travel on unpaved and paved roads, farming operations, construction and demolition, and particles from residential fuel combustion. Direct emissions of PM_{10} are projected to remain relatively constant through 2035 (CARB 2013).

PM10 pollution can result in damage to vegetation and is often responsible for much of the haze regarded as smog. In addition, controlled human exposure studies have shown that exposure to elevated levels of PM_{10} causes adverse health effects, especially related to the inhibition of lung functions and an increase in respiratory and cardiovascular afflictions, as well as cancer risks. PM_{10} causes a greater health risk than larger particles because fine particles are too small for the natural filtering process of the human body and can more easily penetrate the defenses of the human respiratory system. Individuals with preexisting respiratory or cardiovascular disease are especially susceptible to the adverse effects of PM_{10} exposure, as are asthmatic children and the elderly. Children exposed to high concentrations of PM_{10} for prolonged periods exhibit decreased immune function as well. Additionally, associations between long-term exposure to PM_{10} and adverse cognitive effects, such as faster cognitive decline, including memory and attention span loss, are being further examined by health researchers.

Fine particulate matter includes a subgroup of smaller particles that have an aerodynamic diameter of 2.5 micrometers or less (referred to as $PM_{2.5}$). Direct emissions of $PM_{2.5}$ have steadily declined in SVAB between 2000 and 2010 but are projected to increase very slightly through 2035. Emissions of $PM_{2.5}$ in SVAB are dominated by the same sources as emissions of PM_{10} (CARB 2013).

Because $PM_{2.5}$ is smaller than PM_{10}, it can more deeply penetrate the human body through inhalation, allowing many chemicals harmful to human health to be carried to internal organs. Long-term exposure to these particulates can increase the chance of chronic respiratory disease and cause lung damage and irregular heartbeat. Short-term exposure can aggravate respiratory illnesses such as bronchitis and asthma and cause heart attacks and arrhythmias in people with heart disease. Additionally, an estimated 9,000 people die prematurely each year in California as a result of $PM_{2.5}$ exposure (CARB 2013). A safe threshold for $PM_{2.5}$ has not been established and research indicates that health effects exist at low concentrations.

Existing Air Quality Conditions

General Plan Existing Air Quality Conditions

Criteria Air Pollutants

The Sacramento Metropolitan Area is a federal ozone non-attainment area and one of the top ten worst air quality areas nationally. In Sacramento County, pollutants of greatest concern are ozone precursors (hydrocarbons and NO_2), CO, PM_{10} and $PM_{2.5}$, and other

visibility-reducing material. Table AQ-2 denotes the attainment and nonattainment status for NAAQS and CAAQS for criteria air pollutants.

The Sacramento Federal Nonattainment Area (SFNA) for ozone is composed of five air districts in the southern portion of SVAB. The SFNA air districts include all of Sacramento and Yolo counties, and portions of El Dorado, Placer, Sutter, and Solano counties. Except for ozone and particulate matter standards, this area is in attainment for all CAAQS and NAAQS. However, SFNA is designated a "severe" nonattainment area for the 8-hour NAAQS for ozone. As a part of SFNA, Sacramento County is in nonattainment for the 1-hour CAAQS and the 8-hour NAAQS for ozone.

With respect to particulate matter, Sacramento County is designated as nonattainment for the state PM_{10} 24-hour standard and annual mean standard, the state $PM_{2.5}$ annual standard, and the federal $PM_{2.5}$ 24-hour standard.

Ambient air quality standards provide the definition for clean air. Specifically, NAAQS and CAAQS establish the concentration above which a pollutant is known to cause adverse health effects to sensitive groups within the population, such as children and the elderly. Because these standards have been established for specific pollutants using health-based criteria, the pollutants for which standards have been set are known as "criteria" pollutants. For some of the criteria air pollutants, the State standards are more stringent than the federal standards. The differences in the standards are due to variations in health studies and interpretations involved in the standard-setting process.

The amount of pollution released and the atmosphere's ability to transport and dilute the pollutants affect a given pollutant's concentration in the atmosphere. Factors affecting transport and dilution include terrain, wind, atmospheric stability, and, for photochemical pollutants, sunlight. Sacramento's poor air quality can largely be attributed to emissions, geography, and meteorology.

TOXIC AIR CONTAMINANTS

According to the California Air Resources Board's (CARB) *California Almanac of Emissions and Air Quality*, the majority of the estimated health risks from toxic air contaminants (TACs) can be attributed to relatively few compounds, the most important being diesel particulate matter (diesel PM) (CARB 2013). Diesel PM differs from other TACs in that it is not a single substance, but rather a complex mixture of hundreds of substances. Although diesel PM is emitted by diesel-fueled internal combustion engines, the composition of the emissions varies depending on engine type, operating conditions, fuel composition, lubricating oil, and whether an emissions control system is being used. Unlike the other TACs, no ambient monitoring data are available for diesel PM because no routine measurement method currently exists. However, CARB has made preliminary concentration estimates based on a PM exposure method. This method uses the CARB emissions inventory's PM_{10} database, ambient PM_{10} monitoring data, and the results from several studies to estimate concentrations of diesel PM. In addition to diesel PM, TACs for which data are available that pose the greatest existing ambient risk in California are benzene, 1,3-butadiene, acetaldehyde, carbon tetrachloride, hexavalent chromium, para-dichlorobenzene, formaldehyde, methylene chloride, and perchloroethylene.

Of these TACs, diesel PM poses the greatest health risk. Based on receptor modeling techniques, CARB estimated its health risk to be 360 excess cancer cases per million people in SVAB in the year 2000. Since 1990, the health risk associated with diesel PM has been reduced by 52 percent. Overall, levels of most TACs, except para-dichlorobenzene and formaldehyde, have decreased since 1990 (CARB 2013).

ODORS

Odors are generally regarded as an annoyance rather than a health hazard. However, manifestations of a person's reaction to foul odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache). The ability to detect odors varies considerably among the population and overall is quite subjective. Some individuals can smell very minute quantities of specific substances; others may not have the same sensitivity but may have sensitivities to odors of other substances. In addition, people may have different reactions to the same odor; an odor that is offensive to one person may be perfectly acceptable to another (e.g., fast food restaurant). It is important to also note that an unfamiliar odor is more easily detected and is more likely to cause complaints than a familiar one. This is because of the phenomenon known as odor fatigue, in which a person can become desensitized to almost any odor and recognition only occurs with an alteration in the intensity. According to Sacramento Metropolitan Air Quality Management District (SMAQMD), land uses typically associated with the generation of nuisance odors include wastewater conveyance and wastewater treatment plants, municipal solid waste landfills and trash transfer stations, composting facilities, animal agriculture and processing, rendering facilities and roadkill collection, chemical and petroleum industries, and cannabis cultivation (SMAQMD 2019). These sources of odors are found throughout Sacramento County.

SENSITIVE LAND USES

Sensitive receptors are generally considered to include those land uses where exposure to pollutants could result in health-related risks to sensitive individuals, such as children or the elderly. Residential dwellings, schools, hospitals, playgrounds, and similar facilities are of primary concern because of the presence of individuals particularly sensitive to pollutants and/or the potential for increased and prolonged exposure to pollutants. Existing sensitive receptors are scattered through the Project area. Additionally, implementation of the Project would result in additional sensitive receptors (i.e., residences) being added to the proposed candidate rezone sites.

FAIR OAKS BOULEVARD CORRIDOR PLAN

CRITERIA AIR POLLUTANTS

Criteria air pollutants are pollutants of regional concern, the concentrations of which are determined by multiple, overlapping activities and the transport of these emissions depending on topographic and meteorological conditions. The attainment status of Sacramento County is provided above in the discussion of the existing air quality conditions for the General Plan and characterizes the ambient air quality of the Fair Oaks Boulevard Corridor Plan area (Fair Oaks Boulevard Corridor area).

TOXIC AIR CONTAMINANTS

Site 67 is located approximately 50 feet from residences to the east and south, and approximately 350 feet from residences to the north and northeast. Site 67 is also located approximately 500 feet northeast from a school (Angel Arms Learning Center).

ODORS

No existing operational sources of odor are within the proximity of Site 67 in the Fair Oaks Boulevard Corridor Plan.

SENSITIVE RECEPTORS

Sensitive land uses near Site 67 include residential land uses and a school as described under the Toxic Air Contaminants heading.

NORTH WATT AVENUE CORRIDOR PLAN

CRITERIA AIR POLLUTANTS

Criteria air pollutants are pollutants of regional concern, the concentrations of which are determined by multiple, overlapping activities and the transport of these emissions depending on topographic and meteorological conditions. The attainment status of Sacramento County is provided above in the discussion of the existing air quality conditions for the General Plan and characterizes the ambient air quality of the North Watt Avenue Corridor Plan area (North Watt Avenue Corridor area).

TOXIC AIR CONTAMINANTS

Sites 68 through 72 are within the North Watt Avenue Corridor area. Two sites are located directly next to each other; Site 68 located approximately 500 feet north of the intersection of Watt Avenue and Q Street and the Site 69 at 7235 Watt Avenue. Both sites are bordered by residential land uses to the east and west, with the closest of these uses located approximately 50 feet west of Sites 68 and 69; commercial land uses are located to the north and south of the sites in the North Watt Avenue Corridor area.

Site 70, located approximately 0.2 mile south of Elkhorn Boulevard and Watt Avenue, is located approximately 150 feet from residential uses to the east. Land uses to the north and west of the candidate rezone site consist of commercial and industrial uses.

Site 71, located approximately 0.1 mile north of I Street and Watt Avenue, is approximately 150 feet from residential land uses to the east, 900 feet from residential uses to the west.

Site 72 is located at 6233 Watt Avenue approximately 400 feet from residential uses to the west and approximately 120 feet from residential uses to the east. Land uses to the north of Site 72 consist of commercial and industrial uses.

ODORS

No existing operational sources of odor are within the proximity of the proposed candidate rezone sites in the North Watt Avenue Corridor area.

SENSITIVE RECEPTORS

As described under the Toxic Air Contaminants heading above, sensitive land uses near Sites 68 and 69 include residential receptors. Sites 70 through 72 are located within the vicinity (between 120-150 feet) of receptors which include residences.

OLD FLORIN TOWN SPECIAL PLANNING AREA

CRITERIA AIR POLLUTANTS

Criteria air pollutants are pollutants of regional concern, the concentrations of which are determined by multiple, overlapping activities and the transport of these emissions depending on topographic and meteorological conditions. The attainment status of Sacramento County is provided above in the discussion of the existing air quality conditions for the General Plan and characterizes the ambient air quality of the Old Florin Town SPA.

TOXIC AIR CONTAMINANTS

Sites 73 through 79 are within the Old Florin Town SPA. Site 73 is located approximately 650 feet from a daycare (Busy Bee Child Care) to the east. Residential land uses are located approximately 300 feet to the south of Site 73, approximately 500 feet to the west, and approximately 900 feet to the southwest. Industrial land uses are located to the north of Site 73.

Site 74, located at 8165 Florin Road, is located approximately 300 feet from Busy Bee Child Care to the southeast of Site 74. Industrial land uses are located to the north of the candidate rezone site. Residential uses are located approximately 1,000 feet west of the candidate rezone site.

Site 75, located approximately 90 feet north of Augusta Way and Bacchini Avenue, is located directly adjacent to a residential land use to the west. Busy Bee Child Care is located approximately 500 feet to the southwest of Site 75. Industrial land uses are located to the north of Site 75. Residential uses are located approximately 700 feet south of Site 75.

Site 76, located approximately 430 feet north of McCurdy Lane and Florin Road, is located approximately 550 feet from a residential land use to the west. Busy Bee Child Care is located approximately 650 feet to the southwest of Site 76. Industrial land uses are located to the north of the candidate rezone site. Residential uses are located approximately 630 feet south of Site 76.

Site 77, located southeast of Power Inn Road and Florin Road, is located approximately 500 feet from residential land uses to the southeast, approximately 350 feet from residences to the southwest, and 550 feet from residences to the northwest. Commercial, industrial, and green fill land uses are located directly north and south of Site 77.

Site 78, located approximately 180 feet east of Kara Drive and Florin Road, is located approximately 250 feet southeast of Busy Bee Child Care and 500 feet southeast of a

single residential land use. Residential uses are located directly against the candidate rezone site's eastern, southern and western borders.

Site 79, is located at 8475 Florin Road and approximately 180 feet south of Florin Road and Simon Street. The closest receptors are residences approximately 80 feet north, 50 feet east, and 50 feet west of the sites. There are also residences approximately 300 feet southeast of the candidate rezone site.

ODORS

A waste disposal facility is located within 1,000 feet of Sites 73-79 at 8475 Florin Road and approximately 180 feet south of the intersection of Florin Road and Simon Street.

SENSITIVE RECEPTORS

As described under the Toxic Air Contaminants heading above, sensitive land uses near Sites 73 through 75 include residential uses and a daycare. Sensitive land uses near Sites 76 and 78 include a daycare and residences. Sites 77 and 79 are located near residences.

REGULATORY SETTING

Air quality in Sacramento County is regulated by several agencies, including the US Environmental Protection Agency (EPA), CARB, and SMAQMD. Each of these agencies develops rules and/or regulations to attain the goals or directives imposed upon them through legislation. Although EPA regulations may not be superseded, both state and local regulations may be more stringent. In general, air quality is evaluated based upon standards developed by federal and state agencies.

FEDERAL

FEDERAL CLEAN AIR ACT

The Clean Air Act (CAA) of 1970 and the CAA Amendments of 1971 required EPA to establish NAAQS with states retaining the option to adopt more stringent standards or to include other specific pollutants. The primary and secondary standards are the levels of air quality considered to protect public health and safety, respectively, with an adequate margin of safety. The primary standards are intended to protect public health, such as reducing the risk of developing acute or chronic illnesses in the country's population, while the secondary standards are protective of public welfare and serve to minimize damage to animals, crops, vegetation, and buildings. They are designed to protect those sensitive receptors most susceptible to further respiratory distress such as asthmatics, the elderly, very young children, people already weakened by other disease or illness, and persons engaged in strenuous work or exercise. Healthy adults can tolerate occasional exposure to air pollutant concentrations considerably above these minimum standards before adverse effects are observed.

The current NAAQS and area-attainment status of the Sacramento County are discussed above in the "Environmental Setting" Section of this Chapter. CAA and its subsequent amendments require each state to prepare a State Implementation Plan (SIP). The CAA Amendments dictate that states containing areas violating NAAQS revise their SIPs to include extra control measures to reduce air pollution. SIP includes strategies and control measures to attain NAAQS by deadlines established by CAA. SIP is periodically modified to reflect the latest emissions inventories, plans, and rules and regulations of air basins as reported by the agencies with jurisdiction over them. EPA has the responsibility to review all SIPs to determine if they conform to the requirements of CAA.

STATE

CALIFORNIA AIR RESOURCES BOARD

CARB, a part of the California EPA (CalEPA), is responsible for the coordination and administration of both federal and State air pollution control programs within California. In this capacity, CARB conducts research and defines CAAQS, compiles emission inventories, develops suggested control measures, and provides oversight of local programs. CARB establishes emissions standards for motor vehicles sold in California, consumer products, such as hairspray, aerosol paints, and barbecue lighter fluid, and various types of commercial equipment. It also sets fuel specifications to further reduce vehicular emissions. CARB has primary responsibility for the development of California's SIP, for which it works closely with the federal government and the local air districts.

In addition to standards set for criteria air pollutants, the state has set standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. These standards are designed to protect the health and welfare of the populace with a reasonable margin of safety, meaning that exposure to concentrations at or below the CAAQS would be preventative against the development of acute or chronic illnesses. The attainment status under CAAQS for the Sacramento County is discussed in the Section, "Environmental Setting," above.

CALIFORNIA CLEAN AIR ACT

The California Clean Air Act (CCAA) of 1988 requires non-attainment areas to achieve and maintain CAAQS by the earliest practicable date and local air districts to develop plans for attaining the State's ozone, CO, SO_2, and NO_2 limits. CCAA also requires that air districts assess their progress toward attaining the air quality standards every 3 years.

THE AIR TOXICS HOT SPOTS INFORMATION AND ASSESSMENT ACT

California Health and Safety Code Section 44300 et seq., provides for the regulation of over 200 air toxics and contains the primary air contaminant legislation in the state. Under the Act, local air districts may request that a facility account for its TAC emissions. Local air districts then prioritize facilities on the basis of emissions, and high-priority designated facilities are required to submit a health risk assessment and communicate the results to the affected public. The TAC control strategy involves reviewing new sources to ensure

compliance with required emission controls and limits, maintaining an inventory of existing sources of TACs, and developing new rules and regulations to reduce TAC emissions.

Assembly Bill 1807

Assembly Bill (AB) 1807, enacted in September 1983, sets forth a procedure for the identification and control of TACs in California. AB 1807 defines a TAC as an air pollutant that may cause or contribute to an increase in mortality or an increase in serious illness, or which may pose a present or potential hazard to human health. CARB prepares identification reports on candidate substances under consideration for listing as TACs. The reports and summaries describe the use of and the extent of emissions in California resulting in public exposure, together with their potential health effects.

In 1998, CARB identified diesel PM as a TAC under the AB 1807 program. Diesel PM is emitted into the air via heavy-duty diesel trucks, construction equipment, and passenger cars.

Local

Sacramento Metropolitan Air Quality Management District

SMAQMD is the primary agency responsible for planning to meet federal and State ambient air quality standards in Sacramento County. SMAQMD works with other local air districts in the Sacramento region to maintain the region's portion of the SIP for ozone. SIP is a compilation of plans and regulations that govern how the region and State will comply with the federal CAA requirements to attain and maintain the federal ozone standard. The Sacramento Region has been designated as a "moderate" 2015 8-hour ozone nonattainment area with an extended attainment deadline of June 15, 2019 (EPA 2020a). The 2018 Sacramento Regional 2008 8-Hour Ozone Attainment and Further Reasonable Progress Plan was approved by CARB on November 16, 2017. The previous 2013 Update to the 8-Hour Ozone Attainment and Reasonable Further Progress Plan was approved and promulgated by EPA for the 1997 8-Hour Ozone Standard. The most recent SIP is the 2022 State Strategy for the State Implementation Plan (2022 SIP). At a public meeting held on October 26, 2023, CARB voted to approve the Sacramento Regional 70 parts per billion (ppb) 8-Hour Ozone Attainment and Reasonable Further Progress Plan. The Sacramento Regional 70 ppb 8-Hour Ozone Attainment and Reasonable Further Progress Plan was prepared by the five local air districts of the SFNA with the support of CARB. SFNA requested a reclassification to "severe" with an attainment deadline of August 3, 2033. The 2023 Sacramento Regional Plan for the 2015 70 ppb 8-Hour Ozone Standard addresses the CAA requirements associated with the "severe" classification and how SFNA can attain the standard by the attainment date. The Sacramento Regional 70 ppb 8-Hour Ozone Attainment and Reasonable Further Progress Plan is an air quality attainment plan (AQAP) that is applicable to development in the Project area.

SMAQMD adopted the Guide to Air Quality Assessment in Sacramento County (SMAQMD Guide) in December 2009 and has made multiple revisions since, with the most recent revisions occurring in October 2020 to operational emissions pertaining to best management practices (BMPs) for particulate matter. Projects that comply with the

mandatory requirements of Parts 6 and 11 of the Title 24 California Building Code (the recommended BMP for operation emissions of PM_{10} and $PM_{2.5}$ for land use development projects) as a component of the projects' design are subject to SMAQMD's threshold of 80 and 82 lb/day for PM_{10} and $PM_{2.5}$, respectively. SMAQMD also recommends that a 0 lb/day threshold be applied to construction emissions prior to implementation of its recommended fugitive dust BMPs.

The SMAQMD Guide provides methods to analyze air quality impacts from plans and projects, including screening criteria, thresholds of significance, calculation methods, and mitigation measures to assist lead agencies in complying with CEQA. During updates to the SMAQMD Guide, SMAQMD updated certain CEQA thresholds for air quality emissions. The SMAQMD Board of Directors rescinded the 2002 concentration-based thresholds for PM_{10} and $PM_{2.5}$ and adopted the new mass emissions PM_{10} and $PM_{2.5}$ thresholds on May 28, 2015. The TACs thresholds for stationary sources were developed as part of the SMAQMD's AB 2588 program, however the SMAQMD Board of Directors have not yet established a threshold for mobile source or non-permitted sources of TACs. All projects are subject to adopted SMAQMD rules and regulations in effect at the time of construction. Specific rules applicable to the construction of the Project may include the following:

- **Rule 201**: **General Permit Requirements.** Any project that includes the use of equipment capable of releasing emissions to the atmosphere may be required to obtain permit(s) from SMAQMD before equipment operation. The applicant, developer, or operator of a project that includes an emergency generator, boiler, or heater should contact SMAQMD early to determine whether a permit is required, and to begin the permit application process. Portable construction equipment (e.g., generators, compressors, pile drivers, lighting equipment) with an internal combustion engine greater than 50 horsepower must have a SMAQMD permit or CARB portable equipment registration.
- **Rule 402**: **Nuisance.** A person shall not discharge from any source whatsoever such quantities of air contaminants or other materials which cause injury, detriment, nuisance or annoyance to any considerable number of persons or the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause or have natural tendency to cause injury or damage to business or property.
- **Rule 403**: **Fugitive Dust.** The developer or contractor is required to control dust emissions from earthmoving activities or any other construction activity to prevent airborne dust from leaving the project site.
- **Rule 417**: **Wood Burning Appliances.** The purpose of the rule is to limit emissions of particulate matter to the atmosphere from the operation of wood burning appliances.
- **Rule 442**: **Architectural Coatings.** The purpose of the rule is to limit the emissions of VOCs from the use of architectural coatings supplied, sold, offered for sale, applied, solicited for application, or manufactured for use within the District.

In addition, if modeled construction-generated emissions for a project are not reduced to SMAQMD's thresholds of significance after the standard construction mitigation is applied, then an offsite construction mitigation fee is required. The fee must be paid before a grading permit can be issued. This fee is used by SMAQMD to purchase offsite emissions reductions. Such purchases are made through SMAQMD's Agriculture and Construction Equipment Replacement Program, through which select owners of heavy-duty equipment in Sacramento County can repower or retrofit their old engines with cleaner engines or technologies.

TOXIC AIR CONTAMINANTS

At the local level, air districts may adopt and enforce CARB control measures. Under SMAQMD Rule 201 ("General Permit Requirements"), Rule 202 ("New Source Review"), and Rule 207 ("Federal Operating Permit"), all sources that possess the potential to emit TACs are required to obtain permits from SMAQMD. Permits may be granted to these operations if they are constructed and operated in accordance with applicable regulations, including New Source Review standards and air toxics control measures. SMAQMD limits emissions and public exposure to TACs through several programs. SMAQMD prioritizes TAC-emitting stationary sources based on the quantity and toxicity of the TAC emissions and the proximity of the facilities to sensitive receptors.

ODORS

Although offensive, odors rarely cause any physical harm; they can be very unpleasant, leading to considerable stress among the public and often generating citizen complaints to local governments and SMAQMD. SMAQMD's Rule 402 ("Nuisance") regulates odorous emissions. SMAQMD also has recommended screening distances for CEQA evaluation when siting a source of odor (e.g., landfill, wastewater treatment plant) within the vicinity of an existing sensitive land use.

SACRAMENTO COUNTY GENERAL PLAN

The Sacramento County General Plan contains the following policies from the Air Quality Element that are applicable to the Project:

AQ-1. New development shall be designed to promote pedestrian/bicycle access and circulation to encourage community residents to use alternative modes of transportation to conserve air quality and minimize direct and indirect emission of air contaminants.

AQ-3. Buffers and/or other appropriate exposure reduction measures shall be established on a project-by-project basis and incorporated during review to provide for protection of sensitive receptors from sources of air pollution or odor. CARB's "Strategies to Reduce Air Pollution Exposure Near High Volume Roadways" Technical Advisory and the AQMD's "Mobile Sources Air Toxics Protocol" or applicable AQMD guidance shall be utilized when establishing these exposure reduction measures.

AQ-4. Developments which meet or exceed thresholds of significance for ozone precursor pollutants, and/or Greenhouse Gases (GHG) as adopted by SMAQMD, shall be deemed to have a significant environmental impact. An Air Quality Mitigation Plan and/or a Greenhouse Gas Reduction Plan shall be submitted to the County of Sacramento prior to project approval, subject to review and recommendation as to technical adequacy by SMAQMD.

AQ-4A. Residential zones should not be located adjacent to industrial zones (M-1 and M-2) or general agriculture zones (AG-10 to 160. In the event that a residential zone is located adjacent to an industrial or agricultural zone, the developer of the property(ies) being rezoned shall be required to implement exposure reduction measures developed in consultation with the SMAQMD.

AQ-10. Encourage vehicle trip reduction and improved air quality by requiring development projects that exceed the SMAQMD's significance thresholds for operational emissions to provide on-going, cost-effective mechanisms for transportation services that help reduce the demand for existing roadway infrastructure.

AQ-11. Encourage contractors operating in the county to procure and to operate low-emission vehicles, and to seek low emission fleet status for their off-road equipment.

AQ-13. Use California State Air Resources Board (ARB) and SMAQMD guidelines for Sacramento County facilities and operations to comply with mandated measures to reduce emissions from fuel consumption, energy consumption, surface coating operations, and solvent usage.

AQ-17. Promote optimal air quality benefits through energy conservation measures in new development.

AQ-19. Require all feasible reductions in emissions for the operation of construction vehicles and equipment on major land development and roadway construction projects.

AQ-20. Promote Cool Community strategies to cool the urban heat island, reduce energy use and ozone formation, and maximize air quality benefits by encouraging four main strategies including, but not limited to: plant trees, selective use of vegetation for landscaping, install cool roofing, and install cool pavements.

AQ-21. Support SMAQMD's particulate matter control measures for residential wood burning and fugitive dust.

Sacramento County Zoning Code

While the Sacramento County Zoning Code does not contain regulations specific to air quality, provisions for the County's distinct area plans are within the Zoning Code.

DISTINCT AREA PLANS

The County guides development using several land use plans such as Special Planning Areas (SPAs), Specific Plans, Comprehensive Plans, Community Plans, Corridor Plans, and Neighborhood Preservation Areas (NPAs). As shown in Chapter 2, "Project Description," 13 sites are located within distinct area plans, specifically: Fair Oaks Boulevard Corridor Plan, North Watt Avenue Corridor Plan, and Old Florin Town SPA. These plans provide community-specific regulations that supplement the County Zoning Code and are created when the countywide zoning regulations do not adequately address local concerns (County of Sacramento 2024). Relevant policies related to air quality for each of the distinct area plans are summarized below. Relevant air quality mitigation included in the area planning efforts are summarized below. Where appropriate, mitigation is carried through or updated from these plans and associated environmental documents.

FAIR OAKS BOULEVARD CORRIDOR PLAN

Site 67 is located within the Fair Oaks Boulevard Corridor Plan. The Fair Oaks Boulevard Corridor Plan was adopted by the Board of Supervisors on October 26, 2011. The Fair Oaks Boulevard Corridor Plan is implemented by a Special Planning ordinance and Section 110-30.6 of the Sacramento County Zoning Code. Projects within the Fair Oaks Boulevard Corridor area are required to contribute to fulfilling the goals outlined in the Fair Oaks Boulevard Corridor Plan and the evolution of the community consistent with the economic development and image objectives for each district and the surrounding community. The Fair Oaks Boulevard Corridor Plan does not contain goals or policies specific to air quality.

The following mitigation measures from the Fair Oaks Boulevard EIR are applicable to air quality:

AQ-1: Construction Ozone Precursor Emissions and Diesel Particulates

Development proposals that exceed the SMAQMD NO_x screening levels shown in Table AQ-12, or any similar screening standard adopted by SMAQMD at the time of project application, shall be required to prepare construction emission estimates based on projected construction timelines and equipment lists prior to approval of improvement plans. When emissions exceed the SMAQMD construction thresholds of significance (currently of 85 pounds per day of NO_x) or the applicable standard in place at the time of application, the following measure shall be implemented (or the current SMAQMD-recommended mitigation in effect at the time of project application):

The project shall ensure that emissions from all off-road diesel-powered equipment used on the project site do not exceed 40 percent opacity for more than three minutes in any one hour. Any equipment found to exceed 40 percent opacity (or Ringelmann 2.0) shall be repaired immediately, and SMAQMD shall be notified within 48 hours of identification of non-compliant equipment. A visual survey of all in-operation equipment shall be made at least weekly, and a monthly summary of the visual survey results shall be submitted throughout the duration of the project, except that the monthly summary shall not be required for any 30-day period in which construction activity does not occur. The monthly

summary shall include the quantity and type of vehicles surveyed as well as the dates of each survey. The SMAQMD and/or other officials may conduct periodic site inspections to determine compliance; and, The contractor shall provide a plan for approval by SMAQMD demonstrating that the heavy-duty (> 50 horsepower) off-road vehicles to be used in the construction project, including owned, leased and subcontractor vehicles, will achieve a project wide fleet-average 20 percent NOx reduction and 45 percent particulate reduction compared to the most recent CARB fleet average at time of construction; and the project sponsor shall submit to SMAQMD a comprehensive inventory of all off-road construction equipment, equal to or greater than 50 horsepower, that will be used an aggregate of 40 or more hours during any portion of the construction project. Acceptable options for reducing emissions may include use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, and/or other options as they become available. The inventory shall include the horsepower rating, engine production year, and projected hours of use or fuel throughput for each piece of equipment. The inventory shall be updated and submitted monthly throughout the duration of the project, except that an inventory shall not be required for any 30-day period in which no construction activity occurs. At least 48 hours prior to the use of subject heavy-duty off-road equipment, the project representative shall provide SMAQMD with the anticipated construction timeline including start date, and name and phone number of the project manager and on-site foreman. If, after the 20 percent NOx reduction afforded by implementation of the above, the SMAQMD thresholds of significance are still exceeded, then that development shall pay SMAQMD off-site air quality mitigation fees to reduce the project's net construction NOx emissions below the significance threshold. The off-site mitigation fees shall be paid to SMAQMD prior to the approval of improvement plans or the issuance of grading permits. Developers should contact the SMAQMD for assistance in assessing the fee, based on the current rate of $16,000/ton of NOx or the prevailing rate in effect at the time of construction.

AQ-2. Operational Emissions

All development projects within the Fair Oaks Boulevard Corridor SPA shall comply with the SMAQMD endorsed Fair Oaks Boulevard Corridor Operational Air Quality Management Plan (8-06-2009), which requires implementation of reduction measures that will achieve a minimum of 15 percent reduction in operational and area source emissions, consistent with General Plan Policy.

NORTH WATT AVENUE CORRIDOR PLAN

Sites 68 through 72 are located within the North Watt Avenue Corridor Plan. The North Watt Avenue Corridor Plan was adopted by the Board of Supervisors on July 17, 2012. The North Watt Avenue Corridor Plan is intended to guide infill growth and public improvements along North Watt Avenue and throughout the North Watt Avenue Corridor area within a planning horizon of 20 years. The North Watt Avenue Corridor Plan was created to implement new land use and transportation development that produce less greenhouse gas emissions than existing forms; builds on the priorities set by the

community; and supports the County's commitment to revitalize its older commercial corridors. This Corridor Plan defines goals and objectives that lead to the corridor's transition to a series of mixed-use urban villages and residential neighborhoods supporting the County's objectives for infill development. However, the North Watt Avenue Corridor Plan does not contain goals or policies specific to air quality.

The following mitigation measures from the North Watt Avenue EIR are applicable to air quality:

AQ-1. All future construction projects shall include an ozone precursor analysis. If the analysis results indicate that the project will generate ozone precursors that exceed the current SMAQMD thresholds this mitigation shall apply. This mitigation may be modified if guidance from the SMAQMD changes in the future.

A. The project shall provide a plan for approval by the District demonstrating that the heavy-duty (50 horsepower [hp] or more) off-road vehicles to be used in the construction project, including owned, leased, and subcontractor vehicles, will achieve a project wide fleet-average 20 percent NO_x reduction and 45 percent particulate reduction compared to the most recent CARB fleet average. Acceptable options for reducing emissions may include use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, and/or other options as they become available. The District's Construction Mitigation Calculator can be used to identify an equipment fleet that achieves this reduction.

B. The project shall ensure that emissions from all off-road diesel-powered equipment used on the project site do not exceed 40 percent opacity for more than three minutes in any one hour. Any equipment found to exceed 40 percent opacity (or Ringelmann 2.0) shall be repaired immediately, and the lead agency and District shall be notified within 48 hours of identification of noncompliant equipment. A visual survey of all in-operation equipment shall be made at least weekly, and a monthly summary of the visual survey results shall be submitted throughout the duration of the project, except that the monthly summary shall not be required for any 30-day period in which no construction activity occurs. The monthly summary shall include the quantity and type of vehicles surveyed as well as the dates of each survey. The District and/or other officials may conduct periodic site inspections to determine compliance. Nothing in this section shall supersede other District or state rules or regulations.

C. If at the time of construction, the District has adopted a regulation applicable to construction emissions, compliance with the regulation may completely or partially replace this mitigation. Consultation with the District prior to construction will be necessary to make this determination.

AQ-2. All development projects within the North Watt Avenue Corridor Plan shall comply with the SMAQMD endorsed Air Quality Mitigation Plan (7-16-2010),

which requires implementation of reduction measures that will achieve a minimum of 15.75 percent reduction in operational and area source emissions, consistent with General Plan Policy.

AQ-3. All projects within 500 feet of I-80 or the UP rail line which involve sensitive uses (residential uses, and those with concentrations of the very young, elderly, or infirm such as parks, daycares, nursing homes, or hospitals), shall develop a mitigation plan to reduce impacts associated with TACs, in consultation with SMAQMD. The mitigation plan may include measures such as vegetative plantings, the installation of electrostatic filters, and/or site redesign.

OLD FLORIN TOWN SPA

Sites 73 through 79 are located within the Old Florin Town SPA, which was adopted by the Board of Supervisors on May 25, 2011. The Old Florin Town SPA encapsulates a Special Planning Area Ordinance on approximately 430 acres in the South Sacramento community. The Old Florin Town SPA does not contain goals or policies specific to air quality.

The following mitigation measures from the Old Florin Town SPA EIR are applicable to air quality:

AQ-1. Development proposals that exceed the SMAQMD NO_x Table AQ-2 screening levels shown in (Chapter 8: Air Quality, p.15-16), or any similar screening standard adopted by SMAQMD at the time of project application, shall be required to prepare construction emission estimates based on projected construction timelines and equipment lists prior to approval of improvement plans. When emissions exceed the SMAQMD construction thresholds of significance (currently of 85 pounds per day of NO_x) or the applicable standard in place at the time of application, the following measure shall be implemented (or the current SMAQMD-recommended mitigation in effect at the time of project application):

The project shall ensure that emissions from all off-road diesel powered equipment used on the project site do not exceed 40 percent opacity for more than three minutes in any one hour. Any equipment found to exceed 40 percent opacity (or Ringelmann 2.0) shall be repaired immediately, and SMAQMD shall be notified within 48 hours of identification of non-compliant equipment. A visual survey of all inoperation equipment shall be made at least weekly, and a monthly summary of the visual survey results shall be submitted throughout the duration of the project, except that the monthly summary shall not be required for any 30-day period in which construction activity does not occur. The monthly summary shall include the quantity and type of vehicles surveyed as well as the dates of each survey. The SMAQMD and/or other officials may conduct periodic site inspections to determine compliance;

and,

The contractor shall provide a plan for approval by SMAQMD demonstrating that the heavy-duty (> 50 horsepower) off-road vehicles to be used in the construction project, including owned, leased and subcontractor vehicles, will achieve a project wide fleet-average 20 percent NOx reduction and 45 percent particulate reduction compared to the most recent CARB fleet average at time of construction; and the project sponsor shall submit to SMAQMD a comprehensive inventory of all off-road construction equipment, equal to or greater than 50 horsepower, that will be used an aggregate of 40 or more hours during any portion of the construction project. Acceptable options for reducing emissions may include use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, and/or other options as they become available. The inventory shall include the horsepower rating, engine production year, and projected hours of use or fuel throughput for each piece of equipment. The inventory shall be updated and submitted monthly throughout the duration of the project, except that an inventory shall not be required for any 30-day period in which no construction activity occurs. At least 48 hours prior to the use of subject heavy-duty off-road equipment, the project representative shall provide SMAQMD with the anticipated construction timeline including start date, and name and phone number of the project manager and on-site foreman.

If, after the 20 percent NO_x reduction afforded by implementation of the above, the SMAQMD thresholds of significance are still exceeded, then that development shall pay SMAQMD off-site air quality mitigation fees to reduce the project's net construction NO_x emissions below the significance threshold. The off-site mitigation fees shall be paid to SMAQMD prior to the approval of improvement plans or the issuance of grading permits. Developers should contact the SMAQMD for assistance in assessing the fee, based on the current rate of $16,000/ton of NO_x or the prevailing rate in effect at the time of construction.

AQ-2. All development projects within the OFT SPA shall comply with the SMAQMD endorsed Old Florin Town SPA Operational Air Quality Mitigation Plan (09/28/2009), which requires implementation of reduction measures that will achieve a minimum of 15 percent reduction in operational and area source emissions, consistent with General Plan Policy. The AQMP shall be incorporated into the Old Florin Town SPA.

AQ-3. Future applicants of projects that have sensitive land uses, within 500 feet of the UP rail line, shall develop a mitigation plan to reduce impacts associated with TACs, in consultation with SMAQMD. The mitigation plan may include measures such as vegetative plantings, the installation of electrostatic filters, and/or site redesign.

OTHER LAND USE PLANS

In addition to the distinct area plans described above, Stockton Boulevard NPA, Victory Avenue NPA, Greenback Lane SPA, and Downtown Rio Linda SPA also contain

proposed candidate rezone sites. These land use plans do not have applicable policies related to air quality.

Significance Criteria and Methodology

Significance Criteria

Thresholds of significance are based on Appendix G of the State CEQA Guidelines. The Project would result in an impact related to air quality if it would:

- conflict with or obstruct implementation of the applicable air quality plan;
- result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is nonattainment under an applicable federal or State ambient air quality standard;
- expose sensitive receptors to substantial pollutant concentrations; or
- result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

For the Project, the significance criteria used to evaluate Project impacts on air quality under CEQA are based on the above Appendix G criteria for air quality as well as thresholds of significance adopted by SMAQMD. SMAQMD's air quality thresholds of significance are tied to achieving or maintaining attainment designations with NAAQS and CAAQS, which are scientifically substantiated, numerical concentrations of criteria air pollutants considered to be protective of human health. Implementing the Project would have a significant impact related to air quality such that human health would be adversely affected if it would (SMAQMD 2020e):

- cause construction-generated criteria air pollutant or precursor emissions to exceed the SMAQMD-recommended thresholds of 85 lb/day for NO_X, 80 lb/day or 13.2 tpy for PM_{10}, and 82 lb/day or 15 tpy for $PM_{2.5}$ after SMAQMD's Basic Construction Emission Control Practices (construction BMPs) have been implemented;
- result in a net increase in long-term operational criteria air pollutant or precursor emissions that exceed the SMAQMD-recommended thresholds of 65 lb/day for ROG and NO_X, 80 lb/day or 13.2 tpy for PM_{10}, and 82 lb/day or 15 tpy for $PM_{2.5}$ after SMAQMD's best available control technology (BACT) and operational BMPs have been applied;
- result in short-term construction and long-term operational local mobile-source CO emissions that would violate or contribute substantially to concentrations that exceed the 1-hour CAAQS of 20 ppm or the 8-hour CAAQS of 9 ppm;
- expose any off-site sensitive receptor to a substantial incremental increase in TACs emissions that exceed 10 in 1 million for carcinogenic risk (i.e., the risk of contracting cancer) and/or a noncarcinogenic hazard index of 1.0 or greater; and/or

- result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

METHODOLOGY

Regional and local criteria air pollutant emissions and associated impacts, as well as impacts from TACs, CO concentrations, and odors were assessed in accordance with Sacramento County and SMAQMD-recommended methodologies. The Project's emissions were compared to SMAQMD's construction and operational thresholds.

CRITERIA AIR POLLUTANTS AND OZONE PRECURSORS

The analysis in this section is consistent with the recommendations of SMAQMD's Guide to Air Quality Assessment in Sacramento County, Chapter 9, "Program-Level Analysis of General Plans and Area Plans" (SMAQMD 2020a). The analysis focuses on the extent to which the Project would conflict with air quality planning efforts as well as potential exceedances of local air quality thresholds. The net increase in criteria air pollutant (PM_{10} and $PM_{2.5}$) and ozone precursor (ROG and NO_x) emissions (i.e., pollutants for which the region is in nonattainment of ambient air quality standards) generated by the Project were estimated based on vehicle miles travelled (VMT) provided by DKS as part of the traffic modeling for the Project as well as the maximum development under the Project that are identified in Chapter 2, "Project Description," in order to address the largest extent of potential air quality impacts. Notably, VMT modeling included three additional sites located in the County's Vineyard community. These sites were removed from the rezone list during preparation of the EIR. However, removal of the sites would not result in greater VMT as the sites removed are in a high VMT generating area. Therefore, this SEIR provides conservative emissions estimates.

Construction and operational emissions were estimated based on the net change in land uses facilitated by the Project between the General Plan EIR and buildout of the Project. Construction emissions account for the total Project acreage of approximately 235 acres and were estimated consistent with SMAQMD's Program-Level Analysis guidance, which directs lead agencies to estimate construction emissions using guidance contained in Chapter 3, "Construction-Generated Criteria Air Pollutant and Ozone Precursor Emissions." Based on the 5-year buildout schedule of the Project (2025 through 2029), 20 percent of the Project would be constructed each year. For modeling purposes, the Project was modeled as five separate years each with 20 percent of the acreage and units to get the most accurate representation of emissions per year.

As indicated in Chapter 2, "Project Description," the Project includes rezoning approximately 214 acres for lower income units and approximately 22 acres for moderate income units. With implementation of the Project there would be a potential net new residential development capacity in the County of approximately 4,081 housing units. Project acreage and the number of dwelling units were used in the modeling conducted for the Project. Due to the programmatic nature of this analysis, California Emissions Estimator Model (CalEEMod) Version 2022.1.1.21 default values for construction trip generation, heavy-duty equipment numbers and types, and construction phasing were used. This

model was developed in coordination with the SMAQMD and is the most current emissions model approved for use in California by various air districts, including SMAQMD.

Because this analysis evaluates Project impacts at the programmatic level, there is some uncertainty regarding the schedule of when Project development would occur. Therefore, construction emissions were modeled using the assumptions that development would start in 2025 and occur gradually extending to the horizon year of the Sacramento County Housing Element, which for purposes of this analysis is assumed to be 2029. The first year of operation (i.e., emissions from operational activity only excluding construction emissions) was assumed to be 2030 based on the lifetime of the Housing Element. This assumption is considered inherently conservative, as development of the additional residential capacity allowed under the proposed rezone would likely occur well-beyond a five-year timeframe.

The distinct area plans were modeled separately from the main rezone and also assumed to begin construction in 2025. Construction schedules for the distinct area plans were based on CalEEMod defaults for each phase and construction of each region were assumed to occur consecutively; the distinct area plans are anticipated to begin in 2025 and conclude in late 2028. Although 2029 is the horizon year for the Project, 2028 is utilized for the conclusion of Project construction in the distinct area plans as it is the CalEEMod default value for a construction project of this size; this is a conservative scenario for construction emissions modeling.

Appendix AQ-1 includes outputs from the model runs for both construction and operational activity associated with previously approved project and future buildout conditions of the proposed Project. With respect to operational emissions, mobile source emissions were estimated using Project-estimated annual VMT derived from the VMT analysis prepared by DKS for the Project (see Chapter 10, “Transportation”). Energy- and area-sourced emissions were estimated using CalEEMod default values. Project emissions were compared to anticipated air pollutant emissions associated with buildout under the General Plan as disclosed in the General Plan EIR. Emissions from distinct area plans were compared to emissions associated with buildout of those plans and disclosed in the distinct area plan EIRs.

Additionally, as SMAQMD BMPs are required to be implemented to utilize SMAQMD’s non-zero threshold for construction PM_{10} and $PM_{2.5}$ emissions, these BMPs were preemptively applied to the construction model, as well as recommended as formal mitigation in the analysis below.

Typically, air districts develop thresholds of significance for CEQA evaluation (summarized below) in consideration of maintaining or achieving attainment under NAAQS and CAAQS for the geographical area they oversee (long-term regional air quality planning). These thresholds are tied to an air district in nonattainment’s SIP for criteria air pollutants within a cumulative context. These SIPs are submitted to CARB and contain an inventory of existing ambient air pollutant concentrations and, if applicable, a suite of measures to reduce air pollution and a projected date of achieving attainment under NAAQS and CAAQS. Air quality plans identify a budget that accounts for new,

future sources of pollution from land use development and stationary sources. These budgets inform the development of CEQA thresholds of significance and represent an allowable level of pollution that, when emitted in volumes below such thresholds, would not conflict with an air district's long-term regional air quality planning or attainment date.

As discussed previously, NAAQS and CAAQS represent concentrations of criteria air pollutants protective of human health and are substantiated by extensive scientific evidence. EPA and CARB recognize that ambient air quality below these concentrations would not cause adverse health impacts to exposed receptors. In connecting an air district's (e.g., SMAQMD, San Joaquin Valley Air Pollution Control District [SJVAPCD]) thresholds of significance to its anticipated date of attainment, projects that demonstrate levels of construction and/or operational emissions below the applicable thresholds would be consistent with long-term regional planning efforts. These projects would not result in emissions that would conflict with an area achieving future attainment status under NAAQS and CAAQS as outlined by an applicable air quality plan.

Similarly, projects that demonstrate emissions levels in exceedance of an applicable threshold could contribute to the continued nonattainment designation of a region or potentially degrade a region from attainment to nonattainment resulting in acute or chronic respiratory and cardiovascular illness associated with exposure to concentrations of criteria air pollutants above what EPA and CARB consider safe. Symptoms can include coughing, difficulty breathing, chest pain, eye and throat irritation and, in extreme cases, death caused by exacerbation of existing respiratory and cardiovascular disease, cancer, and impaired immune and lung function.

However, the exact location and magnitude of specific health impacts that could occur as a result of Project-level construction- or operation-related emissions is infeasible to model with a high degree of accuracy. While dispersion modeling of Project-generated particulate matter may be conducted to evaluate resulting ground-level concentrations, the secondary formation of particulate matter is similar to the complexity of ozone formation, and localized impacts of directly emitted PM do not always equate to local particulate matter concentrations due to the transport of emissions. Ozone is a secondary pollutant formed from the oxidation of ROG and NO_x in the presence of sunlight. Rates of ozone formation are a function of a variety of complex physical factors, including topography, building influences on air flow (e.g., downwash), ROG and NO_x concentration ratios, multiple meteorological conditions, and sunlight exposure (Seinfeld and Pandis 1996:298). For example, rates of ozone formation are highest in elevated temperatures and when the ratio of ROG to NO_x is 5.5:1. When temperatures are lower and this ratio shifts, rates of ozone formation are stunted (Seinfeld and Pandis 1996:299–300). In addition, ROG emissions are composed of many compounds that have different levels of reactivity leading to ozone formation. Methane, for instance, is the most common ROG compound, yet it has one of the lowest reactivity potentials (Seinfeld and Pandis 1996:309, 312). Moreover, some groups may develop more severe health impacts than others. For instance, infants, children, the elderly, and individuals with preexisting medical conditions are more susceptible to developing illnesses from exposure to air pollutants.

Notably, during the litigation process in the Friant Ranch case, SJVACPD submitted an amicus curiae brief that provided scientific context and expert opinion regarding the feasibility of performing regional dispersion modeling for ozone. In the brief, SJVAPCD states that "CEQA does not require an EIR to correlate a project's air quality emissions to specific health impacts, because such an analysis is not reasonably feasible." SJVAPCD reiterates that (SJVAPCD 2015):

> SJVAPCD has based its thresholds of significance for CEQA purposes on the levels that scientific and factual data demonstrate that the [SJVAB] can accommodate without affecting the attainment date for the NAAQS. SJVAPCD has tied its CEQA significance thresholds to the level at which stationary pollution sources must 'offset' their emissions…Thus the CEQA air quality analysis for criteria air pollutants is not really localized, project-level impact analysis but one of regional 'cumulative impacts.

The brief asserts that these CEQA thresholds of significance are not intended to be applied such that any localized human health impact associated with a project's emissions could be identified. Rather, CEQA thresholds of significance are used to determine whether a project's emissions would obstruct a region's capability of attaining NAAQS and CAAQS according to the emissions inventory prepared in a SIP, which is then submitted and reviewed by CARB and EPA. This sentiment is corroborated in an additional brief submitted by the South Coast Air Quality Management District (SCAQMD 2015).

In response to the Friant Ranch Decision, the *Friant Ranch Interim Recommendation* acted as the district's temporary guidance until a final methodology had been developed and approved (SMAQMD 2019). In October 2020 SMAQMD adopted the *Guidance to Address the Friant Ranch Ruling for CEQA Projects in the Sacramento Air District.* This guidance document replaces the *Friant Ranch Interim Recommendation.* The *Guidance to Address the Friant Ranch Ruling for CEQA Projects in the Sacramento Air District* document provides insight on the health effects that may result from a project emitting at the maximum thresholds of significance, look-up tables for estimating health effects for strategic areas where growth exceeding thresholds of significance is anticipated, and modeling guidance for CEQA projects that have emissions in excess of the significance thresholds and are located outside the strategic areas modeled (SMAQMD 2020b).

Mobile CO Impacts and Health Risk

Project-generated traffic resulting in concentrations of CO leading to an exceedance of NAAQS and CAAQS was evaluated using SMAQMD-recommended screening criteria.

Health risk from construction and operational emissions of TACs were assessed qualitatively. This assessment is based on the location from which construction- or operation-related TACs emissions would be generated by land uses developed relative to on-site and off-site sensitive receptors as subsequent phases are built, as well as the duration during which TACs exposure would occur.

IMPACT AND ANALYSIS

This impact and analysis section is organized by impact then, within each impact, by analysis of Project buildout as compared to the General Plan EIR, and finally by distinct planning areas. Mitigation is included or updated, where applicable, from the original environmental documents prepared for the General Plan and distinct area plans. An analysis of cumulative impacts is included at the end of the section.

IMPACT AQ-1: SHORT-TERM CONSTRUCTION EMISSIONS OF CRITERIA POLLUTANTS AND PRECURSORS (NO_X, ROG, PM_{10}, AND $PM_{2.5}$)

SACRAMENTO COUNTY GENERAL PLAN

GENERAL PLAN ENVIRONMENTAL IMPACT REPORT DETERMINATION

The General Plan EIR determined that impacts related to construction-related emissions of criteria air pollutants would be significant and unavoidable. This is because while compliance with measures required for NO_X and visible emissions from equipment would reduce PM_{10} emissions, these emissions can only be controlled by mitigation for active grading of up to 15 acres, but beyond that amount the control becomes less effective. Therefore, it was assumed that PM_{10} emissions would likely exceed local thresholds. Additionally, the General Plan EIR concluded that grading activities would, in some cases, exceed the acreage at which control is possible, resulting in significant and unavoidable impacts despite the application of feasible mitigation to reduce PM_{10} emissions from grading.

PROPOSED PROJECT IMPACT EVALUATION

Construction-related activities associated with increased residential capacity allowed by the Project would generate emissions of ROG, NO_x, PM_{10}, and $PM_{2.5}$ associated with demolition, off-road equipment, material delivery, worker commute trips, and other miscellaneous activities (e.g., application of architectural coatings). Fugitive dust emissions of PM_{10} and $PM_{2.5}$ would be associated primarily with vehicle movement and vary as a function of soil silt content, soil moisture, wind speed, and acreage of disturbance. PM_{10} and $PM_{2.5}$ are also contained in exhaust from off-road equipment and on-road vehicles. Emissions of ozone precursors, ROG and NO_x, would be associated primarily with construction equipment and on-road mobile exhaust. The application of architectural coatings would result in off-gas emissions of ROG.

INDIVIDUAL CANDIDATE REZONE SITE IMPACT EVALUATION

SMAQMD has developed construction emissions screening levels to assist a project proponent or lead agency in determining if NO_X and/or PM emissions from constructing a project in Sacramento County would exceed the SMAQMD construction-related criteria pollutant emissions significance thresholds for these pollutants. Construction of a project that does not exceed the screening level and meets all the screening parameters is considered to have a less-than-significant impact on air quality (SMAQMD 2020c). According to the SMAQMD CEQA Guide, projects that are 35 acres or less in size generally would not exceed the District's construction NO_X and PM thresholds of

significance SMAQMD 2020c. Notably, in order to utilize the screening method to determine if a project's construction emissions would have a less-than-significant impact on air quality, the project cannot include any of these parameters:

- Include buildings more than 4 stories tall;
- include demolition activities;
- include major trenching activities;
- have a construction schedule that is unusually compact, fast-paced, or involves more than 2 phases (i.e., grading, paving, building construction, and architectural coatings) occurring simultaneously;
- involve cut-and-fill operations (moving earth with haul trucks and/or flattening or terracing hills); and
- require import or export of soil materials that will require a considerable amount of haul truck activity.

At this level of analysis for the Project, it cannot be guaranteed that future development on individual candidate rezone sites would exclude all of the listed parameters. Therefore, the screening criteria is not used for this analysis. Instead, emissions are estimated for the largest candidate rezone site (Site 15) as the most conservative scenario for Project construction emissions. Site 15 is 11.45 acres and has a proposed maximum density of 458 units (an increase of 229 units beyond the existing maximum density permitted). The majority of candidate rezone sites (approximately 85 percent) are below 5 acres in size. Table AQ-3 below provides a conservative estimate of emissions that could occur during construction activities related to residential development of the largest candidate rezone site (i.e., construction of 458 units), as larger sites with greater residential capacity tend to result in more intense construction activities and, therefore, greater emissions.

Table AQ-3: Maximum Construction-Generated Daily and Annual Emissions of Criteria Air Pollutants and Precursors Associated With Largest Individual Candidate Rezone Site (Site 15) (2025–2026)

Construction Year	ROG (lb/day)	NO_X (lb/day)	PM_{10} (lb/day)	$PM_{2.5}$ (lb/day)	PM_{10} (tpy)	$PM_{2.5}$ (tpy)
2025	3	31	9	5	<1	<1
2026	2	14	14	1	<1	<1
SMAQMD Thresholds of Significance without BMPs[1]	None	85	0	0	0	0
Threshold Exceeded?	N/A	No	Yes	Yes	Yes	Yes
SMAQMD Thresholds of Significance with BMPs[2]	None	85	80	82	14.6	15
Threshold Exceeded?	N/A	No	No	No	No	No

Notes: ROG = reactive organic gas; NO_X = oxides of nitrogen; PM_{10} = respirable particulate matter; lb/day = pounds per day; tpy = tons per year; SMAQMD = Sacramento Air Quality Management District; BMPs = Best Management Practices

[1] Without implementation of fugitive dust reducing BMPs.

[2] With implementation of fugitive dust reducing BMPs.

Source: Modeling conducted by Ascent Environmental in 2024.

As shown in Table AQ-3, construction emissions associated with increased residential capacity on Site 15 would not exceed SMAQMD criteria pollutant thresholds with implementation of SMAQMD's dust-reducing BMPs. Because Site 15 is exemplary in terms of being the largest candidate rezone site in acreage, and one of the greatest increases in units permitted with proposed maximum density and construction emissions related to increasing residential capacity would not exceed SMAQMD thresholds, it is unlikely that construction emissions related to increasing capacity on any other individual candidate rezone site would exceed SMAQMD criteria pollutant thresholds with implementation of SMAQMD's dust-reducing BMPs.

AGGREGATE BUILDOUT IMPACT EVALUATION

As discussed above under "Individual Candidate Rezone Site Impact Evaluation," construction emissions at an individual candidate rezone site level would not likely exceed SMAQMD criteria pollutant thresholds with implementation of SMAQMD's dust-reducing BMPs. The following discussion presents the impacts associated with the aggregate buildout of the Project (i.e., totality of all future development allowed on the candidate rezone sites with the Project) and is essentially a cumulative analysis of the Project.

Tables AQ-4 and AQ-5 summarize the modeled maximum daily (ROG, NO_x, PM_{10}, and $PM_{2.5}$) and annual (PM_{10} and $PM_{2.5}$) emissions from construction activities associated with buildout of the General Plan with and without the Project. Notably, the General Plan EIR analysis evaluated construction-generated impacts of all development allowed under the General Plan, while Table AQ-4 below summarizes construction-generated emissions associated with allowed development on the candidate rezone sites, which are a subset of the total development that was analyzed in the General Plan EIR. Similarly, Table AQ-5 summarizes the emissions from the proposed residential capacity on the candidate rezone sites under the Project.

Table AQ-6 provides a breakdown of the additional emissions that could result from construction activities related to increased capacity allowed under the Project. For specific construction assumptions and modeling inputs, refer to Appendix AQ-1.

Table AQ-4: Maximum Construction-Generated Daily and Annual Emissions of Criteria Air Pollutants and Precursors Emissions from Implementation of the Adopted General Plan (2025–2029)

Construction Year	ROG (lb/day)	NO_X (lb/day)	PM_{10} (lb/day)	$PM_{2.5}$ (lb/day)	PM_{10} (tpy)	$PM_{2.5}$ (tpy)
2025	31	63	18	10	<1	<1
2026	46	43	14	6	1.1	<1
2027	46	56	18	10	1.0	<1
2028	44	40	13	6	<1	<1
2029	28	26	9	5	<1	<1

Construction Year	ROG (lb/day)	NO_X (lb/day)	PM_{10} (lb/day)	$PM_{2.5}$ (lb/day)	PM_{10} (tpy)	$PM_{2.5}$ (tpy)
SMAQMD Thresholds of Significance without BMPs[1]	None	85	0	0	0	0
Threshold Exceeded?	N/A	No	Yes	Yes	Yes	Yes
SMAQMD Thresholds of Significance with BMPs[2]	None	85	80	82	14.6	15
Threshold Exceeded?	N/A	No	No	No	No	No

Notes: ROG = reactive organic gas; NO_X = oxides of nitrogen; PM_{10} = respirable particulate matter; lb/day = pounds per day; tpy = tons per year; SMAQMD = Sacramento Air Quality Management District; BMPs = Best Management Practices

[1] Without implementation of fugitive dust reducing BMPs.

[2] With implementation of fugitive dust reducing BMPs.

Source: Modeling conducted by Ascent Environmental in 2024.

Table AQ-5: Maximum Construction-Generated Daily and Annual Emissions of Criteria Air Pollutants and Precursors Emissions Associated with Implementation of Project

Construction Year	ROG (lb/day)	NO_X (lb/day)	PM_{10} (lb/day)	$PM_{2.5}$ (lb/day)	PM_{10} (tpy)	$PM_{2.5}$ (tpy)
2025	72	63	19	10	1.5	<1
2026	91	45	16	7	1.9	<1
2027	92	56	19	10	1.7	<1
2028	93	42	16	7	1.7	<1
2029	68	26	10	5	1.1	<1
SMAQMD Thresholds of Significance without BMPs[1]	None	85	0	0	0	0
Threshold Exceeded?	N/A	No	Yes	Yes	Yes	Yes
SMAQMD Thresholds of Significance with BMPs[2]	None	85	80	82	14.6	15
Threshold Exceeded?	N/A	No	No	No	No	No

Notes: ROG = reactive organic gas; NO_X = oxides of nitrogen; PM_{10} = respirable particulate matter; lb/day = pounds per day; tpy = tons per year; SMAQMD = Sacramento Air Quality Management District BMPs = Best Management Practices

[1] Without implementation of fugitive dust reducing BMPs.

[2] With implementation of fugitive dust reducing BMPs.

Source: Modeling conducted by Ascent Environmental in 2024.

Table AQ-6: Difference in Maximum Construction-Generated Daily and Annual Emissions of Criteria Air Pollutants and Precursors Emissions Associated with Implementation of Adopted General Plan and Project[1]

Construction Year	ROG (lb/day)	NO_X (lb/day)	PM_{10} (lb/day)	$PM_{2.5}$ (lb/day)	PM_{10} (tpy)	$PM_{2.5}$ (tpy)
2025	+41	0	+1	0	+1	0
2026	+45	+2	+3	0	+1	0
2027	+47	0	+1	0	+1	0
2028	+49	+2	+3	+1	+1	0
2029	+40	0	+1	0	+1	0

Notes: ROG = reactive organic gas; NO_X = oxides of nitrogen; PM_{10} = respirable particulate matter; lb/day = pounds per day; tpy = tons per year; SMAQMD = Sacramento Air Quality Management District BMPs = Best Management Practices

[1] Numbers in the table represent Project (Table AQ-4) minus General Plan emissions (Table AQ-3). + indicates that the Project would result in greater emissions on the candidate rezone sites as compared to the General Plan.

Source: Modeling conducted by Ascent Environmental in 2024.

According to the SMAQMD guidance, projects that do not implement SMAQMD's BMPs must meet a zero threshold for peak daily and annual emissions for PM_{10} and $PM_{2.5}$. With implementation of SMAQMD's BMPs, the SMAQMD's peak daily and annual thresholds increase to 80 lb/day or 14.6 tpy for PM_{10} and 82 lb/day or 15 tpy for $PM_{2.5}$. As shown above in Table AQ-5, construction activities associated with implementation of the Project are anticipated to generate emissions in exceedance of the established maximum daily threshold for PM_{10} and $PM_{2.5}$ without implementation of SMAQMD's BMPs. As shown in Table AQ-6, construction of the additional residential units allowed by the Project would result in slightly greater emissions than development on the candidate rezone sites under the current zoning.

Given the cumulative nature of this analysis, construction Countywide could exceed 35 acres per day, on any given day, with or without the Project. The Project emissions presented in Table AQ-5, along with other construction occurring in the County, could exceed annual emissions thresholds. As discussed above at the individual candidate rezone site level, construction emissions at an individual candidate rezone site level would not likely exceed SMAQMD criteria pollutant thresholds with implementation of SMAQMD's dust-reducing BMPs. The General Plan EIR determined that criteria pollutant emissions related to construction would be significant (at a cumulative level of analysis), and because construction-related emissions associated with the Project and other unmitigated construction occurring in the County would contribute to overall emissions in the air basin, impacts would be more severe. Because the impact associated with the Project is more severe relative to the impact identified in the General Plan EIR, this change in impact is considered significant.

MITIGATION MEASURES

MITIGATION MEASURE AQ-1: IMPLEMENT SMAQMD'S BASIC CONSTRUCTION EMISSION CONTROL PRACTICES

For all development on candidate rezone sites identified as part of the Project, construction contractors shall implement SMAQMD's Basic Construction Emission Control Practices as conditions of approval, including the following:

- water all exposed surfaces two times daily. Exposed surfaces include, but are not limited to soil piles, graded areas, unpaved parking areas, staging areas, and access roads;
- cover or maintain at least two feet or free board space on haul trucks transporting soil, sand, or other loose material on the site. Any haul trucks that would be traveling along freeways or major roadways should be covered;
- use wet power vacuum street sweepers to remove any visible trackout mud or dirt onto adjacent public roads at least once a day. Use of dry power sweeping is prohibited;
- limit vehicle speeds on unpaved roads to 15 miles per hour (mph);
- complete construction of all roadways, driveways, sidewalks, parking lots as soon as possible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used;
- minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes [required by California Code of Regulations, Title 13, sections 2449(d)(3) and 2485]. Provide clear signage that posts this requirement for workers at the entrances to the site; and
- maintain all construction equipment in proper working condition according to manufacturer's specifications. The equipment must be checked by a certified mechanic and determined to be running in proper condition before it is operated.

SIGNIFICANCE AFTER MITIGATION

With implementation of SMAQMD's Basic Construction Emission Control Practices dust control measures, the emissions thresholds for PM_{10} and $PM_{2.5}$ would be 80 lb/day or 14.6 tpy of PM_{10} and 82 lb/day or 15 tpy of $PM_{2.5}$. The dust control measures outlined in Mitigation Measure AQ-1 would reduce impacts related to fugitive dust emissions by reducing dust generated by vehicle movement through the watering of exposed surfaces and limiting vehicle speeds on unpaved roads, reducing the potential for dust to escape hauling trucks by placing covers over the truck beds when on major roadways, wet-vacuuming mud/dirt tracked onto public roadways, and completing high-movement areas (e.g., roadways, sidewalk, and parking lots) as soon as possible to reduce the amount of unpaved surfaces that could result in dust generation. As discussed above under "Individual Candidate Rezone Site Impact Evaluation," construction emissions at an individual candidate rezone site level would not likely exceed SMAQMD criteria pollutant thresholds with implementation of Mitigation Measure AQ-1.

At an aggregate buildout of the Project level, as shown in Table AQ-5, with implementation of the feasible SMAQMD's BMPs identified in Mitigation Measure AQ-1, the daily emissions resulting from construction of additional residential development allowed under the Project would not exceed applicable thresholds. However, because the General Plan EIR concluded that construction-generated emissions of criteria pollutants associated with county-wide development of all land use types would be significant and unavoidable (at a cumulative level of analysis), and the proposed Project would generate more emissions than what was accounted for in the General Plan EIR, the Project would result in a more severe impact. Therefore, pursuant to CEQA Guidelines Section 15162, the Project would result in a more severe impact, and the impact remains significant and unavoidable. The Project's contribution to impacts would be significant and unavoidable and the overall impacts would remain significant and unavoidable.

Although construction activities associated with the Project would result in slightly greater total mass emissions than identified in the General Plan EIR, as shown in Tables AQ-7 and AQ-8 below, construction of the Project would result in fewer emissions per capita. While development allowed under the proposed Project would result in more total units constructed than what was analyzed in the General Plan EIR, implementation of the Project would result in a more efficient distribution of emissions per capita due to the denser development allowed under the Project through rezoning relative to the number of units accounted for in the General Plan. Increasing housing density results in fewer criteria pollutant emissions per capita, or the criteria pollutant emissions associated either directly or indirectly with a single person. This is because emissions of criteria pollutants associated with sources such as mobile sources, area sources, and energy sources are considered more efficient when the associated development houses a larger number of people in a smaller area. Therefore, the proposed rezone would be considered more efficient in terms of emissions per capita because the rezone would result in a greater number of people being housed within the same development footprint. Decreasing per capita emissions, especially those related to VMT, aligns with the goals of the 2022 SIP (CARB 2022b: 73).

Table AQ-7: Emissions per Capita Associated with Existing Residential Capacity Under the General Plan[1]

Construction Year	ROG (lb/day/capita)	NO_X (lb/day/capita)	PM_{10} (lb/day/capita)	$PM_{2.5}$ (lb/day/capita)
2025	0.00336	0.00678	0.00197	0.00112
2026	0.00489	0.00461	0.00145	0.00069
2027	0.00489	0.00599	0.00193	0.00108
2028	0.00474	0.00428	0.00143	0.00067
2029	0.00300	0.00278	0.00096	0.00053
Average	0.00418	0.00489	0.00155	0.00082

Notes: lb/day/capita = pounds per day per capita; ROG = reactive organic gas; NO_X = oxides of nitrogen; PM_{10} = respirable particulate matter; $PM_{2.5}$ = fine particulate matter.

[1] Assumed Population of 9,347from CalEEMod defaults

Source: Modeling conducted by Ascent Environmental in 2024.

Table AQ-8: Emissions per Capita Associated with Proposed Residential Capacity Under the Proposed Rezone[1]

Construction Year	ROG (lb/day/capita)	NO_X (lb/day/capita)	PM_{10} (lb/day/capita)	$PM_{2.5}$ (lb/day/capita)
2025	0.00347	0.00305	0.00092	0.00050
2026	0.00439	0.00216	0.00078	0.00033
2027	0.00445	0.00270	0.00091	0.00049
2028	0.00448	0.00202	0.00079	0.00033
2029	0.00326	0.00125	0.00047	0.00024
Average	0.00401	0.00224	0.00078	0.00038

Notes: lb/day/capita = pounds per day per capita; ROG = reactive organic gas; NO_X = oxides of nitrogen; PM_{10} = respirable particulate matter; $PM_{2.5}$ = fine particulate matter.

[1] Assumed Population of 20,773 from CalEEMod defaults

Source: Modeling conducted by Ascent Environmental in 2024.

DISTINCT AREA PLANS

FAIR OAKS BOULEVARD CORRIDOR PLAN

ENVIRONMENTAL IMPACT REPORT DETERMINATION

The Fair Oaks Boulevard EIR determined that, despite the application of the dust control measures required by SMAQMD's Rule 403, the Fair Oaks Boulevard Corridor Plan would have a significant and unavoidable impact related to fugitive dust from construction activities due to the potential for construction to occur across a large area (greater than 15 acres), thus reducing the effectiveness of SMAQMD Rule 403. In a separate impact, it was determined that the Fair Oaks Boulevard Corridor Plan would have a less than significant impact related to construction-generated emissions of ozone precursors and diesel PM with the application of adopted Mitigation Measure AQ-1 identified in the Fair Oaks Boulevard EIR. Finally, the Fair Oaks Boulevard EIR determined that construction of roadways associated with the Fair Oaks Boulevard Corridor Plan would have a less-than-significant impact related to emissions of fugitive dust, ROG, NO_x, and PM_{10}.

IMPACT EVALUATION

INDIVIDUAL CANDIDATE REZONE SITE IMPACT EVALUATION

As stated above, SMAQMD has developed construction emissions screening levels to assist a project proponent or lead agency in determining if NO_X and/or PM emissions from constructing a project in Sacramento County would exceed the SMAQMD construction-related criteria pollutant emissions significance thresholds for these pollutants. It cannot be guaranteed at this level of analysis, that construction activities associated with increased residential capacity on Site 67 would be within the parameters listed above under Impact AQ-1's "Individual Candidate Rezone Site Impact Evaluation" section discussion for screening out projects.

As detailed above, emissions are estimated for the largest candidate rezone site (Site 15). Although not located within this distinct area plan, Site 15 is exemplary in terms of being the largest candidate rezone site in acreage, and one of the greatest increases in units permitted with proposed maximum density and thus represents the most conservative scenario for representing Project construction emissions. As shown in Table AQ-3, construction emissions associated with increased residential capacity on Site 15 would not exceed SMAQMD criteria pollutant thresholds with implementation of SMAQMD's dust-reducing BMPs. Compared to Site 15, Site 67 has less acreage (at 1.25 acres) and results in a lesser increase in units permitted with proposed maximum density (increase of 12 units beyond the existing maximum permitted). As such, it is unlikely that development on Site 67 as part of the Project would result in construction emissions exceeding SMAQMD criteria pollutant thresholds with implementation of SMAQMD's dust-reducing BMPs.

AGGREGATE BUILDOUT IMPACT EVALUATION

Construction activities related to the Fair Oaks Boulevard EIR are assumed to begin in January 2025 and conclude in June 2025. For specific construction assumptions and modeling inputs, refer to Appendix AQ-1. Tables AQ-9 and AQ-10 summarize the modeled maximum daily (ROG, NO_x, PM_{10}, and $PM_{2.5}$) and annual (PM_{10}, and $PM_{2.5}$) emissions from construction activities associated with buildout of the Fair Oaks Boulevard Corridor Plan with existing allowed development on Site 67 and with Project development on Site 67, respectively. Notably, the Fair Oaks Boulevard EIR analysis evaluated construction-generated impacts of all development within the Fair Oaks Boulevard area, while Table AQ-9 summarizes construction-generated emissions related to the previously analyzed candidate rezone site, which is a subset of the total development that was analyzed in the Fair Oaks Boulevard EIR. Similarly, Table AQ-10 summarizes the emissions from the proposed residential capacity on Site 67 under the Project.

Table AQ-11 provides a breakdown of the additional emissions that could result from construction activities related to increased capacity on Site 67 allowed under the Project. For specific construction assumptions and modeling inputs, refer to Appendix AQ-1.

Table AQ-9: Maximum Construction-Generated Daily and Annual Emissions of Criteria Air Pollutants and Precursors Emissions from Development Under the Existing Residential Capacity Within the Fair Oaks Boulevard Corridor Area

Construction Year	ROG (lb/day)	NO_X (lb/day)	PM_{10} (lb/day)	$PM_{2.5}$ (lb/day)	PM_{10} (tpy)	$PM_{2.5}$ (tpy)
2025	3	14	4	2	<1	<1
SMAQMD Thresholds of Significance without BMPs[1]	None	85	0	0	0	0
Threshold Exceeded?	N/A	No	Yes	Yes	Yes	Yes
SMAQMD Thresholds of	None	85	80	82	14.6	15

Construction Year	ROG (lb/day)	NO_X (lb/day)	PM_{10} (lb/day)	$PM_{2.5}$ (lb/day)	PM_{10} (tpy)	$PM_{2.5}$ (tpy)
Significance with BMPs[2]						
Threshold Exceeded?	N/A	No	No	No	No	No

Notes: ROG = reactive organic gas; NO_X = oxides of nitrogen; PM_{10} = respirable particulate matter; lb/day = pounds per day; tpy = tons per year; SMAQMD = Sacramento Air Quality Management District; BMPs = Best Management Practices

[1] Without implementation of fugitive dust reducing BMPs.

[2] With implementation of fugitive dust reducing BMPs.

Source: Modeling conducted by Ascent Environmental in 2024.

Table AQ-10: Maximum Construction-Generated Daily and Annual Emissions of Criteria Air Pollutants and Precursors Emissions Associated With Implementation of the Project on Site 67 Within the Fair Oaks Boulevard Corridor Area

Construction Year	ROG (lb/day)	NO_X (lb/day)	PM_{10} (lb/day)	$PM_{2.5}$ (lb/day) s	PM_{10} (tpy)	$PM_{2.5}$ (tpy)
2025	4	14	4	2	<1	<1
SMAQMD Thresholds of Significance without BMPs[1]	None	85	0	0	0	0
Threshold Exceeded?	N/A	No	Yes	Yes	Yes	Yes
SMAQMD Thresholds of Significance with BMPs[2]	None	85	80	82	14.6	15
Threshold Exceeded?	N/A	No	No	No	No	No

Notes: ROG = reactive organic gas; NO_X = oxides of nitrogen; PM_{10} = respirable particulate matter; lb/day = pounds per day; tpy = tons per year; SMAQMD = Sacramento Air Quality Management District; BMPs = Best Management Practices

[1] Without implementation of fugitive dust reducing BMPs.

[2] With implementation of fugitive dust reducing BMPs.

Source: Modeling conducted by Ascent Environmental in 2024.

Table AQ-11: Difference in Maximum Construction-Generated Daily and Annual Emissions of Criteria Air Pollutants and Precursors Emissions Associated with Implementation of Project on Site 67 Within the Fair Oaks Boulevard Corridor Area

Construction Year	ROG (lb/day)	NO_X (lb/day)	PM_{10} (lb/day)	$PM_{2.5}$ (lb/day)	PM_{10} (tpy)	$PM_{2.5}$ (tpy)
2025	+1	0	0	0	<1	<1

Notes: ROG = reactive organic gas; NO_X = oxides of nitrogen; PM_{10} = respirable particulate matter; lb/day = pounds per day; tpy = tons per year; SMAQMD = Sacramento Air Quality Management District BMPs = Best Management Practices.

[1] Numbers in the table represent development in the Fair Oaks Boulevard Corridor Area (Table AQ-9) minus development proposed in the Fair Oaks Boulevard EIR (Table AQ-10). + indicates that the Project would result in greater emissions on the candidate rezone sites as compared to the Fair Oaks Boulevard EIR.

Source: Modeling conducted by Ascent Environmental in 2024.

According to the SMAQMD guidance, projects that do not implement SMAQMD's BMPs must meet a zero threshold for peak daily and annual emissions for PM_{10} and $PM_{2.5}$. With implementation of SMAQMD's BMPs, the SMAQMD's peak daily and annual thresholds increase to 80 lb/day or 14.6 tpy for PM_{10} and 82 lb/day or 15 tpy for $PM_{2.5}$. As shown above in Table AQ-8, construction activities associated with the proposed rezone of Site 67 are anticipated to generate emissions in exceedance of the established maximum daily threshold for PM_{10}, and $PM_{2.5}$ without implementation of SMAQMD's BMPs.

As shown in Tables AQ-9 and AQ-10, construction of the additional residential units on Site 67 within the Fair Oaks Boulevard area allowed by the Project would result in slightly greater emissions than under the current zoning (see Table AQ-11 for the difference in emissions between residential capacity accounted for in the Fair Oaks Boulevard EIR versus the Project). Because the impact associated with Site 67 under the Project is more severe relative to the impact identified in the Fair Oaks Boulevard EIR, this change in impact is considered significant.

MITIGATION MEASURES

Implement Mitigation Measure AQ-1 and Mitigation Measure FO-AQ-1.

FAIR OAKS BOULEVARD CORRIDOR PLAN EIR ADOPTED MITIGATION MEASURES

Adopted Mitigation Measure FO-AQ-1[1] (below) from the Fair Oaks Boulevard EIR states that when emissions exceed the SMAQMD construction thresholds of significance, the current SMAQMD-recommended mitigation in effect at the time of project application shall be implemented (County of Sacramento 2011). Currently, SMAQMD recommends the application of the Enhanced On-Site Exhaust Controls to reduce NO_X emissions (SMAQMD 2019). Therefore, this mitigation measure that would apply to Site 67 and has been updated to reflect the most recent mitigation recommended by SMAQMD.

<u>Mitigation Measure FO-AQ-1: Construction Ozone Precursor Emissions and Diesel Particulates</u>

> Development proposals on Site 67 that exceed the SMAQMD NO_x screening levels shown in Table AQ-12 of the Fair Oaks Boulevard EIR, or any similar screening standard adopted by SMAQMD at the time of project application, shall be required to prepare construction emission estimates based on projected construction timelines and equipment lists prior to approval of improvement plans. When emissions exceed the SMAQMD construction thresholds of significance (currently of 85 pounds per day of NO_x) or the applicable standard in place at the time of application, the following measure shall be implemented:
>
> 1. The project applicant, or its designee, shall provide a plan for approval by the Sac Metro Air District that demonstrates the heavy-duty off-road vehicles (50 horsepower or more) to be used 8 hours or more during the construction project will achieve a project wide fleet-average 10 percent NO_X reduction compared to

[1] "FO" added for distinction with other mitigation measures.

the most recent California Air Resources Board (CARB) fleet average. The plan shall have two components: an initial report submitted before construction and a final report submitted at the completion.

- Submit the initial report at least four (4) business days prior to construction activity using the Sac Metro Air District's Construction Mitigation Tool
- Provide project information and construction company information.
- Include the equipment type, horsepower rating, engine model year, projected hours of use, and the CARB equipment identification number for each piece of equipment in the plan. Incorporate all owned, leased and subcontracted equipment to be used.
- Submit the final report at the end of the job, phase, or calendar year, as pre-arranged with Sac Metro Air District staff and documented in the approval letter, to demonstrate continued project compliance.

2. The Sac Metro Air District may conduct periodic site inspections to determine compliance. Nothing in this mitigation shall supersede other air district, state or federal rules or regulations.
3. This mitigation will sunset on January 1, 2028, when full implementation of the CARB In-Use Off-Road Regulation is expected.

SIGNIFICANCE AFTER MITIGATION

With implementation of SMAQMD's Basic Construction Emission Control Practices proposed dust control measures, the emissions thresholds for PM_{10} and $PM_{2.5}$ would be 80 lb/day or 14.6 tpy of PM_{10} and 82 lb/day or 15 tpy of $PM_{2.5}$. The dust control measures outlined in Mitigation Measure AQ-1 would reduce impacts related to fugitive dust emissions by reducing dust generated by vehicle movement through the watering of exposed surfaces and limiting vehicle speeds on unpaved roads, reducing the potential for dust to escape hauling trucks by placing covers over the truck beds when on major roadways, wet-vacuuming mud/dirt tracked onto public roadways, and completing high-movement areas (e.g., roadways, sidewalk, and parking lots) as soon as possible to reduce the amount of unpaved surfaces that could result in dust generation. As shown in Table AQ-10, with implementation of the feasible SMAQMD's BMPs identified in Mitigation Measure AQ-1, the daily emissions resulting from construction of additional residential development allowed under the Project on Site 67 would not exceed applicable thresholds. Additionally, should construction on Site 67 result in exceedances of SMAQMD's NO_x threshold and/or ROG threshold adopted at the time of project applications, application of Mitigation Measure FO-AQ-1 would reduce impacts related to NO_x and diesel PM by requiring that a project wide fleet-average 10 percent NO_X reduction be achieved compared to the most recent CARB fleet average.

Cumulatively, the Fair Oaks Boulevard Corridor EIR concluded that construction-generated emissions of criteria pollutants associated with development within the Fair Oaks Boulevard Corridor area would be significant and unavoidable. The proposed rezone on Site 67 allowed under the Project would generate more emissions than what was accounted for in the Fair Oaks Boulevard EIR. Pursuant to CEQA Guidelines Section 15162, the proposed

rezone on Site 67 would result in a more severe impact than was disclosed in the Fair Oaks Boulevard EIR. Therefore, the Project's contribution to impacts from rezoning Site 67 would be significant and overall impacts would be significant and unavoidable.

It should be noted that, although construction activities associated with allowed development on Site 67 under the Project would result in slightly greater total mass emissions than identified in the Fair Oaks Boulevard EIR, as shown in Tables AQ-12 and AQ-13, construction of the Project would result in fewer emissions per capita. While development allowed on Site 67 under the proposed Project would result in more total units constructed than what was analyzed in the Fair Oaks Boulevard EIR, implementation of the Project would result in a more efficient distribution of emissions per capita due to the denser development allowed under the Project through rezoning relative to the number of units accounted for in the Fair Oaks Boulevard EIR. Increasing housing density results in fewer criteria pollutant emissions per capita, or the criteria pollutant emissions associated either directly or indirectly with a single person. This is because emissions of criteria pollutants associated with sources such as mobile sources, area sources, and energy sources are considered more efficient when the associated development houses a larger number of people in a smaller area. For this reason, the proposed rezone would be considered more efficient in terms of emissions per capita because the rezone would result in a greater number of people being housed within the same development footprint. Decreasing per capita emissions, especially those related to VMT, aligns with the goals of the 2022 SIP (CARB 2022b: 73).

Table AQ-12: Emissions per Capita Associated Construction of Existing Residential Capacity Within the Fair Oaks Boulevard Corridor Area[1]

Construction Year	ROG (lb/day/capita)	NO_X (lb/day/capita)	PM_{10} (lb/day/capita)	$PM_{2.5}$ (lb/day/capita)
2025	0.047	0.201	0.050	0.028

Notes: lb/day/capita = pounds per day per capita; ROG = reactive organic gas; NO_X = oxides of nitrogen; PM_{10} = respirable particulate matter; $PM_{2.5}$ = fine particulate matter.

[1]Assumed Population of 70 from CalEEMod Defaults

Source: Modeling conducted by Ascent Environmental in 2024.

Table AQ-13: Emissions per Capita Associated with Construction of Project On Site 67 Within the Fair Oaks Boulevard Corridor Area[1]

Construction Year	ROG (lb/day)	NO_X (lb/day)	PM_{10} (lb/day)	$PM_{2.5}$ (lb/day)
2025	0.042	0.136	0.034	0.019

Notes: lb/day/capita = pounds per day per capita; ROG = reactive organic gas; NO_X = oxides of nitrogen; PM_{10} = respirable particulate matter; $PM_{2.5}$ = fine particulate matter.

[1]Assumed Population of 104 from CalEEMod Default

Source: Modeling conducted by Ascent Environmental in 2024.

NORTH WATT AVENUE CORRIDOR PLAN

ENVIRONMENTAL IMPACT REPORT DETERMINATION

The North Watt Avenue EIR, determined that, despite the application of the dust control measures required by SMAQMD's Rule 403, the North Watt Avenue Corridor Plan would have a significant and unavoidable impact related to fugitive dust from construction activities due to the potential for construction to occur across a large area (greater than 15 acres), thus reducing the effectiveness of SMAQMD Rule 403. In a separate impact, it was determined that the North Watt Avenue Corridor Plan would have a less than significant impact related to construction-generated emissions of ozone precursors and diesel PM with the application of adopted Mitigation Measure AQ-1 identified in the North Watt Avenue EIR.

IMPACT EVALUATION

INDIVIDUAL CANDIDATE REZONE SITE IMPACT EVALUATION

As stated above, SMAQMD has developed construction emissions screening levels to assist a project proponent or lead agency in determining if NO_X and/or PM emissions from constructing a project in Sacramento County would exceed the SMAQMD construction-related criteria pollutant emissions significance thresholds for these pollutants. In regard to Sites 68 through 72, it cannot be guaranteed at this level of analysis, that construction activities associated with increased residential capacity on Sites 68 through 72 would exclude the parameters listed above under Impact AQ-1's "Individual Candidate Rezone Site Impact Evaluation" section discussion for screening out projects.

As detailed above, emissions are estimated for the largest candidate rezone site (Site 15). Although not located within this distinct area plan, Site 15 is exemplary in terms of being the largest candidate rezone site in acreage, and one of the greatest increases in units permitted with proposed maximum density and thus represents the most conservative scenario to represent Project construction emissions. As shown in Table AQ-3 above, construction emissions associated with increased residential capacity on Site 15 would not exceed SMAQMD criteria pollutant thresholds with implementation of SMAQMD's dust-reducing BMPs. Compared to Site 15, Sites 68 through 72 have less acreage (largest site being 6.35 acres) and result in a lesser increase in units permitted with proposed maximum density (greatest increase being 69 units beyond the existing maximum permitted). As such, it is unlikely that development on Sites 68 through 72 as part of the Project would result in construction emissions exceeding SMAQMD criteria pollutant thresholds with implementation of SMAQMD's dust-reducing BMPs.

AGGREGATE BUILDOUT IMPACT EVALUATION

Construction on Sites 68 through 72 within the North Watt Avenue Corridor area is assumed to begin after the completion of construction on Site 67 in June 2025 and would conclude in March 2027. For specific construction assumptions and modeling inputs, refer to Appendix AQ-1. Table AQ-14 and Table AQ-15 summarize the modeled maximum daily (ROG, NO_x, PM_{10}, and $PM_{2.5}$) and annual (PM_{10} and $PM_{2.5}$) emissions from construction activities from buildout of the North Watt Avenue Corridor Plan without and with the proposed rezone on Sites 68 through 72, respectively. Notably, the North Watt

Avenue EIR analysis evaluated construction-generated impacts of all development within the North Watt Avenue area, while Table AQ-14 below summarizes construction-generated emissions related to the previously analyzed candidate rezone sites, which are a subset of the total development that was analyzed in the North Watt Avenue EIR. Similarly, Table AQ-15 summarizes the emissions from the proposed increase in residential capacity on Sites 68 through 72 under the Project.

Table AQ-16 provides a breakdown of the additional emissions that could result from construction activities related to increased capacity allowed under the Project. For specific construction assumptions and modeling inputs, refer to Appendix AQ-1.

Table AQ-14: Maximum Construction-Generated Daily and Annual Emissions of Criteria Air Pollutants and Precursors Emissions from Development Under the Existing Residential Capacity Within the North Watt Avenue Corridor Area

Construction Year	ROG (lb/day)	NO_X (lb/day)	PM_{10} (lb/day)	$PM_{2.5}$ (lb/day)	PM_{10} (tpy)	$PM_{2.5}$ (tpy)
2025	3	32	9	5	<1	<1
2026	18	14	4	1	<1	<1
2027	18	13	4	1	<1	<1
SMAQMD Thresholds of Significance without BMPs[1]	None	85	0	0	0	0
Threshold Exceeded?	N/A	No	Yes	Yes	Yes	Yes
SMAQMD Thresholds of Significance with BMPs[2]	None	85	80	82	14.6	15
Threshold Exceeded?	N/A	No	No	No	No	No

Notes: ROG = reactive organic gas; NO_X = oxides of nitrogen; PM_{10} = respirable particulate matter; lb/day = pounds per day; tpy = tons per year; SMAQMD = Sacramento Air Quality Management District BMPs = Best Management Practices

[1] Without implementation of fugitive dust reducing BMPs.

[2] With implementation of fugitive dust reducing BMPs.

Source: Modeling conducted by Ascent Environmental in 2024.

Table AQ-15: Maximum Construction-Generated Daily and Annual Emissions of Criteria Air Pollutants and Precursors Emissions Associated With Implementation of the Project on Sites 68 Through 72 Within the North Watt Avenue Corridor Area

Construction Year	ROG (lb/day) Emissions	NO_X (lb/day) Emissions	PM_{10} (lb/day) Emissions	$PM_{2.5}$ (lb/day) Emissions	PM_{10} (tpy) Emissions	$PM_{2.5}$ (tpy) Emissions
2025	3	32	9	5	<1	<1
2026	23	16	6	2	<1	<1
2027	23	15	6	2	<1	<1
SMAQMD Thresholds of Significance without BMPs[1]	None	85	0	0	0	0

Construction Year	ROG (lb/day) Emissions	NO_X (lb/day) Emissions	PM_{10} (lb/day) Emissions	$PM_{2.5}$ (lb/day) Emissions	PM_{10} (tpy) Emissions	$PM_{2.5}$ (tpy) Emissions
Threshold Exceeded?	N/A	No	Yes	Yes	Yes	Yes
SMAQMD Thresholds of Significance with BMPs[2]	None	85	80	82	14.6	15
Threshold Exceeded?	N/A	No	No	No	No	No

Notes: ROG = reactive organic gas; NO_X = oxides of nitrogen; PM_{10} = respirable particulate matter; lb/day = pounds per day; tpy = tons per year; SMAQMD = Sacramento Air Quality Management District BMPs = Best Management Practices

[1] Without implementation of fugitive dust reducing BMPs.

[2] With implementation of fugitive dust reducing BMPs.

Source: Modeling conducted by Ascent Environmental in 2024.

Table AQ-16: Difference in Maximum Construction-Generated Daily and Annual Emissions of Criteria Air Pollutants and Precursors Emissions Associated with Implementation of Project on Sites 68 Through 72 Within the North Watt Avenue Corridor Area

Construction Year	ROG (lb/day)	NO_X (lb/day)	PM_{10} (lb/day)	$PM_{2.5}$ (lb/day)	PM_{10} (tpy)	$PM_{2.5}$ (tpy)
2025	0	0	0	0	<1	<1
2026	+5	+2	+2	+1	<1	<1
2027	+5	+2	+2	+1	<1	<1

Notes: ROG = reactive organic gas; NO_X = oxides of nitrogen; PM_{10} = respirable particulate matter; lb/day = pounds per day; tpy = tons per year; SMAQMD = Sacramento Air Quality Management District BMPs = Best Management Practices.

[1] Numbers in the table represent development in the North Watt Avenue Corridor area (Table AQ-14) minus development proposed in the North Watt Avenue EIR (Table AQ-13). + indicates that the Project would result in greater emissions on the candidate rezone sites as compared to the North Watt Avenue EIR.

Source: Modeling conducted by Ascent Environmental in 2024.

According to the SMAQMD guidance, projects that do not implement SMAQMD's BMPs must meet a zero threshold for peak daily and annual emissions for PM_{10} and $PM_{2.5}$. With implementation of SMAQMD's BMPs, the SMAQMD's peak daily and annual thresholds increase to 80 lb/day or 14.6 tpy for PM_{10} and 82 lb/day or 15 tpy for $PM_{2.5}$. As shown above in Table AQ-14, construction activities on Sites 68 through 72 are anticipated to generate emissions in exceedance of the established maximum daily threshold for PM_{10}, and $PM_{2.5}$ without implementation of SMAQMD's BMPs.

As shown in Tables AQ-14 and AQ-15, construction of the additional residential units on Sites 68 through 72 within the North Watt Avenue Corridor area allowed by the Project would result in slightly greater emissions than under the current zoning (see Table AQ-16 for the difference in emissions between residential capacity accounted for in the North Watt Avenue EIR versus the Project). Therefore, because the North Watt Avenue EIR determined that criteria pollutant emissions related to construction would be significant, construction-related emissions associated with the Project would be more severe.

Because the impact associated with the Project is more severe relative to the impact identified in the North Watt Avenue EIR, this change in impact is considered significant.

MITIGATION MEASURES

Implement Mitigation Measure AQ-1 and Mitigation Measure NW-AQ-1.

NORTH WATT AVENUE CORRIDOR PLAN ADOPTED MITIGATION MEASURES

Adopted Mitigation Measure NW-AQ-1[2] (below) from the North Watt Avenue EIR states that when emissions exceed the SMAQMD construction thresholds of significance, the current SMAQMD-recommended mitigation in effect at the time of project application shall be implemented (County of Sacramento 2011b). Currently, SMAQMD recommends the application of the Enhanced On-Site Exhaust Controls as mitigation to reduce NO_X emissions (SMAQMD 2019). Therefore, this mitigation measure that would apply to Sites 68 through 72 has been updated to reflect the most recent mitigation recommended by SMAQMD.

MITIGATION MEASURE NW-AQ-1: CONSTRUCTION OZONE PRECURSOR EMISSIONS AND DIESEL PARTICULATES

Development proposals on Sites 68 through 72 that exceed the SMAQMD NO_x screening levels, or any similar screening standard adopted by SMAQMD at the time of project application, shall be required to prepare construction emission estimates based on projected construction timelines and equipment lists prior to approval of improvement plans. When emissions exceed the SMAQMD construction thresholds of significance (currently of 85 pounds per day of NO_x) or the applicable standard in place at the time of application, the following measure shall be implemented:

1. The project applicant, or its designee, shall provide a plan for approval by the Sac Metro Air District that demonstrates the heavy-duty off-road vehicles (50 horsepower or more) to be used 8 hours or more during the construction project will achieve a project wide fleet-average 10 percent NO_X reduction compared to the most recent California Air Resources Board (CARB) fleet average. The plan shall have two components: an initial report submitted before construction and a final report submitted at the completion.
    - Submit the initial report at least four (4) business days prior to construction activity using the Sac Metro Air District's Construction Mitigation Tool
    - Provide project information and construction company information.
    - Include the equipment type, horsepower rating, engine model year, projected hours of use, and the CARB equipment identification number for each piece of equipment in the plan. Incorporate all owned, leased and subcontracted equipment to be used.

[2] "NW" has been added to distinguish mitigation measures.

- Submit the final report at the end of the job, phase, or calendar year, as pre-arranged with Sac Metro Air District staff and documented in the approval letter, to demonstrate continued project compliance.

2. The Sac Metro Air District may conduct periodic site inspections to determine compliance. Nothing in this mitigation shall supersede other air district, state or federal rules or regulations.
3. This mitigation will sunset on January 1, 2028, when full implementation of the CARB In-Use Off-Road Regulation is expected.

SIGNIFICANCE AFTER MITIGATION

With implementation of SMAQMD's Basic Construction Emission Control Practices proposed dust control measures, the emissions thresholds for PM_{10} and $PM_{2.5}$ would be 80 lb/day or 14.6 tpy of PM_{10} and 82 lb/day or 15 tpy of $PM_{2.5}$. The dust control measures outlined in Mitigation Measure AQ-1 would reduce impacts related to fugitive dust emissions by reducing dust generated by vehicle movement through the watering of exposed surfaces and limiting vehicle speeds on unpaved roads, reducing the potential for dust to escape hauling trucks by placing covers over the truck beds when on major roadways, wet-vacuuming mud/dirt tracked onto public roadways, and completing high-movement areas (e.g., roadways, sidewalk, and parking lots) as soon as possible to reduce the amount of unpaved surfaces that could result in dust generation. As shown in Table AQ-15, with implementation of the feasible SMAQMD's BMPs identified in Mitigation Measure AQ-1, the daily emissions resulting from construction of additional residential development allowed under the Project on Sites 68 through 72 would not exceed applicable thresholds. Additionally, should construction on Sites 68 through 72 result in exceedances of SMAQMD's NO_x threshold and/or ROG threshold adopted at the time of project applications, application of Mitigation Measure NW-AQ-1 would reduce impacts related to NO_x and diesel PM by requiring that a project wide fleet-average 10 percent NO_X reduction be achieved compared to the most recent CARB fleet average.

Cumulatively, the North Watt Avenue EIR concluded that construction-generated emissions of criteria pollutants associated with development within the North Watt Avenue Corridor area would be significant and unavoidable The proposed residential capacity allowed under the Project on Sites 68 through 72 would generate slightly more emissions than what was accounted for in the North Watt Avenue EIR. Pursuant to CEQA Guidelines Section 15162, the Project would result in a more severe impact than what was disclosed in the North Watt Avenue EIR. The Project's contribution to impacts from rezoning Sites 68 through 72 would be significant and overall impacts remain significant and unavoidable.

It should be noted that, although construction activities associated with the Project would result in slightly greater total mass emissions than identified in the North Watt Avenue EIR, as shown in Tables AQ-17 and AQ-18 below, construction of the Project would result in fewer emissions per capita. While development allowed under the proposed Project would result in more total units constructed on Sites 68 through 72 than what was analyzed in the North Watt Avenue EIR, implementation of the Project would result in a

more efficient distribution of emissions per capita due to the denser development allowed on Sites 68 through 72 under the Project through rezoning relative to the number of units accounted for on these sites in the North Watt Avenue EIR. Increasing housing density results in fewer criteria pollutant emissions per capita, or the criteria pollutant emissions associated either directly or indirectly with a single person. This is because emissions of criteria pollutants associated with sources such as mobile sources, area sources, and energy sources are considered more efficient when the associated development houses a larger number of people in a smaller area. For this reason, the proposed rezone would be considered more efficient in terms of emissions per capita because the rezone would result in a greater number of people being housed within the same development footprint. Decreasing per capita emissions, especially those related to VMT, aligns with the goals of the 2022 SIP (CARB 2022b: 73).

Table AQ-17: Emissions per Capita Associated with Construction of Existing Residential Capacity Within the North Watt Avenue Corridor Area[1]

Construction Year	ROG (lb/day/capita)	NO_X (lb/day/capita)	PM_{10} (lb/day/capita)	$PM_{2.5}$ (lb/day/capita)
2025	0.002	0.022	0.007	0.004
2026	0.013	0.010	0.003	0.001
2027	0.013	0.009	0.003	0.001
Average	0.009	0.014	0.004	0.002

Notes: lb/day/capita = pounds per day per capita; ROG = reactive organic gas; NO_X = oxides of nitrogen; PM_{10} = respirable particulate matter; $PM_{2.5}$ = fine particulate matter.

[1]Assumed Population of 1,414 From CalEEMod Defaults

Source: Modeling conducted by Ascent Environmental in 2024.

Table AQ-18: Emissions per Capita Associated with Construction of Project On Sites 68 Through 72 Within the North Watt Avenue Corridor Area[1]

Construction Year	ROG (lb./day/capita)	NO_X (lb/day/capita)	PM_{10} (lb/day/capita)	$PM_{2.5}$ (lb/day/capita)
2025	0.002	0.015	0.004	0.003
2026	0.011	0.008	0.003	0.001
2027	0.011	0.007	0.003	0.001
Average	0.008	0.010	0.004	0.001

Notes: lb/day/capita = pounds per day per capita; ROG = reactive organic gas; NO_X = oxides of nitrogen; PM_{10} = respirable particulate matter; $PM_{2.5}$ = fine particulate matter.

[1]Assumed Population of 2,058 From CalEEMod Defaults

Source: Modeling conducted by Ascent Environmental in 2024.

OLD FLORIN TOWN SPA

ENVIRONMENTAL IMPACT REPORT DETERMINATION

The Old Florin Town SPA EIR determined that, despite the application of the dust control measures required by SMAQMD's Rule 403, the Old Florin Town SPA would have a significant and unavoidable impact related to fugitive dust from construction activities due

to the potential for construction to occur across a large area (greater than 15 acres), thus reducing the effectiveness of SMAQMD Rule 403. In a separate impact, it was determined that the Old Florin Town SPA would have a less than significant impact related to construction-generated emissions of ozone precursors and diesel PM with the application of adopted Mitigation Measure AQ-1 identified in the Old Florin Town SPA EIR.

IMPACT EVALUATION

INDIVIDUAL CANDIDATE REZONE SITE IMPACT EVALUATION

As stated above, SMAQMD has developed construction emissions screening levels to assist a project proponent or lead agency in determining if NO_X and/or PM emissions from constructing a project in Sacramento County would exceed the SMAQMD construction-related criteria pollutant emissions significance thresholds for these pollutants. It cannot be guaranteed at this level of analysis that construction activities associated with increased residential capacity on Sites 73 through 79 would be within the parameters listed above under Impact AQ-1's "Individual Candidate Rezone Site Impact Evaluation" section discussion for screening out projects.

As detailed above, emissions are estimated for the largest candidate rezone site (Site 15). Although not located within this distinct area plan, Site 15 is exemplary in terms of being the largest candidate rezone site in acreage, and one of the greatest increases in units permitted with proposed maximum density and thus represents the most conservative scenario to represent Project construction emissions. As shown in Table AQ-3, construction emissions associated with increased residential capacity on Site 15 would not exceed SMAQMD criteria pollutant thresholds with implementation of SMAQMD's dust-reducing BMPs. Compared to Site 15, Sites 73 through 79 have less acreage (largest site being 5.82 acres) and result in a lesser increase in units permitted with proposed maximum density (greatest increase being 58 units beyond the existing maximum permitted). As such, it is unlikely that development on Sites 73 through 79 as part of the Project would result in construction emissions exceeding SMAQMD criteria pollutant thresholds with implementation of SMAQMD's dust-reducing BMPs.

AGGREGATE BUILDOUT IMPACT EVALUATION

Construction activities on Sites 73 through 79 in the Old Florin Town SPA is assumed to begin after the completion of the North Watt Avenue Corridor construction in March 2027 and conclude in November 2028. For specific construction assumptions and modeling inputs, refer to Appendix AQ-1. Tables AQ-19 and AQ-20 summarize the modeled maximum daily (ROG, NO_x, PM_{10}, and $PM_{2.5}$) and annual (PM_{10} and $PM_{2.5}$) emissions from construction activities from buildout of the Old Florin Town SPA without and with the proposed rezone on Sites 73 through 79, respectively. Notably, the Old Florin Town SPA EIR analysis evaluated construction-generated impacts of all development within the Old Florin Town area, while Table AQ-19 below summarizes construction-generated emissions related to development on Sites 73 through 79, which are a subset of the total development that was analyzed in the Old Florin Town SPA EIR. Similarly, Table AQ-20 summarizes the emissions from the proposed increase in residential capacity under the Project.

Table AQ-21 provides a breakdown of the additional emissions that could result from construction activities related to increased capacity allowed under the Project. For specific construction assumptions and modeling inputs, refer to Appendix AQ-1.

Table AQ-19: Maximum Construction-Generated Daily and Annual Emissions of Criteria Air Pollutants and Precursors Emissions from Development Under the Existing Residential Capacity Within the Old Florin Town Special Planning Area

Construction Year	ROG (lb/day)	NO_X (lb/day)	PM_{10} (lb/day)	$PM_{2.5}$ (lb/day)	PM_{10} (tpy)	$PM_{2.5}$ (tpy)
2027	16	28	9	5	<1	<1
2028	16	13	4	1	<1	<1
SMAQMD Thresholds of Significance without BMPs[1]	None	85	0	0	0	0
Threshold Exceeded?	N/A	No	Yes	Yes	Yes	Yes
SMAQMD Thresholds of Significance with BMPs[2]	None	85	80	82	14.6	15
Threshold Exceeded?	N/A	No	No	No	No	No

Notes: ROG = reactive organic gas; NO_X = oxides of nitrogen; PM_{10} = respirable particulate matter; lb/day = pounds per day; tpy = tons per year; SMAQMD = Sacramento Air Quality Management District; BMPs = Best Management Practices

1 Without implementation of fugitive dust reducing BMPs.

2 With implementation of fugitive dust reducing BMPs.

Source: Modeling conducted by Ascent Environmental in 2024.

Table AQ-20: Maximum Construction-Generated Daily and Annual Emissions of Criteria Air Pollutants and Precursors Emissions Associated With Implementation of the Project on Sites 73 Through 79 Within the Old Florin Town Special Planning Area

Construction Year	ROG (lb/day)	NO_X (lb/day)	PM_{10} (lb/day)	$PM_{2.5}$ (lb/day)	PM_{10} (tpy)	$PM_{2.5}$ (tpy)
2027	25	28	9	5	<1	<1
2028	25	14	7	2	<1	<1
SMAQMD Thresholds of Significance without BMPs[1]	None	85	0	0	0	0
Threshold Exceeded?	N/A	No	Yes	Yes	Yes	Yes
SMAQMD Thresholds of Significance with BMPs[2]	None	85	80	82	14.6	15
Threshold Exceeded?	N/A	No	No	No	No	No

Notes: ROG = reactive organic gas; NO_X = oxides of nitrogen; PM_{10} = respirable particulate matter; lb/day = pounds per day; tpy = tons per year; SMAQMD = Sacramento Air Quality Management District; BMPs = Best Management Practices

1 Without implementation of fugitive dust reducing BMPs.

2 With implementation of fugitive dust reducing BMPs.

Source: Modeling conducted by Ascent Environmental in 2024.

Table AQ-21: Difference in Maximum Construction-Generated Daily and Annual Emissions of Criteria Air Pollutants and Precursors Emissions Associated with Implementation of Project on Sites 73 Through 79 Within the Old Florin Town Area[1]

Construction Year	ROG (lb/day)	NO_X (lb/day)	PM_{10} (lb/day)	$PM_{2.5}$ (lb/day)	PM_{10} (tpy)	$PM_{2.5}$ (tpy)
2027	+8	0	0	0	<1	<1
2028	+8	+1	+3	+1	<1	<1

Notes: ROG = reactive organic gas; NO_X = oxides of nitrogen; PM_{10} = respirable particulate matter; lb/day = pounds per day; tpy = tons per year; SMAQMD = Sacramento Air Quality Management District BMPs = Best Management Practices.

[1] Numbers in the table represent development in the Old Florin Town SPA (Table AQ-19) minus development proposed in the Old Florin Town SPA EIR (Table AQ-18). + indicates that the Project would result in greater emissions on the candidate rezone sites as compared to the Old Florin Town SPA EIR.

Source: Modeling conducted by Ascent Environmental in 2024.

According to the SMAQMD guidance, projects that do not implement SMAQMD's BMPs must meet a zero threshold for peak daily and annual emissions for PM_{10} and $PM_{2.5}$. With implementation of SMAQMD's BMPs, the SMAQMD's peak daily and annual thresholds increase to 80 lb/day or 14.6 tpy for PM_{10} and 82 lb/day or 15 tpy for $PM_{2.5}$. As shown above in Table AQ-20, construction activities associated with the proposed rezone on Sites 73 through 79 are anticipated to generate emissions in exceedance of the established maximum daily threshold for PM_{10}, and $PM_{2.5}$ without implementation of SMAQMD's BMPs.

As shown in Tables AQ-19 and AQ-20, construction of the additional residential units on Sites 73 through 79 within the Old Florin Town SPA allowed by the Project would result in slightly greater emissions than under the current zoning (see Table AQ-21 for the difference in emissions between residential capacity accounted for in the Old Florin Town SPA EIR versus the Project). Therefore, because the Old Florin Town SPA EIR determined that criteria pollutant emissions related to construction would be significant, construction-related emissions associated with the Project would be more severe. Because the impact associated with the Project is more severe relative to the impact identified in the Old Florin Town SPA EIR, this change in impact is considered significant.

MITIGATION MEASURES

Implement Mitigation Measure AQ-1 and Mitigation Measure OFT-AQ-1.

Old Florin Town SPA EIR Adopted Mitigation Measures

Adopted Mitigation Measure OFT-AQ-1[3] (below) from the Old Florin Town SPA EIR states that when emissions exceed the SMAQMD construction thresholds of significance, the current SMAQMD-recommended mitigation in effect at the time of project application shall be implemented (County of Sacramento 2012). Currently, SMAQMD recommends the application of the Enhanced On-Site Exhaust Controls to reduce NO_X emissions (SMAQMD 2019). Therefore, this mitigation measure that would apply to Sites 73 through 79 has been updated to reflect the most recent mitigation recommended by SMAQMD.

[3] "OFT" added to distinguish mitigation measures.

MITIGATION MEASURE OFT-AQ-1: CONSTRUCTION OZONE PRECURSOR EMISSIONS AND DIESEL PARTICULATES

Development proposals on Sites 73 through 79 that exceed the SMAQMD NO_x screening levels shown in Table AQ-2 of the Old Florin Town SPA EIR, or any similar screening standard adopted by SMAQMD at the time of project application, shall be required to prepare construction emission estimates based on projected construction timelines and equipment lists prior to approval of improvement plans. When emissions exceed the SMAQMD construction thresholds of significance (currently of 85 pounds per day of NO_x) or the applicable standard in place at the time of application, the following measure shall be implemented:

1. The project applicant, or its designee, shall provide a plan for approval by the Sac Metro Air District that demonstrates the heavy-duty off-road vehicles (50 horsepower or more) to be used 8 hours or more during the construction project will achieve a project wide fleet-average 10 percent NO_X reduction compared to the most recent California Air Resources Board (CARB) fleet average. The plan shall have two components: an initial report submitted before construction and a final report submitted at the completion.
    a. Submit the initial report at least four (4) business days prior to construction activity using the Sac Metro Air District's Construction Mitigation Tool
    b. Provide project information and construction company information.
    c. Include the equipment type, horsepower rating, engine model year, projected hours of use, and the CARB equipment identification number for each piece of equipment in the plan. Incorporate all owned, leased and subcontracted equipment to be used.
    d. Submit the final report at the end of the job, phase, or calendar year, as pre-arranged with Sac Metro Air District staff and documented in the approval letter, to demonstrate continued project compliance.
2. The Sac Metro Air District may conduct periodic site inspections to determine compliance. Nothing in this mitigation shall supersede other air district, state or federal rules or regulations.
3. This mitigation will sunset on January 1, 2028, when full implementation of the CARB In-Use Off-Road Regulation is expected.

SIGNIFICANCE AFTER MITIGATION

With implementation of SMAQMD's Basic Construction Emission Control Practices proposed dust control measures, the emissions thresholds for PM_{10} and $PM_{2.5}$ would be 80 lb/day or 14.6 tpy of PM_{10} and 82 lb/day or 15 tpy of $PM_{2.5}$. The dust control measures outlined in Mitigation Measure AQ-1 would reduce impacts related to fugitive dust emissions by reducing dust generated by vehicle movement through the watering of exposed surfaces and limiting vehicle speeds on unpaved roads, reducing the potential for dust to escape hauling trucks by placing covers over the truck beds when on major roadways, wet-vacuuming mud/dirt tracked onto public roadways, and completing high-movement areas (e.g., roadways, sidewalk, and parking lots) as soon as possible to

reduce the amount of unpaved surfaces that could result in dust generation. As shown in Table AQ-20, with implementation of the feasible SMAQMD's BMPs identified in Mitigation Measure AQ-1, the daily emissions resulting from construction of additional residential development allowed under the Project on Sites 68 through 72 would not exceed applicable thresholds. Additionally, should construction on Sites 73 through 79 result in exceedances of SMAQMD's NO_x threshold and/or ROG threshold adopted at the time of project applications, application of Mitigation Measure OFT-AQ-1 would reduce impacts related to NO_x and diesel PM by requiring that a project wide fleet-average 10 percent NO_X reduction be achieved compared to the most recent CARB fleet average.

Cumulatively, the Old Florin Town SPA EIR concluded that construction-generated emissions of criteria pollutants associated with development within the Old Florin Town SPA would be significant and unavoidable. The proposed capacity allowed under the Project would generate more emissions than what was accounted for in the Old Florin Town SPA EIR. Pursuant to CEQA Guidelines Section 15162, the Project would result in a more severe impact than what was disclosed in the Old Florin Town SPA EIR. The Project's contribution to impacts from rezoning Sites 73 through 79 would be significant and overall impacts remain significant and unavoidable.

It should be noted that, although construction activities associated with development allowed on Sites 73 through 79 under the Project would result in slightly greater total mass emissions than identified in the Old Florin Town SPA EIR, as shown in Tables AQ-22 and AQ-23 below, construction of the Project would result in fewer emissions per capita. While development allowed under the proposed Project would result in more total units constructed on Sites 73 through 79 than what was analyzed in the Old Florin Town SPA EIR, implementation of the Project would result in a more efficient distribution of emissions per capita due to the denser development allowed under the Project through rezoning relative to the number of units accounted for in the Old Florin Town SPA EIR. Increasing housing density results in fewer criteria pollutant emissions per capita, or the criteria pollutant emissions associated either directly or indirectly with a single person. This is because emissions of criteria pollutants associated with sources such as mobile sources, area sources, and energy sources are considered more efficient when the associated development houses a larger number of people in a smaller area. Therefore, the proposed rezone would be considered more efficient in terms of emissions per capita because the rezone would result in a greater number of people being housed within the same development footprint. Decreasing per capita emissions, especially those related to VMT, aligns with the goals of the 2022 SIP (CARB 2022b: 73).

Table AQ-22: Emissions per Capita Associated with Construction of Existing Residential Capacity Within the Old Florin Town SPA[1]

Construction Year	ROG (lb/day/capita)	NO_X (lb/day/capita)	PM_{10} (lb/day/capita)	$PM_{2.5}$ (lb/day/capita)
2027	0.0115	0.0199	0.0064	0.0036
2028	0.0115	0.0089	0.0031	0.0009
Average	0.0115	0.0144	0.0048	0.0022

Notes: lb/day/capita = pounds per day per capita; ROG = reactive organic gas; NOX = oxides of nitrogen; PM10 = respirable particulate matter; PM2.5 = fine particulate matter.

[1]Assumed Population of 1,408 From CalEEMod Defaults

Source: Modeling conducted by Ascent Environmental in 2024.

Table AQ-23: Emissions per Capita Associated with Construction of Project On Sites 73 Through 79 Residential Capacity Within the Old Florin Town SPA[1]

Construction Year	ROG lb/day/capita)	NO_X lb/day/capita)	PM_{10} lb/day/capita)	$PM_{2.5}$ lb/day/capita)
2027	0.0115	0.0129	0.0041	0.0023
2028	0.0115	0.0066	0.0030	0.0008
Average	0.0115	0.0097	0.0036	0.0016

Notes: lb/day/capita = pounds per day per capita; ROG = reactive organic gas; NO_X = oxides of nitrogen; PM_{10} = respirable particulate matter; $PM_{2.5}$ = fine particulate matter.

[1]Assumed Population of 2,176 From CalEEMod Defaults

Source: Modeling conducted by Ascent Environmental in 2024.

IMPACT AQ-2: LONG-TERM OPERATIONAL EMISSIONS OF CRITERIA POLLUTANTS AND PRECURSORS (NO_X, ROG, PM_{10}, AND $PM_{2.5}$)

SACRAMENTO COUNTY GENERAL PLAN

GENERAL PLAN ENVIRONMENTAL IMPACT REPORT DETERMINATION

The General Plan EIR discussed operational air quality impacts in two sections: "Generation of On-Road Mobile Source Criteria Pollutant Emissions in Excess of SMAQMD Thresholds" and "Generation of Stationary, Area, and Off-Road Criteria Pollutant Emissions in Excess of SMAQMD Thresholds." These two sections collectively concluded that buildout of the General Plan could result in long-term operational emissions that could exceed local thresholds, despite the implementation of all feasible mitigation. Impacts were determined to be significant and unavoidable. For the purpose of this analysis, the two operations-related impacts analyzed in the General Plan EIR are considered together under a single evaluation of impacts related to long-term operational emissions.

PROPOSED PROJECT IMPACT EVALUATION

Increased residential development allowed under the proposed Project would result in the generation of long-term operational emissions of ROG, NO_X, PM_{10}, and $PM_{2.5}$ from mobile, stationary, and area-wide sources. Mobile source emissions of criteria pollutants and precursors would result from vehicle trips generated by residents and other associated vehicle trips (e.g., delivery of supplies and maintenance vehicles). Stationary and area-wide sources would include the combustion of natural gas for space and water heating (i.e., energy use), the use of landscaping equipment and other small equipment, the periodic application of architectural coatings, and ROG from the use of consumer products.

INDIVIDUAL CANDIDATE REZONE SITE IMPACT EVALUATION

As stated in Impact AQ-1, the largest candidate rezone site proposed under the Project is Site 15 which is 11.45 acres and has a proposed maximum density of 458 units (an

increase of 229 units beyond the existing maximum density permitted). In regard to operation, the SMAQMD CEQA Guide details screening thresholds for operational emissions that aid in determining if a project, based on its size, is likely to result in exceedances of air quality thresholds. Modeling for the Project assumed that increased residential capacity could result in apartments that are 3 to 10 stories tall. Based on this, the SMAQMD screening levels for mid-rise apartments 3 to 10 stories tall is 740 dwelling units for ozone precursors and 1,458 dwelling units for PM. Therefore, Site 15 would not exceed either of these screening thresholds as the maximum density that could be allowed on Site 15 under the Project is 458 units. Because Site 15 is the largest candidate site in terms of proposed units and the site would not exceed SMAQMD's screening thresholds, it is unlikely that operational emissions related to increasing capacity on any other individual candidate site would exceed SMAQMD's operational criteria pollutant thresholds.

AGGREGATE BUILDOUT IMPACT EVALUATION

As discussed above under "Individual Candidate Rezone Site Impact Evaluation," operational emissions at an individual candidate rezone site level would not likely exceed SMAQMD criteria pollutant thresholds as the number of units on individual candidate rezone sites would be under SMAQMD screening levels. The following discussion presents the impacts associated with the aggregate buildout of the Project (i.e., totality of all future development allowed on the candidate rezone sites with the Project) and is essentially a cumulative analysis of the Project.

Tables AQ-24 and AQ-25 summarize the maximum daily and annual operation-related emissions of criteria air pollutants at the buildout of the General Plan without and with the Project, respectively. Notably, the General Plan EIR analysis evaluated operation-generated impacts of all development allowed under the General Plan, while Table AQ-24 below summarizes operations-generated emissions related to the development on the candidate rezone sites, which are a subset of the total development that was analyzed in the General Plan EIR. Similarly, Table AQ-25 summarizes the emissions from operation of the proposed residential capacity on the candidate rezone sites under the Project. For specific operations assumptions and modeling inputs, refer to Appendix AQ-1.

Table AQ-24: Criteria Air Pollutant and Precursor Emissions Associated with Operation of Existing Residential Capacity Under the General Pan

Source	ROG (lb/day)	NO_X (lb/day)	PM_{10} (lb/day)	PM_{10} (tpy)	$PM_{2.5}$ (lb/day)	$PM_{2.5}$ (tpy)
Mobile	96	82	163	26.0	42	6.7
Area	67	2	<1	<1	<1	<1
Energy	1	11	<1	<1	1	<1
Total	163	95	164	26.2	43	6.9
SMAQMD Thresholds of Significance	65	65	80	14.6	82	15
Threshold Exceeded?	Yes	Yes	Yes	Yes	No	No

Notes: ROG = reactive organic gas; NO_X = oxides of nitrogen; CO = carbon monoxide; PM10 = respirable particulate matter; lb/day = pounds per day; SMAQMD = Sacramento Metropolitan Air Quality Management District. Totals may not sum due to rounding.

Source: Modeling conducted by Ascent Environmental in 2024.

Table AQ-25: Criteria Air Pollutant and Precursor Emissions Associated with Operation of Project Under the General Plan

Source	ROG (lb/day)	NO_X (lb/day)	PM_{10} (lb/day)	PM_{10} (tpy)	$PM_{2.5}$ (lb/day)	$PM_{2.5}$ (tpy)
Mobile[1]	142	122	242	41.0	63	10.6
Area	207	4	<1	<1	<1	<1
Energy	1	25	2	<1	2	<1
Total	350	151	244	41.4	65	11.0
SMAQMD Thresholds of Significance	65	65	80[2]	14.6[2]	82[3]	15[3]
Threshold Exceeded?	Yes	Yes	Yes	Yes	No	No

Notes: ROG = reactive organic gas; NOX = oxides of nitrogen; CO = carbon monoxide; PM10 = respirable particulate matter; lb/day = pounds per day; SMAQMD = Sacramento Metropolitan Air Quality Management District. Totals may not sum due to rounding.

[1] Emissions estimates associated with project-related mobile sources are considered conservative as traffic modeling was based on the inclusion of three additional sites which are no longer considered in the scope of the project.

[2] If all feasible BACT/BMPs are applied, then 82 lb/day and 15 tpy. The Project would comply with the California Building Code and is therefore subject to this threshold.

[3] If all feasible BACT/BMPs are applied, then 80 lb/day and 14.6 tpy. The Project would comply with the California Building Code and is therefore subject to this threshold.

Source: Modeling conducted by Ascent Environmental in 2024.

Table AQ-26: Additional Total Operations-Generated Daily and Annual Emissions of Criteria Air Pollutants and Precursors Emissions Associated with Implementation of Project[1]

Source	ROG (lb/day)	NO_X (lb/day)	PM_{10} (lb/day)	PM_{10} (tpy)	$PM_{2.5}$ (lb/day)	$PM_{2.5}$ (tpy)
Total Proposed Rezone Emissions Increase	+187	+56	+80	+15.2	+22	+4.1

Notes: ROG = reactive organic gas; NO_X = oxides of nitrogen; PM_{10} = respirable particulate matter; lb/day = pounds per day; tpy = tons per year; SMAQMD = Sacramento Air Quality Management District BMPs = Best Management Practices

[1] Numbers in the table represent development proposed under the Project (Table AQ-24) minus development proposed in the General Plan EIR (Table AQ-23) on the candidate rezone sites. + indicates that the Project would result in greater emissions on the candidate rezone sites as compared to the General Plan EIR.

As shown in Tables AQ-24 and AQ-25, operation of the residential capacity under the General Plan would result in emissions exceeding the SMAQMD thresholds for ROG, NO_x, daily PM_{10}, and annual PM_{10} while operation of the proposed residential capacity under the Project would also result in emissions exceeding the SMAQMD thresholds for ROG, NO_x, daily PM_{10}, and annual PM_{10}. Table AQ-26 shows that operation of the Project would generate greater emissions compared to operation of the existing residential capacity under the General Plan.

Because operation of additional residences allowed under the Project would result in ROG emissions that exceed SMAQMD's threshold, an Air Quality Mitigation Plan (AQMP) is required to be submitted to the County (subject to SMAQMD review) prior to approval

of individual developments that would occur consistent with the Project, as required by General Plan Policy AQ-4. Therefore, should operational emissions from individual developments allowed under the Project exceed SMAQMD thresholds, developers for individual developments would be required to prepare an AQMP if emissions are found to exceed SMAQMD thresholds. As stated in the General Plan EIR, projects within the growth projections of the SIP are required to demonstrate a 15 percent reduction in operational emissions. The most recently adopted SIP, the 2022 SIP, was prepared following the adoption of the General Plan EIR and thus accounts for the projected growth under the General Plan. Therefore, the AQMP prepared for individual developments allowed under the Project would be required to demonstrate a 15 percent reduction in operational air pollutants. This would be achieved through the implementation of AQMP emission reduction measures which would be identified and quantified and would include commitments to reducing VMT, promoting alternative modes of transportation, and energy efficiency building measures.

As shown in Table AQ-26, operation of the additional residential units as part of the Project would result in greater emissions on the candidate rezone sites than development under the current zoning. Therefore, because the General Plan EIR determined that criteria pollutant emissions related to operation would be significant (at a cumulative level of analysis), and because operation-related emissions associated with the Project and other unmitigated operations occurring in the County would contribute to overall emissions in the air basin, impacts would be more severe. Because the impact associated with the Project is more severe relative to the impact identified in the General Plan EIR, this change in impact is considered significant.

MITIGATION MEASURES

Implement Tier 1 BMP 1 from Mitigation Measure CC-2.

SIGNIFICANCE AFTER MITIGATION

Tier 1 BMP 1 from Mitigation Measure CC-2 in Chapter 6, “Climate Change,” requires that individual developments under the Project shall be designed and constructed without natural gas infrastructure or proposed alternatives that demonstrate the same level of GHG reductions and pre-wire. As shown in Appendix AQ-1, implementation of Mitigation Measure CC-2 in Chapter 6, “Climate Change,” would reduce operational NO_x emissions by 18 percent, which is 3 percent beyond the 15 percent reduction target, and consistent with the findings of the General Plan EIR.

However, emissions of ROG would not change substantially. This is because the Project's operational ROG emissions can be largely attributed to the use of consumer products (e.g. aerosols, cleaning products, hairspray) (included in the “Area” source in Table AQ-25). The use of consumer products and subsequent emissions are dictated by human behaviors which cannot reliably be altered through mitigation. Additionally, there are not reliable methods for enforcing or monitoring the products used by residents for the purpose of lower ROG emissions from the use of these products. Recent photochemical modeling shows that ozone formation in the region supports a NOx limited area and that ROG plays a minimal role in reducing ozone concentrations (SMAQMD 2023a). Because of this, the amount of ROG reductions needed to reduce ozone concentrations is much

higher than NOx. This is not necessarily reflected in the NOx and ROG thresholds which were established by the SMAQMD in 2002. This concern is captured in the *Draft Guidance for Land Use Emissions Reductions 5.0* which states "if a project is not able to achieve its CEQA reduction target for ROG, the project may choose to reduce additional NOx on a ton-for-ton basis instead of ROG" (SMAQMD 2023b). This allows the excess allocation of NOx of 3 percent to be reallocated to ROG emissions to help meet the 15 percent reduction of ROG emissions. The application of the excess 3 percent allocation of NOx reduction to ROG would result in346 lb/day of ROG. Additional reductions in operational ROG emissions, which are not reflected in the CalEEMod modeling, are anticipated due to required County standards in design requiring parking lot shading and carports, and all-electric infrastructure or the like. Although all feasible mitigation addressing ROG emissions are applied, the Project's contribution to impacts related to ROG emissions would be significant, and the overall impact would remain significant and unavoidable.

However, it should be noted that while development allowed under the proposed Project would result in more total units operated than what was analyzed in the General Plan EIR, implementation of the Project would result in a more efficient distribution of emissions per capita due to the denser development allowed under the Project through rezoning relative to the number of units accounted for in the General Plan (see Table AQ-27). Increasing residential density would result in fewer criteria pollutant emissions per capita, or fewer criteria pollutant emissions associated either directly or indirectly with a single person. This is because emissions of criteria pollutants associated with sources such as mobile sources, area sources, and energy sources are considered more efficient when the associated development houses a larger number of people in a smaller area. For this reason, the proposed rezone would be considered more efficient in terms of emissions per capita compared to the development proposed in the General Plan because the Project would result in a greater number of people being housed within the same development footprint. Decreasing per capita emissions, especially those related to VMT, aligns with the goals of the 2022 SIP (CARB 2022b: 73).

Table AQ-27: Comparison of Emissions per Capita Associated with Implementation of Adopted General Plan and Project

Scenario	ROG (lb/day/capita)	NO_X (lb/day/capita)	PM_{10} (lb/day/capita)	$PM_{2.5}$ (lb/day/capita)
Operation of Existing Land Uses[1]	0.0175	0.01015	0.0175	0.00461
Operation of Proposed Land Uses[2]	0.0169	0.00727	0.0118	0.00312
Difference	-0.00062	-0.00289	-0.00579	-0.00149

Notes: lb/day/capita = pounds per day per capita; ROG = reactive organic gas; NOX = oxides of nitrogen; PM10 = respirable particulate matter; PM2.5 = fine particulate matter.

[1]Assumed Population of 9,347from CalEEMod defaults

[2]Assumed Population of 20,773 from CalEEMod defaults

Source: Modeling conducted by Ascent Environmental in 2024.

DISTINCT AREA PLANS

FAIR OAKS BOULEVARD CORRIDOR PLAN

ENVIRONMENTAL IMPACT REPORT DETERMINATION

The Fair Oaks Boulevard EIR determined that implementation of the Fair Oaks Boulevard Corridor Plan would have a significant and unavoidable impact related to operation due to the modeling results which indicated that the plan's mass emissions of ROG and NO_x would exceed SMAQMD thresholds of significance of 65 lbs/day in the summer and winter.

The Fair Oaks Boulevard EIR determined that the future development in the corridor would be required to adhere to General Plan Policy AQ-4. General Plan Policy AQ-4 requires developments that meet or exceed thresholds of significance for ozone precursor pollutants, as adopted by the SMAQMD, to be deemed to have a significant environmental impact and an AQMP provided subject to review and endorsement by SMAQMD. The goal of the review is to achieve a 15 percent reduction of emissions from the base-case level. The SMAQMD has endorsed the Fair Oaks Boulevard Corridor Operational AQMP. The analysis showed that implementation of the measures identified in the AQMP would achieve a 15 percent reduction in emissions. Therefore, mitigation (Mitigation Measure FO-AQ-2 from the Fair Oaks Boulevard EIR) was included that would require the SPA to implement the endorsed AQMP plan into the SPA language. Even with a 15 percent reduction in operational emissions, the estimated ROG and NO_x emissions were found to exceed the operational threshold of 65 lbs/day and resulted in a significant and unavoidable impact. As a separate impact the Fair Oaks Boulevard EIR determined that that operation of roadways associated with the Fair Oaks Boulevard Corridor Plan would have a less than significant impact related to emissions of ROG and NO_x. Operational emissions of PM_{10}, $PM_{2.5}$, and fugitive dust were not analyzed.

IMPACT EVALUATION

INDIVIDUAL CANDIDATE REZONE SITE IMPACT EVALUATION

As stated above, the SMAQMD CEQA Guide details screening thresholds for operational emissions that aid in determining if a project, based on its size, is likely to result in exceedances of air quality thresholds. Although not located within this distinct area plan, Site 15 is exemplary in terms of resulting in the greatest number of units permitted with proposed maximum density (458 units). Based on modeling for the Project assuming that increased residential density could result in apartments that are 3 to 10 stories tall, the SMAQMD screening levels are 740 dwelling units for ozone precursors and 1,458 dwelling units for PM. Compared to Site 15, Site 67 would allow 37 units with proposed maximum density. As such, Site 67 would not exceed either of these screening thresholds as the maximum density that could be allowed is 37 units and would thus not be expected to exceed SMAQMD thresholds for NO_x or PM.

AGGREGATE BUILDOUT IMPACT EVALUATION

The following discussion analyzes the aggregate emissions that would result from operational activities related to increasing residential capacity of Site 67 in the Fair Oaks

Boulevard Plan area. Tables AQ-28 and AQ-29 summarize the maximum daily and annual operation-related emissions of criteria air pollutants at full buildout under existing zoning and with Project on Site 67 (i.e., operation of 25 units or commercial offices allowed under existing zoning and 37 units allowed with Project). Notably, the Fair Oaks Boulevard EIR analysis evaluated operation-generated impacts of all development allowed within the Fair Oaks Boulevard Plan, while Table AQ-28 summarizes operation-generated emissions related to development on Site 67, which are a subset of the total development that was analyzed in the Fair Oaks Boulevard EIR. Similarly, Table AQ-29 summarizes the emissions from operation of the proposed increase in residential capacity on Site 67 allowed under the Project. For specific construction assumptions and modeling inputs, refer to Appendix AQ-1.

Table AQ-28: Criteria Air Pollutant and Precursor Emissions Associated with Operation of Existing Residential Capacity Within the Fair Oaks Boulevard Corridor Area

Source	ROG (lb/day)	NO_X (lb/day)	PM_{10} (lb/day)	PM_{10} (tpy)	$PM_{2.5}$ (lb/day)	$PM_{2.5}$ (tpy)
Mobile	1	1	2	<1	<1	<1
Area	1	<1	<1	<1	<1	<1
Energy	<1	<1	<1	<1	<1	<1
Total	2	1	2	<1	<1	<1
SMAQMD Thresholds of Significance	65	65	80[1]	14.6[1]	82[2]	15[2]
Threshold Exceeded?	No	No	No	No	No	No

Notes: ROG = reactive organic gas; NO_X = oxides of nitrogen; CO = carbon monoxide; PM_{10} = respirable particulate matter; lb/day = pounds per day; SMAQMD = Sacramento Metropolitan Air Quality Management District. Totals may not sum due to rounding.

[1] If all feasible BACT/BMPs are applied, then 82 lb/day and 15 tpy. Proposed rezone on Site 67 would comply with the California Building Code and is therefore subject to this threshold.

[2] If all feasible BACT/BMPs are applied, then 80 lb/day and 14.6 tpy. Proposed rezone on Site 67 would comply with the California Building Code and is therefore subject to this threshold.

Source: Modeling conducted by Ascent Environmental in 2024.

Table AQ-29: Criteria Air Pollutant and Precursor Emissions Associated with Operation of Project on Site 67 Within the Fair Oaks Boulevard Corridor Area

Source	ROG (lb/day)	NO_X (lb/day)	PM_{10} (lb/day)	PM_{10} (tpy)	$PM_{2.5}$ (lb/day)	$PM_{2.5}$ (tpy)
Mobile[1]	1	1	2	<1	<1	<1
Area	1	<1	<1	<1	<1	<1
Energy	<1	<1	<1	<1	<1	<1
Total	2	1	2	<1	<1	<1
SMAQMD Thresholds of Significance	65	65	80[2]	14.6[2]	82[3]	15[3]
Threshold Exceeded?	No	No	No	No	No	No

Notes: ROG = reactive organic gas; NO_X = oxides of nitrogen; CO = carbon monoxide; PM_{10} = respirable particulate matter; lb/day = pounds per day; SMAQMD = Sacramento Metropolitan Air Quality Management District. Totals may not sum due to rounding.

[1] Emissions estimates associated with project-related mobile sources are considered conservative as traffic modeling was based on the inclusion of three additional sites which are no longer considered in the scope of the project.

[2] If all feasible BACT/BMPs are applied, then 82 lb/day and 15 tpy. Proposed rezone on Site 67 would comply with the California Building Code and is therefore subject to this threshold.

[3] If all feasible BACT/BMPs are applied, then 80 lb/day and 14.6 tpy. Proposed rezone on Site 67 would comply with the California Building Code and is therefore subject to this threshold.

Source: Modeling conducted by Ascent Environmental in 2024.

As shown in Tables AQ-28 and AQ-29, operational emissions associated with buildout of Site 67 under both existing zoning and with Project scenarios would not exceed the SMAQMD thresholds for ROG, NO_x, daily PM_{10}, and annual PM_{10}. There is no difference in operational emissions between the existing zoning and with Project scenarios.

Operation of the anticipated units on Site 67 within the Fair Oaks Boulevard Corridor area would not result in operational emissions above SMAQMD's recommended thresholds and operational emissions related to the increased residential capacity under the Project on Site 67 would not be greater than those analyzed in the Fair Oaks Boulevard EIR and would therefore not result in new substantial impacts. However, adopted Mitigation Measure AQ-2 in the Fair Oaks Boulevard EIR states that all development projects within the Fair Oaks Boulevard Corridor area shall implement reduction measures to achieve a minimum of 15 percent reduction in operational and area source emissions. Because these measures are not incorporated into the Project on Site 67 within the Fair Oaks Boulevard Corridor area, this impact would be potentially significant.

MITIGATION MEASURES

Implement Mitigation Measure FO-AQ-2.

FAIR OAKS BOULEVARD CORRIDOR PLAN EIR ADOPTED MITIGATION MEASURES

Adopted Mitigation Measure FO-AQ-2[4] (below) in the Fair Oaks Boulevard EIR states that all development projects within the Fair Oaks Boulevard Corridor area shall implement reduction measures to achieve a minimum of 15 percent reduction in operational and area source emissions. Therefore, this mitigation measure would apply to Site 67.

Mitigation Measure FO-AQ-2: Operational Emissions

> All development projects within the Fair Oaks Boulevard Corridor SPA shall comply with the SMAQMD endorsed Fair Oaks Boulevard Corridor Operational Air Quality Management Plan (8-06-2009), which requires implementation of reduction measures that will achieve a minimum of 15 percent reduction in operational and area source emissions, consistent with General Plan Policy.

SIGNIFICANCE AFTER MITIGATION

With the implementation of Mitigation Measure FO-AQ-2, future development on Site 67 would implement measures that would achieve a minimum of 15 percent reduction in

[4] "FO" added for distinction with other mitigation measures.

operational and area source emissions. This would further reduce impacts from operation of the proposed capacity. As stated above and shown in Tables AQ-28 and AQ-29, operational emissions associated with the existing zoning and proposed residential capacity with the Project on Site 67 would be the same. Pursuant to CEQA Section 15162, the Project with the Fair Oaks Boulevard Corridor area would not result in new substantial adverse impacts related to operational emissions than what was disclosed in the Fair Oaks Boulevard EIR. The Project's contribution to impacts from rezoning Site 67 would not be substantial and the overall impact would remain significant and unavoidable.

However, it should be noted that while development allowed under the Project would result in more units operated on Site 67 than what was analyzed in the Fair Oaks Boulevard EIR, development on Site 67 as allowed under the Project would result in a more efficient distribution of emissions per capita due to the denser development through rezoning relative to the number of units accounted for in the Fair Oaks Boulevard Corridor Plan (see Table AQ-30). Increasing residential density would result in fewer criteria pollutant emissions per capita, or fewer criteria pollutant emissions associated either directly or indirectly with a single person. This is because emissions of criteria pollutants associated with sources such as mobile sources, area sources, and energy sources are considered more efficient when the associated development houses a larger number of people in a smaller area. Therefore, the proposed rezone would be considered more efficient in terms of emissions per capita compared to the development proposed in the Fair Oaks Boulevard Corridor Plan because the rezone would result in a greater number of people being housed within the same development footprint. Decreasing per capita emissions, especially those related to VMT, aligns with the goals of the 2022 SIP (CARB 2022b: 73).

Table AQ-30: Comparison of Emissions per Capita Associated with Implementation of Existing Residential Capacity and Project on Site 67 Within the Fair Oaks Boulevard Corridor Plan

Scenario	ROG (lb/day/capita)	NO_X (lb/day/capita)	PM_{10} (lb/day/capita)	$PM_{2.5}$ (lb/day/capita)
Operation of Existing Land Uses[1]	0.022143	0.013286	0.026143	0.006857
Operation of Proposed Land Uses[2]	0.017500	0.009327	0.017404	0.004615
Difference	-0.00464	-0.00396	-0.00874	-0.00224

Notes: lb/day/capita = pounds per day per capita; ROG = reactive organic gas; NO_X = oxides of nitrogen; PM_{10} = respirable particulate matter; $PM_{2.5}$ = fine particulate matter.

[1]Assumed Population of 70 from CalEEMod defaults

[2]Assumed Population of 104 from CalEEMod defaults

Source: Modeling conducted by Ascent Environmental in 2024.

NORTH WATT AVENUE CORRIDOR PLAN

ENVIRONMENTAL IMPACT REPORT DETERMINATION

The North Watt Avenue EIR determined that implementation of the North Watt Avenue Corridor Plan would have a significant and unavoidable impact related to operation due to the modeling results of the analysis that indicated that the plan's mass emissions of

ROG and NOx would exceed SMAQMD thresholds of significance of 65 lbs/day in the summer and winter.

The North Watt Avenue EIR determined that the future development in the corridor would be required to adhere to General Plan Policy AQ-4. General Plan Policy AQ-4 requires developments which meet or exceed thresholds of significance for ozone precursor pollutants, as adopted by the SMAQMD, to be deemed to have a significant environmental impact and an AQMP provided subject to review and endorsement by SMAQMD. The goal of the review is to achieve a 15 percent reduction of emissions from the base-case level. The SMAQMD has endorsed the North Watt Avenue Corridor Operational AQMP. The analysis showed that implementation of the measures identified in AQMP would achieve a 15 percent reduction in emissions. The North Watt Avenue EIR Mitigation Measure AQ-2 requires future development within the North Watt Avenue Corridor area to comply with the endorsed AQMP plan. Even with a 15 percent reduction in operational emissions, the estimated ROG and NOx emissions were found to exceed the operational threshold of 65 lbs/day and result in a significant and unavoidable impact. Additionally, the North Watt Avenue EIR determined that operation of roadways associated with the North Watt Avenue Corridor Plan would have a less than significant impact related to emissions of ROG and NO_x. Operational emissions of PM_{10}, $PM_{2.5}$, and fugitive dust were not analyzed.

IMPACT EVALUATION

INDIVIDUAL CANDIDATE REZONE SITE IMPACT EVALUATION

As stated above, the SMAQMD CEQA Guide details screening thresholds for operational emissions that aid in determining if a project, based on its size, is likely to result in exceedances of air quality thresholds. Although not located within this distinct area plan, Site 15 is exemplary in terms of resulting in the greatest number of units permitted with proposed maximum density (458 units). Based on modeling for the Project assuming that increased residential density could result in apartments that are 3 to 10 stories tall, the SMAQMD screening levels are 740 dwelling units for ozone precursors and 1,458 dwelling units for PM. Compared to Site 15, the greatest number of units allowed with proposed maximum density for Sites 68 through 72 is 190 units (Site 71). As such, Sites 68 through 72 would not exceed either of these screening thresholds as the maximum density that could be allowed is 190 units and would thus not be expected to exceed SMAQMD thresholds for NO_x or PM.

AGGREGATE BUILDOUT IMPACT EVALUATION

The following discussion analyzes the aggregate emissions that would result from operational activities related to increasing residential capacity of Sites 68 through 72 in the North Watt Avenue Plan area. Tables AQ-31 and AQ-32 summarize the maximum daily and annual operation-related emissions of criteria air pollutants at full buildout under existing zoning and with Project on Sites 68 through 72 (i.e., operation of 505 units allowed under existing zoning and 735 units allowed with Project). Notably, the North Watt Avenue EIR analysis evaluated operation-generated impacts of all development allowed under the North Watt Avenue Corridor Plan, while Table AQ-31 below summarizes operations-generated emissions related to developed currently allowed on Sites 68

through 72, which is a subset of the total development that was analyzed in the North Watt Avenue EIR. Similarly, Table AQ-32 summarizes the emissions from operation of the proposed increase in residential capacity as allowed on Sites 68 through 72 under the Project. Table AQ-33 shows the increase in emissions that would result from operation of the proposed residential capacity compared to operation of the existing residential capacity on Sites 68 through 72. For specific operations assumptions and modeling inputs, refer to Appendix AQ-1.

Table AQ-31: Criteria Air Pollutant and Precursor Emissions Associated with Operation of Existing Residential Capacity Within the North Watt Avenue Corridor Area

Source	ROG (lb/day)	NO_X (lb/day)	PM_{10} (lb/day)	PM_{10} (tpy)	$PM_{2.5}$ (lb/day)	$PM_{2.5}$ (tpy)
Mobile	15	15	32	5.1	8	1.3
Area	15	<1	<1	<1	<1	<1
Energy	<1	2	<1	<1	<1	<1
Total	31	17	32	5.1	8	1.3
SMAQMD Thresholds of Significance	65	65	80[1]	14.6[1]	82[2]	15[2]
Threshold Exceeded?	No	No	No	No	No	No

Notes: ROG = reactive organic gas; NO_X = oxides of nitrogen; CO = carbon monoxide; PM_{10} = respirable particulate matter; lb/day = pounds per day; SMAQMD = Sacramento Metropolitan Air Quality Management District. Totals may not sum due to rounding.

[1] If all feasible BACT/BMPs are applied, then 82 lb/day and 15 tpy. The proposed rezone on Sites 68 through 72 would comply with the California Building Code and is therefore subject to this threshold.

[2] If all feasible BACT/BMPs are applied, then 80 lb/day and 14.6 tpy. The proposed rezone on Sites 68 through 72 would comply with the California Building Code and is therefore subject to this threshold.

Source: Modeling conducted by Ascent Environmental in 2024.

Table AQ-32: Criteria Air Pollutant and Precursor Emissions Associated with Operation of Project on Sites 68 Through 72 Within the North Watt Avenue Corridor Area

Source	ROG (lb/day)	NO_X (lb/day)	PM_{10} (lb/day)	PM_{10} (tpy)	$PM_{2.5}$ (lb/day)	$PM_{2.5}$ (tpy)
Mobile[1]	15	15	31	5.2	8	1.4
Area	21	<1	<1	<1	<1	<1
Energy	<1	2	<1	<1	<1	<1
Total	36	18	31	5.3	8	1.4
SMAQMD Thresholds of Significance	65	65	80[2]	14.6[2]	82[3]	15[3]
Threshold Exceeded?	No	No	No	No	No	No

Notes: ROG = reactive organic gas; NO_X = oxides of nitrogen; CO = carbon monoxide; PM_{10} = respirable particulate matter; lb/day = pounds per day; SMAQMD = Sacramento Metropolitan Air Quality Management District. Totals may not sum due to rounding.

[1] Emissions estimates associated with project-related mobile sources are considered conservative as traffic modeling was based on the inclusion of three additional sites which are no longer considered in the scope of the project.

[2] If all feasible BACT/BMPs are applied, then 82 lb/day and 15 tpy. The proposed rezone on Sites 68 through 72 would comply with the California Building Code and is therefore subject to this threshold.

[3] If all feasible BACT/BMPs are applied, then 80 lb/day and 14.6 tpy. The proposed rezone on Sites 68 through 72 would comply with the California Building Code and is therefore subject to this threshold.

Source: Modeling conducted by Ascent Environmental in 2024.

Table AQ-33: Additional Total Operations-Generated Daily and Annual Emissions of Criteria Air Pollutants and Precursors Emissions Associated with Operation of Project on Sites 68 Through 72 Within the North Watt Avenue Corridor Area[1]

Source	ROG (lb/day)	NO_X (lb/day)	PM_{10} (lb/day)	PM_{10} (tpy)	$PM_{2.5}$ (lb/day)	$PM_{2.5}$ (tpy)
Total Proposed Rezone Emissions Increase	+5	+1	-1	+0.2	+44	+0.1

Notes: ROG = reactive organic gas; NO_X = oxides of nitrogen; PM_{10} = respirable particulate matter; lb/day = pounds per day; tpy = tons per year; SMAQMD = Sacramento Air Quality Management District BMPs = Best Management Practices

2 Numbers in the table represent development proposed under the Project (Table AQ-30) minus development proposed in the North Watt Avenue EIR (Table AQ-31) on Sites 68 through 72. + indicates that the Project would result in greater emissions on the candidate rezone sites as compared to the North Watt Avenue EIR.

As shown in Tables AQ-31 and AQ-32, operational emissions associated with buildout of Sites 68 through 72 under both existing zoning and with Project scenarios would not exceed the SMAQMD thresholds for ROG, NO_x, daily PM_{10}, and annual PM_{10}. Table AQ-33 shows that operation of development on Sites 68 through 72 allowed under the Project would generate greater emissions compared to operation of the existing residential capacity in the North Watt Avenue Corridor area.

Therefore, because the North Watt Avenue EIR determined that criteria pollutant emissions related to operation would be significant, operation-related emissions associated with the proposed Project would be more severe. Because the impact associated with the Project is more severe relative to the impact identified in the North Watt Avenue EIR, this change in impact is considered significant.

Additionally, SMAQMD's project thresholds are intended to maintain or achieve attainment designations in the SVAB with respect to CAAQS and NAAQS. Projects that exceed SMAQMD's thresholds contribute to nonattainment designations and would exacerbate or interfere with the region's ability to attain the health-based standards (SMAQMD 2020a). Operation of development on Sites 68 through 72 allowed under the Project would not result in emissions above SMAQMD's recommended thresholds. However, adopted Mitigation Measure AQ-2 from the North Watt Avenue EIR states that all development projects within the North Watt Avenue Corridor area shall implement reduction measures to achieve a minimum of 15 percent reduction in operational and area source emissions. These measures are not included as part of the proposed rezone on Sites 68 through 72.

MITIGATION MEASURES

Implement Mitigation Measure NW-AQ-2.

NORTH WATT AVENUE PLAN EIR ADOPTED MITIGATION MEASURES

Adopted Mitigation Measure NW-AQ-2[5] (below) in the North Watt Avenue EIR states that all development projects within the North Watt Avenue Corridor area shall implement reduction measures to achieve a minimum of 15 percent reduction in operational and area source emissions. Therefore, this mitigation measure would apply to Sites 68 through 72.

Mitigation Measure NW-AQ-2: Operational Emissions

> All development projects within the North Watt Avenue Corridor Plan shall comply with the SMAQMD endorsed Air Quality Mitigation Plan (7-16-2010), which requires implementation of reduction measures that will achieve a minimum of 15.75 percent reduction in operational and area source emissions, consistent with General Plan Policy.

SIGNIFICANCE AFTER MITIGATION

With the implementation of adopted Mitigation Measure NW-AQ-2, future development on Sites 68 through 72 would implement measures that will achieve a minimum of 15 percent reduction in operational and area source emissions. This would further reduce impacts from operation of the proposed capacity. However, as stated above and shown in Table AQ-33, operational emissions on Sites 68 through 72 allowed under the Project would be greater than those from operation of the existing residential capacity under the North Watt Avenue Corridor Plan. Therefore, pursuant to CEQA Guidelines Section 15162, the Project would result in a more severe impact than what was disclosed in the North Watt Avenue EIR. The Project's contribution to impacts from rezoning Sites 68 through 72 would be significant and overall impacts remain significant and unavoidable.

However, it should be noted that while development on Sites 68 through 72 under the Project could result in more units operated than what was analyzed in the North Watt Avenue EIR, implementation of the Project would result in a more efficient distribution of emissions per capita due to the denser development allowed under the Project through rezoning relative to the number of units accounted for in North Watt Avenue Corridor Plan (see Table AQ-34). Increasing residential density would result in fewer criteria pollutant emissions per capita, or fewer criteria pollutant emissions associated either directly or indirectly with a single person. This is because emissions of criteria pollutants associated with sources such as mobile sources, area sources, and energy sources are considered more efficient when the associated development houses a larger number of people in a smaller area. Therefore, the proposed rezone on Sites 68 through 72 would be considered more efficient in terms of emissions per capita compared to the development proposed in the North Watt Avenue Corridor Plan because the rezone would result in a greater number of people being housed within the same development footprint. Decreasing per capita emissions, especially those related to VMT, aligns with the goals of the 2022 SIP (CARB 2022b: 73).

[5] "NW" added for distinction with other mitigation measures.

Table AQ-34: Comparison of Emissions per Capita Associated with Implementation of Existing Residential Capacity and Proposed Residential Capacity Under the North Watt Avenue Corridor Plan

Scenario	ROG (lb/day/capita)	NO_X (lb/day/capita)	PM_{10} (lb/day/capita)	$PM_{2.5}$ (lb/day/capita)
Operation of Existing Land Uses[1]	0.021711	0.012016	0.022659	0.005926
Operation of Proposed Land Uses[2]	0.017274	0.008537	0.015170	0.003999
Difference	-0.00444	-0.00348	-0.00749	-0.00193

Notes: lb/day/capita = pounds per day per capita; ROG = reactive organic gas; NO_X = oxides of nitrogen; PM_{10} = respirable particulate matter; $PM_{2.5}$ = fine particulate matter.

[1] Assumed Population of 1,414 from CalEEMod defaults

[2] Assumed Population of 2,058 from CalEEMod defaults

Source: Modeling conducted by Ascent Environmental in 2024.

OLD FLORIN TOWN SPA

ENVIRONMENTAL IMPACT REPORT DETERMINATION

The Old Florin Town SPA EIR determined that implementation of the Old Florin Town SPA would have a significant and unavoidable impact related to operation due to the modeling results that indicated that the SPA's mass emissions of ROG and NO_x would exceed SMAQMD thresholds of significance of 65 lbs/day in the summer and winter.

The Old Florin Town SPA EIR determined that the future development in SPA would be required to adhere to General Plan Policy AQ-4. General Plan Policy AQ-4 requires developments that meet or exceed thresholds of significance for ozone precursor pollutants, as adopted by the SMAQMD, to be deemed to have a significant environmental impact and an AQMP shall be provided subject to review and endorsement by SMAQMD. The goal of the review is to achieve a 15 percent reduction of emissions from the base-case level. The SMAQMD already endorsed the Old Florin Town SPA AQMP. Implementation of the measures identified in the AQMP would achieve a 15 percent reduction in emissions. The Old Florin Town SPA EIR Mitigation Measure AQ-2 requires future development within the SPA to implement the endorsed AQMP plan. Even with a 15 percent reduction in operational emissions, the estimated ROG and NO_x levels were found to exceed the operational threshold of 65 lbs/day and result in a significant and unavoidable impact. The Old Florin Town SPA EIR did not analyze impacts related to operational PM_{10} or $PM_{2.5}$ emissions.

IMPACT EVALUATION

INDIVIDUAL CANDIDATE REZONE SITE IMPACT EVALUATION

As stated above, the SMAQMD CEQA Guide details screening thresholds for operational emissions that aid in determining if a project, based on its size, is likely to result in exceedances of air quality thresholds. Although not located within this distinct area plan, Site 15 is exemplary in terms of resulting in the greatest number of units permitted with

proposed maximum density (458 units). Based on modeling for the Project assuming that increased residential density could result in apartments that are 3 to 10 stories tall, the SMAQMD screening levels are 740 dwelling units for ozone precursors and 1,458 dwelling units for PM. Compared to Site 15, the greatest number of units allowed with proposed maximum density for Sites 73 through 79 is 174 units (Site 77). As such, Sites 73 through 79 would not exceed either of these screening thresholds as the maximum density that could be allowed is 190 units and would thus not be expected to exceed SMAQMD thresholds for NO_X or PM.

AGGREGATE BUILDOUT IMPACT EVALUATION

The following discussion analyzes the aggregate emissions that would result from operational activities related to increasing residential capacity of Sites 72 through 79 in the Old Florin Town SPA. Tables AQ-35 and AQ-36 summarize the maximum daily operation-related emissions of criteria air pollutants during the winter and summer seasons at full buildout under existing zoning and with Project on Sites 73 through 79 (i.e., operation of 503 units allowed under existing zoning and 777 units allowed with Project). Notably, the Old Florin Town SPA EIR analysis evaluated operation-generated impacts of all development allowed under the Old Florin Town SPA, while Table AQ-35 summarizes operational emissions related to development on Sites 73 through 79, which are a subset of the total development that was analyzed in Old Florin Town SPA EIR. Similarly, Table AQ-36 summarizes the emissions from operation of the proposed increase in residential capacity on Sites 73 through 79 allowed under the Project. Table AQ-37 shows the increase in emissions that would result from operation of the proposed residential capacity with the Project compared to operation of the existing residential capacity. For specific operations assumptions and modeling inputs, refer to Appendix AQ-1.

Table AQ-35: Criteria Air Pollutant and Precursor Emissions Associated with Operation of Existing Residential Capacity Within the Old Florin Town SPA

Source	ROG (lb/day)	NO_X (lb/day)	PM_{10} (lb/day)	PM_{10} (tpy)	$PM_{2.5}$ (lb/day)	$PM_{2.5}$ (tpy)
Mobile	15	15	32	5.1	8	1.3
Area	15	<1	<1	<1	<1	<1
Energy	<1	2	<1	<1	<1	<1
Total	31	17	32	5.1	8	1.3
SMAQMD Thresholds of Significance	65	65	80[1]	14.6[1]	82[2]	15[2]
Threshold Exceeded?	No	No	No	No	No	No

Notes: ROG = reactive organic gas; NO_X = oxides of nitrogen; CO = carbon monoxide; PM_{10} = respirable particulate matter; lb/day = pounds per day; SMAQMD = Sacramento Metropolitan Air Quality Management District. Totals may not sum due to rounding.

[1] If all feasible BACT/BMPs are applied, then 82 lb/day and 15 tpy. The proposed rezone on Sites 73 through 79 would comply with the California Building Code and is therefore subject to this threshold.

[2] If all feasible BACT/BMPs are applied, then 80 lb/day and 14.6 tpy. The proposed rezone on Sites 73 through 79 would comply with the California Building Code and is therefore subject to this threshold.

Source: Modeling conducted by Ascent Environmental in 2024.

Table AQ-36: Criteria Air Pollutant and Precursor Emissions Associated with Operation of Project on Sites 73 Through 79 Within the Old Florin Town SPA

Source	ROG (lb/day)	NO_X (lb/day)	PM_{10} (lb/day)	PM_{10} (tpy)	$PM_{2.5}$ (lb/day)	$PM_{2.5}$ (tpy)
Mobile[1]	15	15	31	5.2	8	1.4
Area	21	<1	<1	<1	<1	<1
Energy	<1	2	<1	<1	<1	<1
Total	36	18	31	5.3	8	1.4
SMAQMD Thresholds of Significance	65	65	80[2]	14.6[2]	82[3]	15[3]
Threshold Exceeded?	No	No	No	No	No	No

Notes: ROG = reactive organic gas; NO_X = oxides of nitrogen; CO = carbon monoxide; PM_{10} = respirable particulate matter; lb/day = pounds per day; SMAQMD = Sacramento Metropolitan Air Quality Management District. Totals may not sum due to rounding.

[1] Emissions estimates associated with project-related mobile sources are considered conservative as traffic modeling was based on the inclusion of three additional sites which are no longer considered in the scope of the project.

[2] If all feasible BACT/BMPs are applied, then 82 lb/day and 15 tpy. The proposed rezone on Sites 73 through 79 would comply with the California Building Code and is therefore subject to this threshold.

[3] If all feasible BACT/BMPs are applied, then 80 lb/day and 14.6 tpy. The proposed rezone on Sites 73 through 79 would comply with the California Building Code and is therefore subject to this threshold.

Source: Modeling conducted by Ascent Environmental in 2024.

Table AQ-37: Additional Total Operations-Generated Daily and Annual Emissions of Criteria Air Pollutants and Precursors Emissions Associated with Project on Sites 68 Through 72 Within the Old Florin Town SPA[1]

Source	ROG (lb/day)	NO_X (lb/day)	PM_{10} (lb/day)	PM_{10} (tpy)	$PM_{2.5}$ (lb/day)	$PM_{2.5}$ (tpy)
Total Proposed Rezone Emissions Increase	+5	+1	-1	+0.2	+44	+0.1

Notes: ROG = reactive organic gas; NO_X = oxides of nitrogen; PM_{10} = respirable particulate matter; lb/day = pounds per day; tpy = tons per year; SMAQMD = Sacramento Air Quality Management District BMPs = Best Management Practices

[1] Numbers in the table represent development proposed under the Project (Table AQ-34) minus development proposed in the Old Florin Town SPA EIR (Table AQ-36) on Sites 73 through 79. + indicates that the Project would result in greater emissions on Sites 73 through 79 as compared to the Old Florin Town SPA EIR.

As shown in Table AQ-35 and AQ-36, operational emissions associated with buildout of Sites 73 through 79 under both existing zoning and with Project scenarios would not exceed the SMAQMD thresholds for ROG, NO_x, daily PM_{10}, and annual PM_{10}. Table AQ-37 shows that operation of the development on Sites 73 through 79 allowed under the Project would generate greater emissions compared to operation of the existing residential capacity on these sites under the Old Florin Town SPA EIR.

Therefore, because the Old Florin Town SPA EIR determined that criteria pollutant emissions related to operation would be significant, operation-related emissions associated with the proposed Project would be more severe. Because the impact associated with development on Sites 73 through 79 allowed under the Project is more severe relative to the impact identified in the Old Florin Town SPA EIR, this change in impact is considered significant.

Additionally, SMAQMD's project thresholds are intended to maintain or achieve attainment designations in the SVAB with respect to CAAQS and NAAQS. Projects that exceed SMAQMD's thresholds contribute to nonattainment designations and would exacerbate or interfere with the region's ability to attain the health-based standards (SMAQMD 2020a). Operation of proposed development on Sites 73 through 79 within the Old Florin Town SPA would not result in operational emissions above SMAQMD's recommended thresholds. However, adopted Mitigation Measure AQ-2 from the Old Florin Town SPA EIR states that all development projects within the Old Florin Town SPA shall implement reduction measures to achieve a minimum of 15 percent reduction in operational and area source emissions. These measures are not included as part of the proposed rezone on Sites 73 through 79.

MITIGATION MEASURES

Implement Mitigation Measure OFT-AQ-2.

OLD FLORIN TOWN SPA EIR ADOPTED MITIGATION MEASURES

Adopted Mitigation Measure OFT-AQ-2[6] (below) in the Old Florin Town SPA EIR states that all development projects within the Old Florin Town SPA shall implement reduction measures to achieve a minimum of 15 percent reduction in operational and area source emissions. Therefore, this mitigation measure would apply to Sites 73 through 79.

Mitigation Measure OFT-AQ-2: Operational Emissions

> All development projects within the Old Florin Town SPA shall comply with the SMAQMD endorsed Old Florin Town SPA Operational Air Quality Mitigation Plan (09/28/2009), which requires implementation of reduction measures that will achieve a minimum of 15 percent reduction in operational and area source emissions, consistent with General Plan Policy. The AQMP shall be incorporated into the Old Florin Town SPA.

SIGNIFICANCE AFTER MITIGATION

With the implementation of Mitigation Measure OFT-AQ-2, future development on Sites 73 through 79 would implement measures that would achieve a minimum of 15 percent reduction in operational and area source emissions. This would further reduce impacts from operation of the proposed capacity. However, as stated above and shown in Table AQ-37, operational emissions associated with the proposed residential capacity on Sites 73 through 79 would be greater than those from operation of the existing residential capacity under the Old Florin Town SPA. Therefore, pursuant to CEQA Guidelines Section 15162, the Project would result in a more severe impact than what was disclosed in the Old Florin Town SPA EIR. The Project's contribution to impacts from rezoning Sites 73 through 79 would be significant and overall impacts remain significant and unavoidable.

However, it should be noted that while development on Sites 73 through 79 allowed under the Project would result in more units operated than what was analyzed in the Old Florin

[6] "OFT" added for distinction with other mitigation measures.

Town SPA EIR, implementation of the Project would result in a more efficient distribution of emissions per capita due to the denser development allowed under the Project through rezoning relative to the number of units accounted for in the Old Florin Town (see Table AQ-38). Increasing residential density would result in fewer criteria pollutant emissions per capita, or fewer criteria pollutant emissions associated either directly or indirectly with a single person. This is because emissions of criteria pollutants associated with sources such as mobile sources, area sources, and energy sources are considered more efficient when the associated development houses a larger number of people in a smaller area. Therefore, the development on Sites 73 through 79 allowed under the Project would be considered more efficient in terms of emissions per capita compared to the development proposed in the Old Florin Town SPA because the rezone would result in a greater number of people being housed within the same development footprint. Decreasing per capita emissions, especially those related to VMT, aligns with the goals of the 2022 SIP (CARB 2022b: 73).

Table AQ-38: Comparison of Emissions per Capita Associated with Implementation of Existing Residential Capacity and Proposed Residential Capacity Under the Old Florin Town SPA

Scenario	ROG (lb/day/capita)	NO_X (lb/day/capita)	PM_{10} (lb/day/capita)	$PM_{2.5}$ (lb/day/capita)
Operation of Existing Land Uses[1]	0.020874	0.009155	0.014730	0.003885
Operation of Proposed Land Uses[2]	0.016659	0.006585	0.009894	0.002633
Difference	-0.00422	-0.00257	-0.00484	-0.00125

Notes: lb/day/capita = pounds per day per capita; ROG = reactive organic gas; NO_X = oxides of nitrogen; PM_{10} = respirable particulate matter; $PM_{2.5}$ = fine particulate matter.

[1]Assumed Population of 1,408 from CalEEMod defaults

[2]Assumed Population of 2,176 from CalEEMod defaults

Source: Modeling conducted by Ascent Environmental in 2024.

IMPACT AQ-3: MOBILE-SOURCE CO CONCENTRATIONS

GENERAL PLAN EIR IMPACT CONCLUSION

The General Plan EIR stated that, based on modeling conducted to estimate project-generated CO emissions, future year CO concentrations (relative to the time the General Plan EIR was written) would be lower than existing concentrations due to continuing improvements in engine technology and the retirement of older, higher-emitting vehicles. It was therefore concluded that the impact of project traffic conditions on ambient CO levels in the County would be less than significant.

PROPOSED PROJECT IMPACT EVALUATION

While localized concentrations of criteria air pollutants can expose sensitive receptors to substantial pollutant concentrations, criteria air pollutants generally produce regional impacts. Criteria air pollutants are predominantly generated in the form of mobile-source exhaust from vehicle trips associated with land use development projects. These vehicle trips occur throughout a paved network of roads, and, therefore, associated exhaust

emissions of criteria air pollutants are not generated in a single location where high concentrations could be formed. However, there may be unique situations or infrastructure designs (e.g., tunnels, enclosed underpasses) where a project with high levels of emissions may require concentration modeling to determine if the emissions will expose sensitive receptors to substantial pollutant concentrations.

Implementation of the Project would introduce new vehicle trips throughout the County. Based on the transportation analysis prepared for the Project, the Project would result in a maximum of 4,180 new trips per day on a single roadway (i.e., from the Interstate 80 interchange to Auburn Boulevard). This would result in approximately 6,750 peak trips per hour when added to existing trips along this segment of roadway (DKS 2024).[7] This level of trips would contribute CO to the SVAB. However, as stated in SMAQMD's CEQA Guide, "pollutants such as CO, sulfur dioxide and lead are of less concern because operational activities are not likely to generate substantial quantities of these criteria air pollutants and the SVAB has been in attainment for these criteria air pollutants for multiple years" (SMAQMD 2020d: 4-1). SMAQMD no longer has a recommended screening criteria for assessing the potential of a CO hotspot. However, other air districts, such as the Bay Area Air Quality Management District (BAAQMD), have numerical screening criteria available. Based on BAAQMD's guidance, which can be applied to projects within SMAQMD's jurisdiction for determining localized CO hotspot impacts, projects meeting the following criteria would not result in a CO hotspot (BAAQMD 2023):

- Project-generated traffic would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour, and
- Project-generated traffic would not increase traffic volumes at affected intersections to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, bridge underpass, natural or urban street canyon, below-grade roadway).

These thresholds use intersection volume when considering CO emissions because intersections are susceptible to creating CO hotspots due to the frequency of vehicles idling when stopped. Because the maximum peak hourly trips along any one roadway segment would be 6,750 trips per hour, the Project would not result in an exceedance of the threshold of 44,000 vehicles/hour at any one intersection, and the Project would not result in a CO hotspot. Additionally, mobile-source CO emissions have historically decreased since the advent of catalytic converters, which decrease mobile-source exhaust emissions, and there have been improvements in fuel economy since 2006 through regulatory compliance implemented by EPA and CARB (e.g., the CAFE standards and Advanced Clean Cars II program). As such, CO emissions from the Project would not result in a new or substantially more severe impact as compared to what was evaluated in the General Plan EIR. Pursuant to CEQA Guidelines Section 15162, the Project would not result in a new or substantially more severe impact related to CO emissions than was

[7] Emissions estimates associated with project-related mobile sources are considered conservative as emissions as they are based on the inclusion of three additional sites which are no longer considered in the scope of the project.

evaluated in the General Plan EIR. The Project's contribution to impacts would not be substantial and overall impacts would remain less than significant.

MITIGATION MEASURES

Mitigation not required.

DISTINCT AREA PLANS

FAIR OAKS BOULEVARD CORRIDOR PLAN

ENVIRONMENTAL IMPACT REPORT DETERMINATION

The Fair Oaks Boulevard EIR, determined that anticipated development in the Fair Oaks Boulevard Corridor Plan would have a less than significant impact related to CO emissions resulting from both the construction of the Fair Oaks Boulevard Corridor Plan as well as the construction of roadways associated with the Fair Oaks Boulevard Corridor Plan. CO emissions related to the operation of the Fair Oaks Boulevard Corridor Plan were not analyzed.

IMPACT EVALUATION

Emissions of CO from the use of construction equipment are not typically of concern as construction activities occur sporadically and last for relatively short periods of time. Therefore, construction-related emissions of CO associated with the proposed rezone on Site 67 would be minimal.

As stated above, operation of residential development allowed under the Project would result in a maximum of 6,750 trips per hour along any single roadway segment. This is below the BAAQMD threshold of 44,00 vehicles/hour at any one intersection. Additionally, these new trips account for all trips made along an entire roadway section throughout the course of a day. Therefore, the ADT that would occur through any one intersection within the Fair Oaks Boulevard Corridor area would be even less. Project-related CO emissions would not be new or substantially more severe than those which were analyzed in the Fair Oaks Boulevard EIR. Therefore, pursuant to CEQA Guidelines Section 15162, the rezone of Site 67 as part of the Project would not result in a new or substantially more severe impact related to CO emissions than was evaluated in the Fair Oaks Boulevard EIR. The Project's contribution to impacts from rezoning Site 67 would not be substantial and overall impacts would be less than significant.

MITIGATION MEASURES

Mitigation not required.

NORTH WATT AVENUE CORRIDOR PLAN

ENVIRONMENTAL IMPACT REPORT DETERMINATION

The North Watt Avenue EIR determined that development in the North Watt Avenue Corridor Plan would have a less than significant impact related to CO emissions resulting

from the construction of the North Watt Avenue Corridor Plan. CO emissions related to the operation of the North Watt Avenue EIR were not analyzed.

IMPACT EVALUATION

Emissions of CO from the use of construction equipment are not typically of concern as construction activities occur sporadically and last for relatively short periods of time. Therefore, construction-related emissions of CO associated with the proposed rezone on Sites 68 through 72 would be minimal.

As stated above, operation of residential development allowed under the Project would result in a maximum of 6,750 trips per hour along any single roadway segment. This is below the BAAQMD threshold of 44,00 vehicles/hour at any one intersection. Additionally, this maximum ADT accounts for all trips made along an entire roadway section throughout the course of a day. Therefore, the ADT that would occur through any one intersection within the North Watt Avenue Corridor area would be even less. There would not be new or substantially more severe Project-related CO emissions than those that were analyzed in the North Watt Avenue EIR. Therefore, pursuant to CEQA Guidelines Section 15162, the rezone of Sites 68 through 72 as part of the Project would not result in a new or substantially more severe impact related to CO emissions than was evaluated in the North Watt Avenue EIR. The Project's contribution to impacts from rezoning Sites 68 through 72 would not be substantial and overall impacts would be less than significant.

MITIGATION MEASURES

Mitigation not required.

OLD FLORIN TOWN SPA

ENVIRONMENTAL IMPACT REPORT DETERMINATION

Impacts related to CO within the Old Florin Town SPA EIR were determined to be less than significant as they related to CO emissions resulting from the construction of the Old Florin Town SPA. CO emissions related to the operation of the Old Florin Town SPA were not analyzed.

IMPACT EVALUATION

Emissions of CO from the use of construction equipment are not typically of concern as construction activities occur sporadically and last for relatively short periods of time. Therefore, construction-related emissions of CO associated with the proposed rezone on Sites 73 through 79 would be minimal.

As stated above, operation of residential development allowed under the proposed countywide rezone would result in a maximum of 6,750 trips per hour along any single roadway segment. This is below the BAAQMD threshold of 44,00 vehicles/hour at any one intersection. Additionally, this maximum ADT accounts for all trips made along an entire roadway section throughout the course of a day. Therefore, the ADT that would occur through any one intersection within the Old Florin Town SPA would be even less. There would not be new or substantially more severe Project-related CO emissions than those that were analyzed in the Old Florin Town SPA EIR. Therefore, pursuant to CEQA

Guidelines Section 15162, the rezone of Sites 73 through 79 as part of the Project would not result in a new or substantially more severe impact related to CO emissions than was evaluated in the Old Florin Town SPA EIR. The Project's contribution to impacts from rezoning Sites 73 through 79 would not be substantial and overall impacts would be less than significant.

MITIGATION MEASURES

Mitigation not required.

IMPACT AQ-4: EXPOSURE OF SENSITIVE RECEPTORS TO TACS

GENERAL PLAN EIR IMPACT CONCLUSION

The General Plan EIR determined that because construction activities associated with development allowed under the General Plan would be short-term and occur over a construction period of several months to several years, impacts related to the exposure of sensitive receptors to TACs would be less than significant. The General Plan EIR concluded that the implementation of SMAQMD-required measures meant to reduce construction-related emissions would further reduce construction emissions. An analysis of operational TACs was not included in the General Plan EIR.

PROPOSED PROJECT IMPACT EVALUATION

The proposed Project involves rezoning properties across the county to increase residential development capacity. Therefore, emissions of TACs would not be generated during Project operation because residential land uses are not considered stationary sources of TAC emissions. This analysis focuses on construction TACs and does not analyze operational TACs emissions.

Particulate exhaust emissions from diesel-fueled engines (i.e., diesel PM) were identified as a TAC by CARB in 1998. The potential cancer risk from the inhalation of diesel PM, as discussed above, outweighs the potential for all other health impacts (i.e., non-cancer chronic risk, short-term acute risk) and health impacts from other TACs (CARB 2003: K-1). With regard to exposure of diesel PM, the dose to which receptors are exposed is the primary factor used to determine health risk. Dose is a function of the concentration of a substance or substances in the environment and the duration of exposure to the substance. Dose is positively correlated with time, meaning that a longer exposure period would result in a higher level of health risk for any exposed receptor. Therefore, the risks estimated for an exposed individual are higher if a fixed exposure occurs over a longer period. According to the Office of Environmental Health Hazard Assessment, when a Health Risk Assessment is prepared to project the results of exposure of sensitive receptors to selected compounds, exposure of sensitive receptors to TACs emissions should be based on a 70- or 30-year exposure period. However, such assessments should be limited to the duration of activities associated with a proposed project if emissions occur for shorter periods (OEHHA 2015: 5-23, 5-24).

The TAC that is the focus of this construction analysis is diesel PM because it is known that diesel PM would be emitted during Project construction.

Construction-related activities associated with the buildout of the Project would result in temporary, intermittent emissions of diesel PM from the exhaust of off-road equipment used during demolition and building modernization and on-road heavy-duty trucks. On-road diesel-powered haul trucks traveling to and from a construction area to deliver materials and equipment are less of a concern because they do not operate at any one location for extended periods of time such that they would expose a single receptor to excessive diesel PM emissions.

Based on the construction-related emissions modeling conducted for the Project (see Appendix AQ-1), maximum daily emissions of exhaust PM_{10} would be approximately 6 lb/day during peak construction associated with the Project.

The Project would increase development density compared to what was proposed in the General Plan EIR for some, but not all, the proposed candidate rezone sites, although development would occur within the same footprint as analyzed in the General Plan EIR. This increase could result in increased intensity and duration of construction activities within the candidate rezone sites. At this time, however, the timing, duration, and magnitude of construction activities, as well as the potential for overlapping construction from multiple projects to occur is unknown.

At the time of writing this SEIR, sensitive land uses (e.g., schools, residences, hospitals) have been developed in areas designated for those uses by the General Plan. Some locations of candidate rezone sites are located within the proximity of nearby sensitive receptors; however, because the Project includes only rezoning properties and does not include specific development proposals, the exact timing, haul truck routes, duration of construction activity, and types of equipment are unknown at this time and consequently a project-specific HRA cannot be conducted. Nevertheless, it is foreseeable that future construction activities could generate emissions of diesel PM in concentrations exceeding SMAQMD's 10 in one million threshold of significance at a nearby location of a sensitive receptor.

Therefore, because there is potential for construction of a future candidate rezone site to generate TACs exceeding SMAQMD's 10 in one million threshold of significance, the Project could result in a new impact compared to what was identified in the General Plan EIR. This impact would be significant**.**

MITIGATION MEASURES

Mitigation Measure AQ-2: Require Construction Health Risk Assessment

> Prior to approval of improvement plans, grading plans, or issuance of building permits, (whichever occurs first) a site-specific HRA shall be required for all construction projects anticipated to last more than six months and located within 500 feet of sensitive receptors (as defined by SJVAPCD). All recommendations from the HRA shall be enforced as conditions of approval of the development. Measures to reduce diesel PM exposure include, but are not limited to:

- use of heavy-duty equipment meeting EPA's Tier 4 emission standards, as defined in 40 CFR 1039 and complying with the appropriate test procedures and provisions contained in 40 CFR Parts 1065 and 1068; and

- use of battery-electric off-road equipment as it becomes available. Implementation of this measure shall be required in the contract the Project applicant establishes with its construction contractors.

Future applicants overseeing development on candidate rezone sites shall demonstrate plans to fulfill the requirements of this measure in a report or in Project improvement plan details submitted to the County before the use of any off-road diesel-powered construction equipment on the site.

SIGNIFICANCE AFTER MITIGATION

Implementation of Mitigation Measure AQ-2 would require individual development projects (with a construction period extending longer than 6 months) proposed on any future candidate rezone sites located within 500 feet of an existing sensitive receptor to prepare a site-specific HRA. The HRA would identify project-specific measures needed to reduce TAC exposure. As the lead agency overseeing the issuance of permits to construct and all subsequent environmental documentation for candidate rezone sites proposed under the Project, Sacramento County would ensure that future project applicants would comply with sufficient measures to reduce diesel PM exposure to a less-than-significant level. Therefore, although implementation of the proposed residential capacity would result in a new significant impact related to diesel PM exposure, this impact would be reduced to a less-than-significant level with mitigation**.** Therefore, pursuant to CEQA Guidelines Section 15162, the Project would not result in a new or substantially more severe TAC impact than was evaluated in the General Plan EIR. The Project's contribution to impacts would not be substantial with mitigation and overall impacts would be less than significant with mitigation.

DISTINCT AREA PLANS

FAIR OAKS BOULEVARD CORRIDOR PLAN

ENVIRONMENTAL IMPACT REPORT DETERMINATION

The Fair Oaks Boulevard EIR determined that construction of the Fair Oaks Boulevard Corridor Plan would result in a less than significant impact related to emissions of diesel PM, the primary pollutant of concern regarding TACs, with the application of adopted Mitigation Measure AQ-1 (intended to reduce construction ozone precursor emissions and diesel particulates) identified in the Fair Oaks Boulevard EIR. Operational impacts specifically related to TAC emissions within the Fair Oaks Boulevard Corridor area were not analyzed in the previous EIR.

IMPACT EVALUATION

Future development under the Project on Site 67 within the Fair Oaks Boulevard Corridor area would result in minor increased residential development capacity. Therefore,

emissions of TACs would not be generated during operation because residential land uses are not considered stationary sources of TAC emissions. Therefore, this analysis focuses on construction TACs and does not analyze operational TACs emissions.

The TAC that is the focus of this construction analysis is diesel PM because it is known that diesel PM would be emitted during construction on Site 67 and diesel PM is the primary pollutant of concern regarding TACs from construction.

Construction-related activities associated with future Project buildout on Site 67 would result in temporary, intermittent emissions of diesel PM from the exhaust of off-road equipment used during grading, land clearing, and building construction activities, as well as from on-road heavy-duty trucks. On-road diesel-powered haul trucks traveling to and from a construction area to deliver materials and equipment are less of a concern because they do not operate at any one location for extended periods of time such that they would expose a single receptor to excessive diesel PM emissions.

Based on the construction-related emissions modeling conducted (see Appendix AQ-1), maximum daily emissions of exhaust PM_{10} would be less than 1 lb/day during peak construction on Site 67.

The addition of units on Site 67 within the Fair Oaks Boulevard Corridor area as part of the Project would increase development density compared to what was analyzed in the Fair Oaks Boulevard EIR. However, development would occur in the same footprint as was analyzed in the Fair Oaks Boulevard EIR. This increase could result in increased intensity and duration of construction activities on Site 67.

Construction activities associated with the development of Site 67 would occur near sensitive receptors such as residences within 50 feet of Site 67 and a school approximately 500 feet from Site 67 (see *Existing Air Quality Conditions* above). At the time of writing this SEIR, sensitive land uses (e.g., schools, residences, hospitals) have been developed in areas designated for those uses by the Fair Oaks Boulevard Corridor Plan and evaluated under the Fair Oaks Boulevard EIR. However, because the Project includes only rezoning properties and does not include specific development proposals, the exact timing, haul truck routes, duration of construction activity, and types of equipment needed for development on Site 67 are unknown at this time and consequently a project-specific HRA cannot be conducted. Nevertheless, it is foreseeable that future construction activity could generate emissions of diesel PM in concentrations exceeding SMAQMD's 10 in one million threshold of significance at the nearest location of a sensitive receptor (i.e., residences located approximately 50 feet of Site 67).

Therefore, because there is potential for construction of residential development on Site 67 to generated TACs exceeding SMAQMD's 10 in one million threshold of significance, the proposed rezone on Site 67 could result in a new impact compare to what was identified in the Fair Oaks Boulevard EIR. This impact would be significant**.**

MITIGATION MEASURES

Implement Mitigation Measure AQ-2 and Mitigation Measure FO-AQ-1.

SIGNIFICANCE AFTER MITIGATION

Implementation of Mitigation Measure AQ-2 would require individual development projects (with a construction period extending longer than 6 months) proposed on any future candidate rezone sites located within 500 feet of an existing sensitive receptor to prepare a site-specific HRA. The HRA would identify project-specific measures needed to reduce TAC exposure. As the lead agency overseeing the issuance of permits to construct and all subsequent environmental documentation for the candidate rezone sites, Sacramento County would require future development on Site 67 to implement measures to reduce diesel PM exposure to a less-than-significant level. Similarly, implementation of Mitigation Measure FO-AQ-1 would also reduce emissions of diesel PM by requiring that the criteria of SMAQMD's Enhanced On-Site Exhaust Controls. Therefore, although implementation of the proposed residential capacity would result in a new significant impact related to diesel PM exposure during construction on Site 67, this impact would be reduced to a less-than-significant level with mitigation**.** Therefore, pursuant to CEQA Guidelines Section 15162, the rezone of Site 67 as part of the Project would not result in new or substantially more severe impact than was evaluated in the Fair Oaks Boulevard EIR. The Project's contribution to impacts from rezoning Site 67 would not be substantial with mitigation and overall impacts would be less than significant with mitigation.

NORTH WATT AVENUE CORRIDOR PLAN

ENVIRONMENTAL IMPACT REPORT DETERMINATION

The North Watt Avenue EIR determined that construction of the North Watt Avenue Corridor Plan would result in less than significant emissions of diesel PM, the primary pollutant of concern regarding TACs, with the application of Mitigation Measure AQ-1 (intended to reduce construction ozone precursor emissions and diesel particulates) identified in the North Watt Avenue EIR. Impacts specifically related to TACs generated during construction of the Roadway Project and operation of the North Watt Avenue Corridor Plan were not analyzed in the previous EIR.

IMPACT EVALUATION

The proposed rezone on Sites 68 through 72 within the North Watt Avenue Corridor area would increase residential development capacity. Therefore, emissions of TACs would not be generated during operation because residential land uses are not considered stationary sources of TAC emissions. This analysis focuses on construction TACs and does not analyze operational TACs emissions.

The TAC that is the focus of this construction analysis is diesel PM because it is known that diesel PM would be emitted during construction activities on Sites 68 through 72 and diesel PM is the primary pollutant of concern regarding TACs from construction.

Construction-related activities associated with buildout on Sites 68 through 72 would result in temporary, intermittent emissions of diesel PM from the exhaust of off-road equipment used during grading, land clearing, and building construction activities, as well as from on-road heavy-duty trucks. On-road diesel-powered haul trucks traveling to and

from a construction area to deliver materials and equipment are less of a concern because they do not operate at any one location for extended periods of time such that they would expose a single receptor to excessive diesel PM emissions.

Based on the construction-related emissions modeling conducted (see Appendix AQ-1), maximum daily emissions of exhaust PM_{10} would be approximately 1 lb/day during peak construction on Sites 68 through 72.

Future development on Sites 68 through 72 would increase development density compared to what was analyzed in the North Watt Avenue EIR; however, development would occur in the same footprint as was analyzed in the EIR.

Construction activities would occur near sensitive receptors throughout the North Watt Avenue Corridor area such as residential receptors within 50 feet of Sites 68 and 69.

At the time of writing this SEIR, sensitive land uses (e.g., schools, residences, hospitals) have been developed in areas designated for those uses by the North Watt Avenue Corridor Plan and evaluated under the North Watt Avenue EIR. As detailed under heading "*Existing Air Quality Conditions"* in the "Settings" section above, Sites 68-72 are located within 500 feet of residential receptors. However, because the Project includes only rezoning properties and does not include specific development proposals, the exact timing, haul truck routes, duration of construction activity, and types of equipment are unknown at this time and, consequently, a project-specific HRA cannot be conducted. Nevertheless, it is foreseeable that future construction activity could generate emissions of diesel PM in concentrations exceeding SMAQMD's 10 in one million threshold of significance at a nearby location of a sensitive receptor.

Therefore, because of the potential for construction of a future rezone sight to generated TACs exceeding SMAQMD's 10 in one million threshold of significance, the proposed rezone on Sites 68 through 72 would result in a new impact compared to what was identified in the North Watt Avenue EIR. This impact would be significant.

MITIGATION MEASURES

Implement Mitigation Measure AQ-2 and Mitigation Measure NW-AQ-1.

SIGNIFICANCE AFTER MITIGATION

Implementation of Mitigation Measure AQ-2 would require individual development projects (with a construction period extending longer than 6 months) proposed on any future candidate rezone sites located within 500 feet of an existing sensitive receptor to prepare a site-specific HRA. The HRA would identify project-specific measures needed to reduce TAC exposure. As the lead agency overseeing the issuance of permits to construct and all subsequent environmental documentation for candidate rezone sites, Sacramento County would ensure that future development on Sites 68 through 72 would implement measures to reduce diesel PM exposure to a less-than-significant level. Similarly, implementation of Mitigation Measure NW-AQ-1 would also reduce emissions of diesel PM by requiring that the criteria of SMAQMD's Enhanced On-Site Exhaust Controls. Therefore, although development on Sites 68 through 72 allowed under the Project would

result in a new significant impact related to diesel PM exposure during construction activities this impact would be reduced to a less-than-significant level with mitigation**.** Therefore, pursuant to CEQA Guidelines Section 15162, the rezone of Sites 68 through 72 as part of the Project would not result in a new or substantially more severe impact than was evaluated in the North Watt Avenue EIR. The Project's contribution to impacts from rezoning Sites 68 through 72 would not be substantial with mitigation and overall impacts would be less than significant with mitigation.

OLD FLORIN TOWN SPA

ENVIRONMENTAL IMPACT REPORT DETERMINATION

The Old Florin Town SPA EIR determined that construction of the Old Florin Town SPA would result in less than significant emissions of diesel PM, the primary pollutant of concern regarding TACs, with the application of Mitigation Measure AQ-1(intended to reduce construction ozone precursor emissions and diesel particulates) identified in the Old Florin Town SPA EIR. Operational impacts specifically related to TAC emissions of the Old Florin Town SPA were not analyzed in the previous EIR.

IMPACT EVALUATION

The proposed rezone on Sites 73 through 79 within the Old Florin Town SPA would increase residential development capacity. Therefore, emissions of TACs would not be generated during operation because residential land uses are not considered stationary sources of TAC emissions. Therefore, this analysis focuses on construction TACs and does not analyze operational TACs emissions.

The TAC that is the focus of this construction analysis is diesel PM because it is known that diesel PM would be emitted during construction on Sites 73 through 79 and diesel PM is the primary pollutant of concern regarding TACs from construction.

Construction-related activities associated with buildout on Sites 73 through 79 would result in temporary, intermittent emissions of diesel PM from the exhaust of off-road equipment used during grading, land clearing, and building construction activities, as well as from on-road heavy-duty trucks. On-road diesel-powered haul trucks traveling to and from a construction area to deliver materials and equipment are less of a concern because they do not operate at any one location for extended periods of time such that they would expose a single receptor to excessive diesel PM emissions.

Based on the construction-related emissions modeling conducted (see Appendix AQ-1), maximum daily emissions of exhaust PM_{10} would be approximately 1 lb/day during peak construction on Sites 73 through 79. This is below the SMAQMD-recommended threshold of 80 lb/day.

Future development on Sites 73 through 79 within the Old Florin Town SPA would increase development density compared to what was analyzed in the Old Florin Town SPA EIR. However, development would occur in the same footprint as was analyzed in the previous analysis.

Construction activities would occur near sensitive receptors such as residences within 50 feet of Site 75, and a daycare located approximately 250 feet from Site 78. At the time of writing this SEIR, sensitive land uses (e.g., schools, residences, hospitals) have been developed in areas designated for those uses by the Old Florin Town SPA and evaluated under the Old Florin Town SPA EIR. As detailed above and under heading "*Existing Air Quality Conditions"* in the "Settings" section above, Sites 73-79 are all located within 500 feet of sensitive receptors including residences and a daycare. However, because the Project includes only rezoning properties and does not include specific development proposals, the exact timing, haul truck routes, duration of construction activity, and types of equipment are unknown at this time and, consequently, a project-specific HRA cannot be conducted. Nevertheless, it is foreseeable that future construction activity could generate emissions of diesel PM in concentrations exceeding SMAQMD's 10 in one million threshold of significance at a nearby location of a sensitive receptor.

Therefore, because of the potential for construction of a future rezone sight to generated TACs exceeding SMAQMD's 10 in one million threshold of significance, the proposed rezone on Sites 73 through 79 would result in a new impact compared to what was identified in the Old Florin Town SPA EIR. This impact would be significant.

MITIGATION MEASURES

Implement Mitigation Measure AQ-2 and Mitigation Measure OFT-AQ-1.

SIGNIFICANCE AFTER MITIGATION

Implementation of Mitigation Measure AQ-2 would require individual development projects (with a construction period extending longer than 6 months) proposed on any future candidate rezone sites located within 500 feet of an existing sensitive receptor to prepare a site-specific HRA. The HRA would identify project-specific measures needed to reduce TAC exposure. As the lead agency overseeing the issuance of permits to construct and all subsequent environmental documentation for candidate rezone sites, Sacramento County would require future development on Sites 73 through 79 to implement measures to reduce diesel PM exposure to a less-than-significant level. Similarly, implementation of Mitigation Measure OFT-AQ-1 would also reduce emissions of diesel PM by requiring that the criteria of SMAQMD's Enhanced On-Site Exhaust Controls. Therefore, although on Sites 73 through 79 allowed under the Project would result in a new significant impact related to diesel PM exposure during construction this impact would be reduce to a less-than-significant level with mitigation. Therefore, pursuant to CEQA Guidelines Section 15162, the rezone of Sites 73 through 79 as part of the Project would not result in a new or substantially more severe impact than was evaluated in the Old Florin Town SPA EIR. The Project's contribution to impacts from rezoning Sites 73 through 79 would not be substantial with mitigation and overall impacts would be less than significant with mitigation.

IMPACT AQ-5: CONSISTENCY WITH AN APPLICABLE AIR QUALITY PLAN

GENERAL PLAN EIR IMPACT CONCLUSION

The General Plan EIR determined that the proposed General Plan would not be consistent with the land use assumptions of the SIP because the excess capacity proposed in the General Plan was not consistent with SIP assumptions and would therefore result in more air quality impacts than planned for within the SIP. Additionally, the General Plan was shown to result in air pollutants emissions exceeding SMAQMD's thresholds, which conflicts with the goals of the SIP. This impact was determined to be significant and unavoidable.

PROPOSED PROJECT IMPACT EVALUATION

Sacramento County is currently in nonattainment for ozone and $PM_{2.5}$ in regard to NAAQS, and ozone and PM_{10} in regard to the CAAQS. The most current AQAPs adopted by SMAQMD are the 2023 Sacramento Regional Plan for the 2015 70 ppb 8-Hour Ozone Standard, adopted in October 2023, and the 2020 Metropolitan Transportation Plan/Sustainable Communities Strategy [2020 MTP/SCS]). The 2020 MTP/SCS was adopted on November 18, 2019. In November of 2022, the Sacramento Area Council of Governments (SACOG) Board of Directors authorized SACOG staff to pursue state legislation to extend the Blueprint (SACOG's MTP/SCS) schedule, which moved the plan adoption date from Spring 2024 to Fall 2025. Since then, Assembly member Aguiar-Curry introduced a bill (AB 350) that provides SACOG with the legislative authorization needed to keep the current SCS in compliance with state law for an additional two years. This legislation went into effect on January 1, 2024.

The emission inventories used to develop these plans are based primarily on projected population and employment growth and associated VMT for the SVAB. This growth is estimated for the region based, in part, on the planned growth identified in regional and local land use plans such as general plans or distinct area plans. Therefore, projects that would result in population and/or employment growth beyond that projected in regional or local plans could result in increases in VMT above that forecasted in the attainment plans, further resulting in mobile source emissions that could conflict with or obstruct implementation of the air quality plans. Increases in VMT beyond that projected in the County's General Plan, SACOG's regional VMT modeling, and SMAQMD regional air quality plans generally would be considered to have a significant adverse incremental effect on the SVAB's ability to attain CAAQS and NAAQS for all criteria air pollutants.

The Project is located within the County's General Plan area. State law requires each city and county to adopt a general plan containing at least eight elements including a housing element. The housing element, required to be updated regularly, is designed to meet the regional housing needs allocation (RHNA) of the region. The RHNA is the state-mandated process to identify the total number of housing units (by affordability level) that every city and county must accommodate in Housing Elements (in this case, the County's 2021-2029 Housing Element). The housing element is subject to detailed statutory requirements and mandatory review by the State Department of Housing and Community

Development (HCD). The County's 2021-2029 Housing Element was certified by HCD on May 9, 2022 and adopted after responding to HCD comments on March 8, 2022.

The additional residential development allowed under the Project satisfies the goals of the 2030 General Plan and Housing Element by creating sufficient capacity to address the County's current RHNA obligations. Because the 2023 Sacramento Regional Plan for the 2015 70 ppb 8-Hour Ozone Standard was adopted following the adoption of the 2021-2029 Housing Element, it includes the growth projections accounted for in the County's 2021-2029 Housing Element. The MTP/SCS is federally required to be updated every four years; however, as described above, the 2020 MTP/SCS remains the most recent MTP/SCS at the time of the writing of this analysis. The 2020 MTP/SCS prioritizes the location of proposed development for the forecast period of 2016-2040. Infill and corridor sites, such as those proposed under the Project, are shown to reduce VMT and are therefore consistent with the 2020 MTP/SCS. Additionally, the 2020 MTP/SCS was adopted prior to the adoption of the 2021-2029 Housing Element and thus informs the growth projections of the 2021-2029 Housing Element. Therefore, the growth projections of the 2021-2029 Housing Element, which include the proposed increase in residential capacity under the Project, are consistent with the 2020 MTP/SCS. Because the currently adopted MTP/SCS accounts for the additional development allowed under the proposed rezone which is included in the 2021-2029 Housing Element, the Project would be considered consistent with applicable air quality plans. Pursuant to CEQA Guidelines Section 15162, the proposed Project would not result in new substantial adverse physical impacts related to conflict with an applicable air quality plan over what was already disclosed in the General Plan EIR. The Project's contribution to impacts would not be substantial and overall impacts would remain significant and unavoidable.

Additionally, while increased residential capacity allowed under the proposed Project could result in more total units being constructed than what was analyzed in the General Plan EIR, implementation of the Project would result in a more efficient distribution of criteria pollutant emissions per capita because of the denser development allowed through rezoning. Increasing housing density would result in fewer criteria pollutant emissions per capita, or the criteria pollutant emissions associated, either directly or indirectly, with a single person. This is because more compact development patterns reduce per capita energy demands, while less-compact sprawl increases demand (CARB 2017). In terms of construction, the energy used to facilitate construction would be more efficient compared to that needed to construct housing for less dense development on a per capita basis. In terms of operation, emissions of criteria pollutants associated with sources such as mobile sources, area sources, and energy sources are considered more efficient when the associated development houses a larger number of people in a smaller area. Therefore, the additional residential capacity under the proposed Project would be considered more efficient in terms of emissions per capita compared to the residential capacity analyzed in the General Plan because the rezone could result in a greater number of people being housed within the same development footprint. Decreasing per capita emissions, especially those related to VMT, aligns with the goals of the 2022 SIP (CARB 2022b: 73).

MITIGATION MEASURES

Mitigation not required.

DISTINCT AREA PLANS

FAIR OAKS BOULEVARD CORRIDOR PLAN

ENVIRONMENTAL IMPACT REPORT DETERMINATION

The Fair Oaks Boulevard EIR did not analyze impacts related to consistency with an applicable air quality plan.

IMPACT EVALUATION

The anticipated growth within the Fair Oaks Boulevard Corridor area was accounted for as part of the growth projections in the General Plan's 2021-2029 Housing Element. As stated above, the growth projections of general plans inform the population and VMT projections used to develop air quality plans and their air quality strategies. Because the 2023 Sacramento Regional Plan for the 2015 70 ppb 8-Hour Ozone Standard was adopted following the adoption of the 2021-2029 Housing Element, it incorporates the growth projections accounted for in the County's 2021-2029 Housing Element in its strategy to achieve attainment of NAAQS for ozone.

The 2020 MTP/SCS prioritizes the location of proposed development for the forecast period of 2016-2040. Infill and corridor sites, such as tat proposed on Site 67, are shown to reduce VMT and are therefore consistent with the 2020 MTP/SCS. Additionally, the 2020 MTP/SCS was adopted prior to the adoption of the 2021-2029 Housing Element and thus informs the growth projections of the 2021-2029 Housing Element. Therefore, the growth projections of the 2021-2029 Housing Element, which include the proposed increase in residential capacity within the Fair Oaks Boulevard Corridor area under the Project, are consistent with the 2020 MTP/SCS. Because the currently adopted MTP/SCS accounts for the additional development allowed under the proposed rezone which is included in the 2021-2029 Housing Element, the proposed increase in residential capacity within the Fair Oaks Boulevard Corridor area under the Project would be considered consistent with applicable air quality plans. Therefore, pursuant to State CEQA Guidelines Section 15162, implementation of the Project would not result in new or more severe significant impacts related to consistency with an applicable air quality plan than would occur with implementation of the Fair Oaks Boulevard Corridor Plan.

Additionally, as stated above, while increased residential capacity allowed on Site 67 as part of the Project could result in more total units being constructed than what was analyzed in the Fair Oaks Boulevard EIR, the rezone would result in a more efficient distribution of criteria pollutant emissions per capita because of the denser development allowed through rezoning. Increasing housing density would result in fewer criteria pollutant emissions per capita, or the criteria pollutant emissions associated, either directly or indirectly, with a single person. This is because more compact development patterns reduce per capita energy demands, while less-compact sprawl increases demand (CARB 2017). In terms of construction, the energy used to facilitate construction

would be more efficient compared to that needed to construct housing for less dense development on a per capita basis. In terms of operation, emissions of criteria pollutants associated with sources such as mobile sources, area sources, and energy sources are considered more efficient when the associated development houses a larger number of people in a smaller area. Therefore, the additional residential capacity allowed on Site 67 as part of the Project would be considered more efficient in terms of emissions per capita compared to the residential capacity analyzed in the Fair Oaks Boulevard EIR because the rezone could result in a greater number of people being housed within the same development footprint. Decreasing per capita emissions, especially those related to VMT, aligns with the goals of the 2022 SIP (CARB 2022b: 73).

MITIGATION MEASURES

Mitigation not required.

NORTH WATT AVENUE CORRIDOR PLAN

ENVIRONMENTAL IMPACT REPORT DETERMINATION

The North Watt Avenue EIR did not analyze impacts related to consistency with an applicable air quality plan. However, as stated above, the General Plan EIR, which accounted for the projected growth within the North Watt Avenue Corridor area, determined that the proposed General Plan would not be consistent with the land use assumptions of the SIP because the excess capacity proposed in the General Plan was not consistent with SIP assumptions and would therefore result in more air quality impacts than planned for within the SIP.

IMPACT EVALUATION

The anticipated growth within the North Watt Avenue Corridor area was accounted for as part of the growth projections in the General Plan's 2021-2029 Housing Element. As stated above, the growth projections of general plans inform the population and VMT projections used to develop air quality plans and their air quality strategies. Because the 2023 Sacramento Regional Plan for the 2015 70 ppb 8-Hour Ozone Standard was adopted following the adoption of the 2021-2029 Housing Element, it incorporates the growth projections accounted for in the County's 2021-2029 Housing Element in its strategy to achieve attainment of NAAQS for ozone.

The 2020 MTP/SCS prioritizes the location of proposed development for the forecast period of 2016-2040. Infill and corridor sites, such as that proposed on Sites 68 through 72 under the Project, are shown to reduce VMT and are therefore consistent with the 2020 MTP/SCS. Additionally, the 2020 MTP/SCS was adopted prior to the adoption of the 2021-2029 Housing Element and therefore informs the growth projections of the 2021-2029 Housing Element. Therefore, the growth projections of the 2021-2029 Housing Element, which include the proposed increase in residential capacity within the North Watt Avenue Corridor area under the Project, are consistent with the 2020 MTP/SCS. Because the currently adopted MTP/SCS accounts for the additional development allowed under the proposed rezone, which is included in the 2021-2029 Housing Element, the proposed increase in residential capacity within the North Watt Avenue Corridor area under the

Project would be considered consistent with applicable air quality plans. This impact would be less than significant. Therefore, pursuant to State CEQA Guidelines Section 15162, implementation of the Project would not result in new or more severe significant impacts related to consistency with an applicable air quality plan than would occur with implementation of the North Watt Avenue Corridor Plan.

Additionally, while increased residential capacity allowed on Sites 68 through 72 as part of the Project could result in more total units being constructed than what was analyzed in the North Watt Avenue EIR, the rezone would result in a more efficient distribution of criteria pollutant emissions per capita because of the denser development allowed through rezoning. Increasing housing density would result in fewer criteria pollutant emissions per capita, or the criteria pollutant emissions associated, either directly or indirectly, with a single person. This is because more compact development patterns reduce per capita energy demands, while less-compact sprawl increases demand (CARB 2017). In terms of construction, the energy used to facilitate construction would be more efficient compared to that needed to construct housing for less dense development on a per capita basis. In terms of operation, emissions of criteria pollutants associated with sources such as mobile sources, area sources, and energy sources are considered more efficient when the associated development houses a larger number of people in a smaller area. Therefore, the additional residential capacity allowed on Sites 68 through 72 as part of the Project would be considered more efficient in terms of emissions per capita compared to the residential capacity analyzed in the North Watt Avenue EIR because the rezone could result in a greater number of people being housed within the same development footprint. Decreasing per capita emissions, especially those related to VMT, aligns with the goals of the 2022 SIP (CARB 2022b: 73).

MITIGATION MEASURES

Mitigation not required.

OLD FLORIN TOWN SPA

ENVIRONMENTAL IMPACT REPORT DETERMINATION

The Old Florin Town SPA EIR did not analyze impacts related to consistency with an applicable air quality plan. However, as stated above, the General Plan EIR, which accounted for the projected growth within the Old Florin Town SPA area, determined that the proposed General Plan would not be consistent with the land use assumptions of the SIP because the excess capacity proposed in the General Plan was not consistent with SIP assumptions and would therefore result in more air quality impacts than planned for within the SIP. Therefore, had consistency with air quality plans been analyzed in the Old Florin Town SPA, it is likely that the analysis would have concluded that the Old Florin Town SPA was not consistent with applicable air quality plans because the General Plan was shown to exceed the growth projections of the SIP.

IMPACT EVALUATION

The anticipated growth within the Old Florin Town SPA was accounted for as part of the growth projections in the General Plan's 2021-2029 Housing Element. As stated above,

the growth projections of general plans inform the population and VMT projections used to develop air quality plans and their air quality strategies. Because the 2023 Sacramento Regional Plan for the 2015 70 ppb 8-Hour Ozone Standard was adopted following the adoption of the 2021-2029 Housing Element, it incorporates the growth projections accounted for in the County's 2021-2029 Housing Element in its strategy to achieve attainment of NAAQS for ozone.

The MTP/SCS is federally required to be updated every four years; however, as described above, the 2020 MTP/SCS remains the most recent MTP/SCS at the time of the writing of this analysis.

The 2020 MTP/SCS prioritizes the location of proposed development for the forecast period of 2016-2040. Infill and corridor sites, such as proposed on Sites 73 through 79 under the Project, are shown to reduce VMT and are therefore consistent with the 2020 MTP/SCS. Additionally, the 2020 MTP/SCS was adopted prior to the adoption of the 2021-2029 Housing Element and thus informs the growth projections of the 2021-2029 Housing Element. Therefore, the growth projections of the 2021-2029 Housing Element, which include the proposed increase in residential capacity within the Old Florin Town SPA under the Project, are consistent with the 2020 MTP/SCS. Because the currently adopted MTP/SCS accounts for the additional development allowed under the proposed rezone which is included in the 2021-2029 Housing Element, the proposed increase in residential capacity within the Old Florin Town SPA under the Project would be considered consistent with applicable air quality plans. This impact would be less than significant. Therefore, pursuant to State CEQA Guidelines Section 15162, implementation of the Project would not result in new or more severe significant impacts related to consistency with an applicable air quality plan than would occur with implementation of the Old Florin Town SPA.

Additionally, while increased residential capacity allowed on Sites 73 through 79 as part of the Project could result in more total units being constructed than what was analyzed in the Old Florin Town SPA EIR, the rezone would result in a more efficient distribution of criteria pollutant emissions per capita because of the denser development allowed through rezoning. Increasing housing density would result in fewer criteria pollutant emissions per capita, or the criteria pollutant emissions associated, either directly or indirectly, with a single person. This is because more compact development patterns reduce per capita energy demands, while less-compact sprawl increases demand (CARB 2017). In terms of construction, the energy used to facilitate construction would be more efficient compared to that needed to construct housing for less dense development on a per capita basis. In terms of operation, emissions of criteria pollutants associated with sources such as mobile sources, area sources, and energy sources are considered more efficient when the associated development houses a larger number of people in a smaller area. Therefore, the additional residential capacity allowed on Sites 73 through 79 as part of the Project would be considered more efficient in terms of emissions per capita compared to the residential capacity analyzed in the Old Florin Town SPA EIR because the rezone could result in a greater number of people being housed within the same development footprint. Decreasing per capita emissions, especially those related to VMT, aligns with the goals of the 2022 SIP (CARB 2022b: 73).

MITIGATION MEASURES

Mitigation not required.

IMPACT AQ-6: EXPOSURE TO OBJECTIONABLE ODORS

GENERAL PLAN EIR IMPACT CONCLUSION

The General Plan EIR did not analyze impacts related to odors.

PROPOSED PROJECT IMPACT EVALUATION

The occurrence and severity of odor impacts depends on numerous factors, including: the nature, frequency, and intensity of the source; wind speed and direction; and the sensitivity of the affected receptors. While offensive odors rarely cause any physical harm, they can still be very unpleasant, leading to considerable distress among the public and often generating citizen complaints to local governments and regulatory agencies. Impacts related to odors resulting from the Project are discussed below.

CONSTRUCTION

The predominant source of power for construction equipment is diesel engines. Exhaust odors from diesel engines, as well as emissions associated with paving and the application of architectural coatings may be considered offensive to some individuals. The generation of these odor emissions would vary greatly on a day-to-day basis depending on the type of construction activities. Application of architectural coatings would also be a source of offensive odors from VOCs. However, because the application of architectural coatings would be required to comply with SMAQMD Rule 442 (“Architectural Coatings”) that requires VOC limits on coatings used, potential construction odors would be minimized. Minor odors from the use of heavy-duty diesel equipment would be intermittent and temporary and would dissipate rapidly from the source with an increase in distance. Given the temporary nature of construction activities and the dispersion properties of diesel PM, construction of the Project is not anticipated to result in an odor-related impact during the construction activities associated with increased residential capacity allowed under the proposed rezone.

LONG-TERM OPERATION

As stated above, SMAQMD identifies land uses such as wastewater treatment plants, cannabis cultivation operations, and waste handling facilities as typically being associated with the generation of nuisance odors. The Project would result in increased capacity of residential development on sites spread across the county. Residential development does not typically generate operational odors. Therefore, the Project would not result in long-term operational odor impacts.

SUMMARY

Construction-related odors would occur intermittently, disperse quickly, and would cease upon the completion of the construction phase. Meanwhile, operational odors are not typically associated with residential land uses such as those proposed in the Project. Therefore, impacts would be less than significant. Therefore, pursuant to State CEQA

Guidelines Section 15162, implementation of the Project would not result in new or more severe significant impacts related to odor than would occur with implementation of the General Plan.

Distinct Area Plans

Odors impacts were not evaluated in the Fair Oaks Boulevard EIR, North Watt Avenue EIR, or the Old Florin Town SPA EIR. Odor-generating activities in the distinct planning areas would be similar to those identified in the analysis above (i.e., exhaust from construction-related diesel engine use and the application of architectural coatings). Construction activities in the distinct planning areas would be subject to SMAQMD Rule 442 ("Architectural Coatings") while minor odors from the use of heavy-duty diesel equipment would be intermittent and temporary and would dissipate rapidly from the source with an increase in distance. Given the temporary nature of construction activities and the dispersion properties of diesel PM, construction within the three distinct planning areas is not anticipated to result in an odor-related impact during the construction activities associated with increased residential capacity allowed under the proposed rezone. Regarding operation within the distinct planning areas associated with increased residential capacity allowed under the proposed rezone, SMAQMD identifies land uses such as wastewater treatment plants, cannabis cultivation operations, and waste handling facilities as typically being associated with the generation of nuisance odors. The proposed rezone within the distinct planning areas would result in increased capacity of residential development on sites spread across the county, which includes the three distinct planning areas. Residential development does not typically generate operational odors. Therefore, operation of the future development in the distinct planning areas would not result in long-term operational odor impacts within any of the distinct planning areas. Therefore, impacts would be less than significant. and the proposed rezone in the three distinct planning areas would not result in new or substantially more severe impacts regarding odors than what would have been addressed in the distinct area plan EIRs had the analyses assessed odors. Therefore, pursuant to State CEQA Guidelines Section 15162, implementation of the Project would not result in new or more severe significant impacts odor than would occur with implementation of the distinct area plans.

Cumulative Air Quality

Cumulative Setting

The cumulative setting for regional air quality impacts would be the SVAB. The General Plan EIR analyzed the full development potential of the General Plan Land Use Diagram, including the Project area (consisting of the main rezone area and three distinct planning areas). Odor and TACs exposure are localized impacts, and the cumulative context is considered to be 1,000 feet from a candidate rezone site.

CUMULATIVE IMPACTS EVALUATION

GENERAL PLAN IMPACT REPORT DETERMINATION

The General Plan EIR did not identify any significant cumulative impacts related to air quality. Notably, the General Plan EIR only addressed cumulative impacts related to the exposure of sensitive receptors to high concentrations of CO emissions and did not addressed any other cumulative impact pertaining to air quality.

DISTINCT AREA PLAN ENVIRONMENTAL IMPACT REPORT DETERMINATIONS

The Fair Oaks Boulevard EIR, North Watt Avenue EIR, and Old Florin Town SPA EIR all determined that cumulative operational impacts related to air quality would be significant and unavoidable. The analyses state that the cumulative scenarios assumed that buildout of the distinct area plans in the near–term under the distinct area plan land use assumptions over what the then-existing land uses would result in significant and unavoidable operational air quality impacts. Notably, these impacts only addressed ROG and NO_x related impacts from operation. The analyses did not evaluate cumulative impacts related to construction.

PROJECT-RELATED CUMULATIVE IMPACTS

As stated above, because air quality is a cumulative issue, the following cumulative analyses consider cumulative impacts related to the proposed increase in residential capacity under the Project as a whole rather than by individual planning areas.

A cumulative impact analysis is provided for each of the air quality topics addressed in the impact analyses above in consideration of other planned future developments within the SVAB.

The cumulative context for air quality is both regional (SVAB) for criteria pollutants and local for CO, TACs, and odors. The proposed land uses under the Project would result in an increase of emissions from area sources, energy sources, stationary sources, and mobile sources. Cumulative development in the region would continue to increase the concentration of pollutants from traffic, natural gas combustion in buildings, area sources, and stationary sources, but would be partially offset by state and federal policies that set emissions standards for mobile and non-mobile sources.

Further, as noted in the above analysis, SMAQMD provides guidance for evaluating air quality impacts. In accordance with SMAQMD guidance, the Project was evaluated qualitatively for consistency with the most recently adopted air quality plan in the region. Specifically, the land uses of the Project were compared to the General Plan which informs the growth projects of the SACG regional VMT modeling and the SVAB's ability to attain ambient air quality standards. The analysis above concluded that because the 2023 Sacramento Regional Plan for the 2015 70 ppb 8-Hour Ozone Standard was adopted following the adoption of the 2021-2029 Housing Element, it includes the growth projections accounted for in the County's 2021-2029 Housing Element. Additionally, the 2020 MTP/SCS prioritizes the location of proposed development for the forecast period of 2016-2040. Infill and corridor sites, such as those proposed under the Project, are

shown to reduce VMT and are therefore consistent with the 2020 MTP/SCS. Additionally, the 2020 MTP/SCS was adopted prior to the adoption of the 2021-2029 Housing Element and therefore informs the growth projections of the 2021-2029 Housing Element. Therefore, the growth projections of the 2021-2029 Housing Element, which include the proposed increase in residential capacity under the Project, are consistent with the 2020 MTP/SCS. In addition, SMAQMD-adopted significance thresholds are cumulative in nature; that is, they identify the level of project-generated emissions above which impacts would be cumulatively considerable. Therefore, they represent the level at which emissions of a given project would impede the air basin from achieving ambient air quality standards, considering anticipated growth and associated emissions in that region. A qualitative emission analysis was conducted below to determine cumulative impacts from short-term construction and long-term operational emissions associated with the Project.

IMPACT AQ-7: THE PROJECT, IN COMBINATION WITH PAST, PRESENT, AND REASONABLY FORESEEABLE PROJECTS, COULD RESULT IN A SIGNIFICANT CUMULATIVE IMPACT WITH RESPECT TO CONSTRUCTION EMISSIONS OF CRITERIA AIR POLLUTANTS AND PRECURSORS

Sacramento County is in nonattainment for ozone and PM_{10} with respect to the CAAQS, and for ozone and $PM_{2.5}$ with respect to NAAQS. Construction activities in the region would emit additional particulate matter and ozone precursors that may conflict with attainment efforts in the county. Because the region is in nonattainment, the existing cumulative condition is adverse, and any additional emissions would exacerbate that condition. SMAQMD has established construction emission thresholds for individual construction projects, which determine whether that particular project's emissions would be cumulatively considerable (SMAQMD 2020a). As detailed in Impact AQ-1 with application of the SMAQMD's emission thresholds without the application of BMPs, construction emissions of PM_{10} and $PM_{2.5}$ would exceed the applicable mass emission thresholds established by SMAQMD. Mitigation Measure CC-1 requires the incorporation of SMAQMDs BMPs that would reduce PM_{10} and $PM_{2.5}$ emissions and allow the use of SMAQMD's non-zero PM thresholds. With the application of Mitigation Measure CC-1 and, therefore, SMAQMD's non-zero PM thresholds, all construction-related criteria emissions would be below thresholds. Therefore, the Project's contribution to construction emissions would not be cumulatively considerable and thus not significant.

IMPACT AQ-8: THE PROJECT, IN COMBINATION WITH PAST, PRESENT, AND REASONABLY FORESEEABLE PROJECTS, COULD RESULT IN A SIGNIFICANT CUMULATIVE IMPACT WITH RESPECT TO LONG-TERM OPERATIONAL EMISSIONS OF CRITERIA AIR POLLUTANTS AND PRECURSORS

SMAQMD has established operational emission criteria thresholds with and without BMPs for projects beyond which a particular project's emissions would be cumulatively considerable (SMAQMD 2020d). A project that operates below the threshold levels is generally considered not to result in a cumulatively significant air quality impact, and those that operate above the thresholds would result in a cumulative impact.

Implementation of the Project would result in the generation of long-term operational emissions of ROG, NO_x, PM_{10}, and $PM_{2.5}$ due to mobile, energy, stationary, and area-wide emissions associated with the Project. Mobile-source emissions of criteria air

pollutants and precursors would result from vehicle trips generated by residents and other associated vehicle trips (e.g., delivery of supplies and maintenance vehicles). Stationery and area-wide sources would include the combustion of natural gas for appliances, electronics, and other miscellaneous plug-in uses, the use of landscaping equipment and other small equipment, the periodic application of architectural coatings, and ROG from the use of consumer products. As discussed in Impact AQ-2, the Project would result in operational activity that, despite the application of General Plan Policy AQ-4, would exceed SMAQMD's emission threshold for ROG, NO_x, daily PM_{10}, and annual PM_{10}. Projects that emit criteria air pollutants in exceedance of SMAQMD's thresholds would contribute to the regional degradation of air quality within the SVAB and would be considered cumulatively considerable. Because the contribution of the Project's contribution to operational emissions to the nonattainment status of Sacramento County are considered to be cumulatively considerable and there is no feasible mitigation to reduce the impact outside of the application of General Plan Policy AQ-4. As stated above, the Fair Oaks Boulevard EIR, North Watt Avenue EIR, and Old Florin Town SPA EIR addressed cumulative impacts related to operational criteria pollutants and each determined that impacts would be significant and unavoidable. As shown in Impact AQ-2, the anticipated increase in residential capacity under the Project would result in more severe impacts related to operational emissions across all planning areas. Therefore, cumulative impacts would similarly be more severe than those disclosed in the Fair Oaks Boulevard EIR, North Watt Avenue EIR, and Old Florin Town SPA EIR. Cumulative impacts would remain significant and unavoidable.

IMPACT AQ-9: THE PROJECT, IN COMBINATION WITH PAST, PRESENT, AND REASONABLY FORESEEABLE PROJECTS, COULD RESULT IN A SIGNIFICANT CUMULATIVE IMPACT WITH RESPECT TO MOBILE-SOURCE CO CONCENTRATIONS

Implementation of the Project would introduce new vehicle trips to the Project area. As shown in Impact "Mobile Sources CO Concentrations," the Project would not introduce new vehicle trips to an intersection meeting the criteria of BAAQMD's numerical screening threshold and would thus not result in a CO hotspot. In a cumulative context, mobile-source CO emissions have historically decreased since the advent of catalytic converters, which decrease mobile-source exhaust emissions, and there have been improvements in fuel economy since 2006 through regulatory compliance implemented by EPA and CARB (e.g., the CAFE standards and Advanced Clean Cars program). Because the Project would not result in a CO hotspot and because of the overall reduction in CO emissions due to advances in technology and fuel efficiency, the Project's potential in contributing to cumulative CO impacts would not be cumulatively considerable. Being that the General Plan EIR evaluated cumulative impacts related to CO emissions and found impacts to be less than significant, the Project would not result in a new impact compared to the findings of the General Plan EIR. Cumulative impacts would remain less than significant.

IMPACT AQ-10: THE PROJECT, IN COMBINATION WITH PAST, PRESENT, AND REASONABLY FORESEEABLE PROJECTS, COULD RESULT IN A SIGNIFICANT CUMULATIVE IMPACT WITH RESPECT TO EXPOSURE OF SENSITIVE RECEPTORS TO TACS

TACs, which are examined under Impact "Exposure of Sensitive Receptors to TACs," are also pollutants of localized concern. High concentrations of TACs within urban areas may

result from heavy vehicle traffic, industrial sources, or other sources, which when in close proximity to one another could result in unhealthy air quality conditions for nearby receptors, which would be considered a significant cumulative impact. However, due to the highly dispersive properties of TACs evaluated, emissions do not typically combine from construction or new stationary sources with other adjacent sources to result in cumulative impacts. Because of the localized nature of TACs and the fact that the proposed candidate rezone sites are dispersed throughout the county, Project-generated increases in TAC emissions would not be cumulatively considerable and thus not significant.

IMPACT AQ-11: THE PROJECT, IN COMBINATION WITH PAST, PRESENT, AND REASONABLY FORESEEABLE PROJECTS, COULD RESULT IN A SIGNIFICANT CUMULATIVE IMPACT WITH RESPECT TO EXPOSURE OF SENSITIVE RECEPTORS TO ODORS

The potential generation of objectionable odors affecting a substantial number of people, is also an impact of localized concern. Odor-generating construction activity would be temporary while operation of residential land uses does not result in the generation of odors. Any new odor sources would be subject to future environmental review, and to SMAQMD Rule 402, Nuisance. The Project's potential in contributing to cumulative odor impacts would not be cumulatively considerable and thus not significant.

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6 CLIMATE CHANGE

INTRODUCTION

This chapter presents a summary of regulations applicable to greenhouse gas (GHG) emissions, a summary of climate change science and GHG emissions sources in California, quantification of GHG emissions generated by the Project, and discussion about their contribution to global climate change in accordance with the 2024 State CEQA Guidelines.

No scoping comments pertaining to climate change were received during the notice of preparation (NOP) public review periods. The NOP and comments received in response to the NOP are provided in Appendix INTRO-1.

EXISTING ENVIRONMENTAL CLIMATE CHANGE SETTING

State CEQA Guidelines Section 15162 indicates that should a lead agency determine that substantial changes to the project or its circumstances result in a new or more significant impact compared to what was addressed in a project's previous EIR, or new information of substantial importance results in a new or more significant impact, a subsequent EIR (SEIR) should be prepared. Therefore, this document serves as a SEIR to Sacramento County's 2030 General Plan EIR (General Plan EIR), as well as EIRs prepared for various distinct area plans within which a portion of the candidate rezone sites are located. Applicable distinct area plan EIRs include the Fair Oaks Boulevard Corridor Plan EIR (Fair Oaks Boulevard EIR), the North Watt Avenue Corridor Plan EIR (North Watt Avenue EIR), and the Old Florin Town Special Planning Area (SPA) EIR (Old Florin Town SPA EIR). The Regional Housing Needs Allocation (RHNA) shortfall of 2,884 lower-income category units and the needed buffer could not have been known at the time of the General Plan EIR certification, and the RHNA is in excess of the number of dwelling units analyzed in the General Plan EIR. The number of additional units required in various community plans was not known at the time the applicable environmental documents were certified. As required by Section 15162, this SEIR evaluates the potential for the proposed Project or changes in the circumstances to result in new or substantially more severe significant environmental impact than previously analyzed under the General Plan EIR and distinct area plan EIRs. Because GHG emissions and the effects of climate change are inherently cumulative, the following environmental settings apply to the Project as a whole, which includes the distinct planning areas.

THE PHYSICAL SCIENTIFIC BASIS OF GREENHOUSE GAS EMISSIONS AND CLIMATE CHANGE

Certain gases in the earth's atmosphere, classified as GHGs, play a critical role in determining the earth's surface temperature. Solar radiation enters the atmosphere from space. A portion of the radiation is absorbed by the earth's surface, and a smaller portion

of this radiation is reflected toward space. The absorbed radiation is then emitted from the earth as low-frequency infrared radiation. Most solar radiation passes through GHGs; however, infrared radiation is absorbed by these gases. As a result, radiation that otherwise would have escaped back into space is instead "trapped," resulting in a warming of the atmosphere. This phenomenon, known as the greenhouse effect, is responsible for maintaining a habitable climate on earth.

Prominent GHGs contributing to the greenhouse effect are carbon dioxide (CO_2), methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. Human-caused emissions of these GHGs in excess of natural ambient concentrations are found to be responsible for intensifying the greenhouse effect and leading to a trend of unnatural warming of the earth's climate, known as global climate change or global warming. It is "extremely likely" that more than half of the observed increase in global average surface temperature from 1951 to 2010 was caused by the anthropogenic (originating from human activity) increase in GHG concentrations and other anthropogenic forcing (IPCC 2014).

Climate change is a global problem. GHGs are global pollutants, unlike criteria air pollutants and toxic air contaminants, which are pollutants of regional and local concern. Whereas most pollutants with localized air quality effects have relatively short atmospheric lifetimes (approximately 1 day), GHGs have long atmospheric lifetimes (1 year to several thousand years). GHGs persist in the atmosphere long enough to be dispersed around the globe. Although the lifetime of any GHG molecule depends on multiple variables and cannot be determined with any certainty, it is understood that more CO_2 is emitted into the atmosphere than is sequestered by ocean uptake, vegetation, and other forms of sequestration. Of the total annual human-caused CO_2 emissions, approximately 55 percent are estimated to be sequestered through ocean and land uptake every year, averaged over the last 50 years, whereas the remaining 45 percent of human-caused CO_2 emissions remain stored in the atmosphere (IPCC 2013).

The quantity of GHGs in the atmosphere responsible for climate change is not precisely known, but it is considered to be enormous. No single project alone would measurably contribute to an incremental change in the global average temperature or to global or local climates or microclimates. From the standpoint of CEQA, GHG impacts relative to global climate change are inherently cumulative.

Greenhouse Gas Emission Sources and Sinks

Emissions of CO_2 are byproducts of fossil fuel combustion. Methane, a highly potent GHG, primarily results from off-gassing (the release of chemicals from nonmetallic substances under ambient or greater pressure conditions) and is largely associated with agricultural practices, landfills, and forest fires. Nitrous oxide is also largely attributable to agricultural practices and soil management. CO_2 sinks or reservoirs, including vegetation and the ocean, absorb CO_2 through sequestration and dissolution (CO_2 dissolving into the water), which are two of the most common processes for removing CO_2 from the atmosphere.

As discussed previously, GHG emissions are attributable in large part to human activities. The total GHG inventory for California in 2021 was approximately 381 million metric tons of CO_2 equivalent ($MMTCO_2e$) (CARB 2023).[1]

A GHG inventory for Sacramento County was completed for inventory year 2021, which is summarized in Table CC-1.

Table CC-1: Sacramento County GHG Emissions by Economic Sector (2021)

Sector	Emissions ($MTCO_2e$)	Percent
On-Road Vehicles	1,740,212	43
Off-Road vehicles	107,174	2.5
Residential Building Energy	878,308	22
Commercial/Industrial Building Energy	555,596	14
High-GWP Gases	329,734	8
Agriculture	234,536	6
Solid Waste	156,422	4
Wastewater	24,928	0.5
Total	4,026,910	100

Notes: $MTCO_2e$ = metric tons of carbon dioxide equivalent

Sources: Sacramento County 2024.

As shown in Table CC-1, on-road vehicles and residential building energy comprise the two largest GHG-emitting sectors in the county.

Effects of Climate Change on the Environment

According to the Intergovernmental Panel on Climate Change (IPCC), which was established in 1988 by the World Meteorological Organization and the United Nations Environment Programme, global average temperature will increase by 3.7 to 4.8 degrees Celsius (°C) (6.7 to 8.6 degrees Fahrenheit [°F]) by the end of the century unless additional efforts to reduce GHG emissions are made (IPCC 2014: 10). According to *California's Fourth Climate Change Assessment*, with global GHG emissions reduced at a moderate rate, California will experience average daily high temperatures that are warmer than the historic average by 2.5°F from 2006 to 2039, by 4.4°F from 2040 to 2069, and by 5.6°F from 2070 to 2100. And if GHG emissions continue at current rates, then California will experience average daily high temperatures that are warmer than the historic average by 2.7°F from 2006 to 2039, by 5.8°F from 2040 to 2069, and by 8.8°F from 2070 to 2100 (OPR et al. 2018).

Since its previous climate change assessment in 2012, California has experienced several of the most extreme natural events in its recorded history: a severe drought from 2012 to 2016, an almost nonexistent Sierra Nevada winter snowpack in 2014–2015,

[1] CO_2 equivalent is the number of metric tons of CO_2 emissions with the same global warming potential as one metric ton of another GHG.

increasingly large and severe wildfires, and back-to-back years of the warmest average temperatures (OPR et al. 2018). According to the California Natural Resource Agency's *Safeguarding California Plan: 2018 Update*, California experienced the driest 4-year statewide precipitation on record from 2012 through 2015; the warmest years on average in 2014, 2015, and 2016; and the smallest and second smallest Sierra snowpack on record in 2015 and 2014 (CNRA 2018). According to the National Oceanic and Atmospheric Administration and the National Aeronautics and Space Administration, 2016, 2017, and 2018 were the hottest recorded years in history (NOAA 2019). In contrast, the northern Sierra Nevada experienced one of its wettest years on record during the 2016–2017 water year (CNRA 2018). The changes in precipitation exacerbate wildfires throughout California through a cycle of high vegetative growth coupled with dry, hot periods, which lowers the moisture content of fuel loads. As a result, the frequency, size, and devastation of forest fires have increased. In November 2018, the Camp Fire completely destroyed the town of Paradise in Butte County and caused 85 fatalities, becoming the state's deadliest fire in recorded history, and the largest fires in the state's history occurred in the 2018–2020 period. Moreover, changes in the intensity of precipitation events following wildfires can also result in devastating landslides. In January 2018, following the Thomas Fire, 0.5 inches of rain fell in 5 minutes in Santa Barbara, causing destructive mudslides formed from the debris and loose soil left behind by the fire. These mudslides resulted in 21 deaths.

As temperature increases, the amount of precipitation falling as rain rather than snow also increases, which could lead to increased flooding because water that would normally be held in the snowpack of the Sierra Nevada and Cascade Range until spring would flow into the Central Valley during winter rainstorm events. This scenario would place more pressure on California's levee/flood control system (CNRA 2018). Furthermore, in the extreme scenario involving the rapid loss of the Antarctic ice sheet and the glaciers atop Greenland, the sea level along California's coastline is expected to rise 54 inches by 2100 if GHG emissions continue at current rates (OPR et al. 2018).

Temperature increases and changes to historical precipitation patterns will likely affect ecological productivity and stability. Existing habitats may migrate from climatic changes where possible, and those habitats and species that lack the ability to retreat will be severely threatened. Altered climate conditions will also facilitate the movement of invasive species to new habitats, thus outcompeting native species. Altered climatic conditions dramatically endanger the survival of arthropods (e.g., insects, spiders), which could have cascading effects throughout ecosystems (Lister and Garcia 2018). Conversely, a warming climate may support the populations of other insects such as ticks and mosquitos, which transmit diseases harmful to human health such as the Zika virus, West Nile virus, and Lyme disease (European Commission Joint Research Centre 2018).

Changes in temperature, precipitation patterns, extreme weather events, wildfires, and sea-level rise have the potential to threaten transportation and energy infrastructure, crop production, forests and rangelands, and public health (CNRA 2018; OPR et al. 2018). The effects of climate change will also have an indirect adverse impact on the economy, as more severe natural disasters can cause expensive physical damage to communities and the state.

In addition, adjusting to the physical changes associated with climate change can produce mental health impacts such as depression and anxiety.

REGULATORY SETTING

FEDERAL

CORPORATE AVERAGE FUEL ECONOMY STANDARD

In October 2012, the US Environmental Protection Agency (EPA) and the National Highway Traffic Safety Administration (NHTSA), on behalf of the US Department of Transportation, issued final rules to further reduce GHG emissions and improve Corporate Average Fuel Economy (CAFE) standards for light-duty vehicles for model year (MYs) 2017 and beyond (77 Federal Register [FR] 62624). The most recent CAFE standards are for MYs 2024–2026. The amended CAFE standards increase in stringency for both passenger cars and light trucks, by 8 percent per year for MYs 2024–2025 and by 10 percent per year for MY 2026. NHTSA currently projects that the standards will require, on an average industry fleet-wide basis, roughly 49 miles per gallon (mpg) for MY 2026 (49 CFR 531 et seq.).

ENERGY INDEPENDENCE AND SECURITY ACT

The Energy Independence and Security Act of 2007 is designed to improve vehicle fuel economy and help reduce US dependence on oil. It represents a major step forward in expanding the production of renewable fuels, reducing dependence on oil, and confronting global climate change. The act increased the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard, which required fuel producers to use at least 36 billion gallons of biofuel in 2022 and reduced US demand for oil by setting a national fuel economy standard of 35 mpg by 2020. Most recently, the Energy Independence and Security Act of 2022 was introduced to the Senate on April 6, 2022. This bill would address domestic industrial base and manufacturing capabilities for specified energy-efficiency and renewable energy systems and technologies (e.g., electric transportation systems), including by establishing a program to provide financial assistance for the construction of new facilities that manufacture components of specified energy-efficiency and renewable energy systems and technologies (or to retool, retrofit, or expand such facilities).

STATE

STATEWIDE EMISSIONS TARGETS

EXECUTIVE ORDER S-3-05

In 2005, Executive Order (EO) S-3-05 was signed into law and proclaims that California is vulnerable to the impacts of climate change. It declares that increased temperatures could reduce the Sierra Nevada snowpack, further exacerbate California's air quality problems, and potentially cause a rise in sea levels. To combat those concerns, the EO

established total GHG emissions targets for the state. Specifically, statewide emissions are to be reduced to 2000 levels by 2010, to 1990 levels by 2020, and 80 percent below 1990 levels by 2050.

ASSEMBLY BILL 32

In September 2006, the California Global Warming Solutions Act of 2006, Assembly Bill (AB) 32, was signed into law. AB 32 established regulatory, reporting, and market mechanisms to achieve quantifiable reductions in GHG emissions and a cap on statewide GHG emissions. AB 32 requires that statewide GHG emissions be reduced to 1990 levels by 2020. AB 32 also requires that "(a) The statewide greenhouse gas emissions limit shall remain in effect unless otherwise amended or repealed. (b) It is the intent of the Legislature that the statewide GHG emissions limit continue in existence and be used to maintain and continue reductions in emissions of GHG beyond 2020. (c) The state board [California Air Resources Board (CARB)] shall make recommendations to the Governor and the Legislature on how to continue reductions of GHG emissions beyond 2020" (California Health and Safety Code, Division 25.5, Part 3, Section 38551).

SENATE BILL 375 OF 2008

In September 2008, Senate Bill (SB) 375 was signed into law and aligns regional transportation planning efforts, regional GHG emission reduction targets, and land use and housing allocation. SB 375 requires metropolitan planning organizations (MPOs) to adopt a Sustainable Communities Strategy (SCS) or Alternative Planning Strategy, showing prescribed land use allocation in each MPO's Regional Transportation Plan (RTP). CARB, in consultation with the MPOs, is to provide each affected region with reduction targets for GHGs emitted by passenger cars and light trucks for 2020 and 2035. These plans link land use and housing allocation to transportation planning and related mobile-source emissions. The Sacramento Area Council of Governments (SACOG) serves as the MPO for Sacramento, Placer, El Dorado, Yuba, Sutter, and Yolo Counties, excluding those lands in the Tahoe Basin. The Project area is in Sacramento County under the jurisdiction of SACOG. SACOG was tasked by CARB to achieve a 7 percent per capita reduction compared to 2012 emissions by 2020 and a 16 percent per capita reduction by 2035, both of which CARB confirmed the region would achieve by implementing the Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS) (SACOG 2016: 172; CARB 2018: 1). In March 2018, CARB promulgated revised targets tasking SACOG to achieve a 19 percent per capita reduction by 2035 (CARB 2018: 1). Under SB 375, SACOG adopted its most recent MTP/SCS in 2020. SACOG plans to finalize a blueprint by fall 2025; the blueprint is planned to build a connected region that includes transportation options for residents, affordable housing for the region's growing population, and equitable investments that give all community members access to a safe and healthy region.

SENATE BILL 32 AND ASSEMBLY BILL 197 OF 2016

In August 2016, SB 32 and AB 197 were signed into law and serve to extend California's GHG emissions reduction programs beyond 2020. SB 32 amended the Health and Safety Code to include Section 38566, which contains language to authorize CARB to achieve a statewide GHG emissions reduction of at least 40 percent below 1990 levels by no later

than December 31, 2030. SB 32 codified the targets established by EO B-30-15 for 2030, which set the next interim step in the state's continued efforts to pursue the long-term target expressed in EOs S-3-05 and B-30-15 of 80 percent below 1990 emissions levels by 2050.

ASSEMBLY BILL 1279

On September 16, 2022, the state legislature passed AB 1279, which codified stringent emissions targets for the state of achieving carbon neutrality and an 85 percent reduction in 1990 emissions level by 2045 (this superseded the previous GHG emissions reduction target set forth by EO S-3-05).

CLIMATE CHANGE SCOPING PLAN

As stated above, the state legislature passed AB 1279 that codified stringent emissions targets for the state of achieving carbon neutrality and an 85 percent reduction in 1990 emissions level by 2045. CARB released the Final 2022 Scoping Plan for Achieving Carbon Neutrality (2022 Scoping Plan) on November 16, 2022, as also directed by AB 1279 (CARB 2022a). The 2022 Scoping Plan traces the pathway for the state to achieve its carbon neutrality and an 85 percent reduction in 1990 emissions goal by 2045 using a combined top-down and bottom-up approach using various scenarios. CARB adopted the 2022 Scoping Plan on December 16, 2022.

ADVANCED CLEAN CARS PROGRAM

In January 2012, CARB approved the Advanced Clean Cars (ACC) Program, which combines the control of GHG emissions and criteria air pollutants, as well as requirements for greater numbers of zero-emission vehicles (ZEVs), into a single package of regulatory standards for vehicles for MYs 2017–2025. The new regulations strengthened the GHG standards for 2017 models and beyond. In addition, the program's ZEV regulation requires battery, fuel cell, and plug-in hybrid electric vehicles (EVs) to account for up to 15 percent of California's new vehicle sales by 2025. In August 2022, CARB adopted the ACC II Program, which sets sales requirements to ultimately reach the goal of 100 percent ZEV sales in the state by 2035.

CALIFORNIA RENEWABLES PORTFOLIO STANDARD

SB X1-2 of 2011 requires all California utilities to generate 33 percent of their electricity from renewables by 2020. SB 100 of 2018 sets a three-stage compliance period requiring all California utilities, including independently owned utilities, energy service providers, and community choice aggregators, to generate 52 percent of their electricity from renewables by December 31, 2027; 60 percent by December 31, 2030; and 100 percent carbon-free electricity by December 31, 2045. On September 16, 2022, SB 1020 was signed into law. This bill supersedes the goals of SB 100 by requiring that eligible renewable energy resources and zero-carbon resources supply 90 percent of all retail sales of electricity to California end-use customers by December 31, 2035, 95 percent of all retail sales of electricity to California end-use customers by December 31, 2040, 100 percent of all retail sales of electricity to California end-use customers by December 31, 2045, and 100 percent of electricity procured to serve all state agencies by December 31, 2035.

Building Energy Efficiency Standards

Title 24, Part 6

The energy consumption of new residential and nonresidential buildings in California is regulated by the state's Title 24, Part 6, Building Energy Efficiency Standards (California Energy Code). The California Energy Commission (CEC) updates the California Energy Code every 3 years with more stringent design requirements for reduced energy consumption, which results in the generation of fewer GHG emissions. The current California Energy Code requires builders to use more energy-efficient building technologies for compliance with increased restrictions on allowable energy use. The core focus of the building standards has been efficiency, but the 2019 California Energy Code ventured into on-site generation by requiring solar photovoltaic (PV) systems on new homes, providing significant GHG savings. The most recent is the 2022 California Energy Code that advances the on-site energy generation progress started in the 2019 code by encouraging electric heat pump technology and use, establishing electric-ready requirements when natural gas is installed, expanding solar PV system and battery storage standards, and strengthening ventilation standards to improve indoor air quality. CEC estimates that the 2022 California Energy Code will save consumers $1.5 billion and reduce GHG emissions by 10 $MMTCO_2e$ over the next 30 years (CEC 2021).

Title 24, Part 11

The California Green Building Standards Code, referred to as CALGreen, was added to Title 24 as Part 11, first in 2009 as a voluntary code, which then became mandatory effective January 1, 2011 (as part of the 2010 California Building Standards Code). The current version is the 2022 CALGreen Code, which took effect on January 1, 2023. As compared to the 2019 CALGreen Code, the 2022 CALGreen Code strengthened sections pertaining to electric vehicle (EV) and bicycle parking, water efficiency and conservation, and material conservation and resource efficiency, among other sections of the CALGreen Code. The code sets design requirements equivalent to or more stringent than those of the California Energy Code for energy efficiency, water efficiency, waste diversion, and indoor air quality. These codes are adopted by local agencies that enforce building codes and used as guidelines by state agencies for meeting the requirements of EO B-18-12.

Local

Sacramento Metropolitan Air Quality Management District

The Sacramento Metropolitan Air Quality Management District (SMAQMD) is the primary agency responsible for addressing air quality concerns in all of Sacramento County. SMAQMD recommends methods for analyzing project-generated GHG emissions in CEQA analyses and offers multiple potential GHG emissions reduction measures for land use development projects. SMAQMD developed thresholds of significance to provide a uniform scale to measure the significance of GHG emissions from land use and stationary source projects in compliance with CEQA to align with the statewide GHG emissions target of 40 percent below 1990 levels by 2030 with the passage of SB 32 for land use development projects (SMAQMD 2021).

SMAQMD's most recent published guidance to address GHGs was released in February 2021. SMAQMD recommends that 1,100 $MTCO_2e$ per year ($MTCO_2e$/year) be applied as a bright-line screening threshold for evaluating construction emissions of GHGs. SMAQMD also recommends a tiered approach to evaluate the significance of operational emissions. All land use development projects are required to implement the following Tier 1 best management practices (BMPs):

- BMP 1 – Projects shall be designed and constructed without natural gas infrastructure.
- BMP 2 – Projects shall meet the current CALGreen Tier 2 standards, except all EV-capable spaces shall instead be EV-ready.

Projects can be screened out by comparing their attributes to SMAQMD's operational screening levels table (equivalent to 1,100 $MTCO_2e$/year) after including the implementation of Tier 1 BMPs. If the project emissions exceed the screening level or the project fails to implement Tier 1 BMPs, the project must implement Tier 2 BMP 3, which consists of reducing the project's vehicle miles traveled (VMT) to meet the following requirements of the standards developed by the Governor's Office of Planning and Research (OPR) pursuant to SB 743 (see Chapter 10, "Transportation," for a summary of this bill):

- BMP 3 – Achieve the following VMT reduction targets compared to a county regional average:
    - 15 percent for residential projects,
    - 15 percent for office projects, and
    - no net increase in VMT for retail projects.

Projects that cannot meet the Tier 2 BMP 3 requirements must implement all feasible mitigation to reduce emissions.

SACRAMENTO COUNTY

SACRAMENTO COUNTY 2030 GENERAL PLAN

On November 9, 2011, the Sacramento County Board of Supervisors adopted an updated General Plan, the Sacramento County 2030 General Plan (2030 General Plan). The planning horizon of the County's previous General Plan was from 1990 to 2010; the updated planning horizon is 2030. Key changes from the previous version include a new growth management strategy, a stronger focus on addressing existing communities and revitalizing aging commercial corridors, a new Economic Development Element, and strategies to reduce GHG emissions consistent with state law. The Sacramento County General Plan Air Quality Element contains the following GHG-related policies relevant to the Project (Sacramento County 2017):

AQ-4. Developments which meet or exceed thresholds of significance for ozone precursor pollutants, and/or GHGs as adopted by SMAQMD, shall be deemed to have a significant environmental impact. An Air Quality

Mitigation Plan and/or a Greenhouse Gas Reduction Plan shall be submitted to the County of Sacramento prior to project approval, subject to review and recommendation as to technical adequacy by the Sacramento Metropolitan Air Quality Management District.

AQ-22. Reduce greenhouse gas emissions from County operations as well as private development.

SACRAMENTO COUNTY CLIMATE ACTION PLANNING

On November 9, 2011, the County of Sacramento adopted the Climate Action Plan – Strategy and Framework, which presented a framework for reducing GHG emissions and developing the second phase of the Climate Action Plan (CAP). The County is currently working to develop the Sacramento County Climate Action Plan 2022 (2022 CAP) to address communitywide emissions. The County is in the process of reviewing the 2022 CAP but it has not yet been adopted and is therefore not applicable to this Project. In addition, because crucial laws and regulations, such as AB 1279 and EO B-48-18, have been passed and implemented since the development of the 2011 CAP (the next most-recent iteration of the County's CAP), the GHG reduction goals and strategies in the 2011 CAP are outdated. For this reason, the 2011 CAP is not used in this analysis.

SACRAMENTO COUNTY ZONING CODE

While the Sacramento County Zoning Code does not contain regulations specific to GHGs, provisions for the County's distinct area plans can be found in the Zoning Code.

DISTINCT AREA PLANS

The County guides development using several land use plans such as special planning areas, specific plans, comprehensive plans, community plans, corridor plans, and neighborhood preservation areas (NPAs). As shown in Chapter 2, "Project Description," 13 sites are located in distinct area plans, specifically Fair Oaks Boulevard Corridor Plan, North Watt Avenue Corridor Plan, and Old Florin Town SPA. These plans provide community-specific regulations that supplement the County Zoning Code and are created when the countywide zoning regulations do not adequately address local concerns (Sacramento County 2023). Relevant climate change policies or mitigation included in the distinct area plans are summarized below.

FAIR OAKS BOULEVARD CORRIDOR PLAN

The Fair Oaks Boulevard Corridor Plan includes the following goal and standards related to climate change:

- Community Design Goal CDP 22. Sustainable Energy Design: Encourage and allow "green" distributed generation appropriately screened or designed to integrate with architecture and landscape design.
- 3A5 Climate Change Standards:
    - *Residential Energy Sector Emission Reductions* Future applicants for residential projects shall reduce residential emissions by 0.26 MT CO_2 per

capita. Applicants shall submit a plan detailing a set of quantitative and/or qualitative measures that achieve the reduction in CO_2 emissions per capita. This mitigation may be modified to conform with current Sacramento County climate change standards, including but not limited to a Green Building Program and Climate Action Plan. Additionally, applicants may choose to submit revised, project-specific, residential energy-use emissions factors; however, the applicant will be required to provide adequate data to support the revised emission factor.

NORTH WATT AVENUE CORRIDOR PLAN

The North Watt Avenue Corridor Plan includes the following goals and policies related to climate change that would be applicable to the Project:

Sustainability Goals and Policies

- Goal 2.19 Emphasize building and landscape design and construction that encourage energy efficiency.
- Goal 2.20 Utilize building and landscape design that minimizes water use and provides for the reuse of water where feasible.
- Policy 2.11 All buildings shall be constructed in compliance with State of California Title 24 energy conservation standards.

Transit Goals

- Goal 4.6 Coordinate with bus transit service providers to determine system improvements, including routes and the location of transit stops and stations, consistent with Regional Transit's Transit Master Plan Transit-Oriented Development Guidelines.
- Goal 4.7 Expand local bus service to meet the needs of new development within the Corridor Plan area.
- Goal 4.8 Coordinate with Sacramento Regional Transit to provide bus rapid transit service before full build-out as an incentive for growth and development.
- Goal 4.9 Ensure that local and regional bus service includes logical links to McClellan Business Park and the overall North Highlands community.
- Goal 4.10 Coordinate with private entities, such as McClellan Business Park, to develop a consistent program of transit incentives that serves the Corridor Plan area and North Highlands community, encourages transit use, and reduces single-occupant vehicle trips.
- Goal 4.11 Construct transit facilities suitable for local bus transit and regional bus rapid transit. Such facilities may be separate or combined, as appropriate to routes.
- Goal 4.12 Provide direct and convenient access to all transit stops and stations via the street grid and bicycle and pedestrian routes and trails

Bicycle and Pedestrian Goals

- Goal 4.13 Create a bicycle and pedestrian circulation system with connections to the regional trail system, as identified in Figure 4.31, “Regional Bicycle Circulation Plan.”
- Goal 4.14 Construct Class I multi-use trails within the north–south paseo and along all open space corridors.
- Goal 4.15 Include Class II bike lanes on Watt Avenue, 34th Street, Elkhorn Boulevard, and all arterial and collector streets in the Corridor Plan area.
- Goal 4.16 Ensure safe and convenient bicycle and pedestrian access at all major intersections and trail crossings with Watt Avenue, 34th Street, and arterial and collector streets.
- Goal 4.17 Provide adequate bicycle parking facilities throughout the Corridor Plan area in accordance with Sacramento Metropolitan Air Quality District standards.

Alternative Transportation Goals and Policies

- Goal 4.18 Provide facilities for new transportation technologies that offer energy efficiency and are suitable for implementation in the Corridor Plan area.
- Goal 4.19 Create a neighborhood EV plan for the Corridor Plan area, and consider extending it to McClellan Business Park and the North Highlands community.
- Policy 4.15 Neighborhood EVs shall be permitted on local serving streets where the speed limit is 35 miles per hour or less.

OLD FLORIN TOWN SPECIAL PLANNING AREA

The Old Florin Town SPA includes the following design standards related to climate change that would be applicable to the Project:

CC-1. Add a policy to the SPA requiring that future applicants for residential projects reduce residential emissions by 0.53 MT CO2 per capita, based on 2.7 people per residential unit. In consultation with the Department of Environmental Review and Assessment and Sacramento Metropolitan Air Quality Management District, applicants shall submit a plan detailing a set of quantitative and/or qualitative measures that achieve the reduction in CO2 emissions per capita, prior to the issuance of building permits or prior to obtaining any discretionary entitlements. This mitigation may be modified to conform with current Sacramento County climate change standards, including but not limited to a Green Building Program and Climate Action Plan. Additionally, applicants may choose to submit revised, project specific, residential energy-use emissions factors; however, the applicant will be required to provide adequate data to support the revised emission factor.

OTHER LAND USE PLANS

In addition to the distinct area plans described above, the Stockton Boulevard NPA, Victory Avenue NPA, Greenback Lane SPA, and Downtown Rio Linda SPA also contain candidate rezone sites. These land use plans do not have applicable policies related to GHGs or climate change.

SIGNIFICANCE CRITERIA AND METHODOLOGY

SIGNIFICANCE CRITERIA

The significance criteria used to evaluate Project impacts on climate change under CEQA are based on State CEQA Guidelines Section 15064 and relevant portions of State CEQA Guidelines Appendix G, which recommend that a lead agency consider a project's consistency with relevant, adopted plans and discuss any inconsistencies with applicable regional plans, including plans to reduce GHG emissions. Implementation of the Project would result in a cumulatively considerable contribution to climate change if it would:

- generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; or
- conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.

With respect to GHG emissions, State CEQA Guidelines Section 15064.4(a) states that lead agencies "shall make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate" GHG emissions resulting from a project. The State CEQA Guidelines note that an agency has the discretion to either quantify a project's GHG emissions or rely on a "qualitative analysis or performance-based standards" (Section 15064.4[a]). A lead agency may use a "model or methodology" to estimate GHG emissions and has the discretion to select the model or methodology it considers "most appropriate to enable decision makers to intelligently take into account the project's incremental contribution to climate change" (Section 15064.4[c]). The State CEQA Guidelines provide that the lead agency should consider the following when determining the significance of impacts from GHG emissions on the environment (Section 15064.4[b]):

- The extent a project may increase or reduce GHG emissions as compared to the existing environmental setting.
- Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.
- The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions.

State CEQA Guidelines Appendix G is a sample initial study checklist that includes a number of factual inquiries related to the subject of climate change, as it does on a series

of additional environmental topics. Notably, lead agencies are under no obligation to use these inquiries in fashioning thresholds of significance on these subjects, or indeed on any subject addressed in the checklist (*Save Cuyama Valley v. County of Santa Barbara* (2013) 213 Cal.App.4th 1059, 1068). Rather, with few exceptions, "CEQA grants agencies discretion to develop their own thresholds of significance."

Since California's legislative mandate to reduce total projected GHG emissions to 1990 levels by the year 2020 has been achieved, the focus is now on reducing emissions 40 percent below 1990 levels by the year 2030 (SB 32), 85 percent below 1990 levels by 2045 (AB 1279), and carbon neutrality by 2045 (AB 1279). To achieve these targets, future development must be planned and implemented in the most GHG-efficient manner possible.

As previously noted, the County has a currently adopted CAP. The 2011 CAP aimed to reduce GHG emissions by 15 percent by the year 2020, as recommended at the time by CARB in the 2008 Scoping Plan, in order to achieve the targets set forth in AB 32. However, development under the Project would extend to the General Plan horizon year. The reduction goals of the CAP were intended to "help place California on the path to meeting the longer term goal of an 80 percent reduction in emissions below 1990 levels by 2050" (Sacramento County 2011a). When the CAP was prepared, AB 32 comprised the most recent legislative target, later superseded by AB 1279, which established the long-term and increasingly more stringent goal of reducing statewide emissions by 85 percent from a 1990 inventory and achieving carbon neutrality by no later than 2045. As stated previously, SMAQMD recommends Tier 1 and 2 BMPs to reduce operational GHG impacts from projects. These BMPs align with the direction in Appendix D of the 2022 Scoping Plan, which calls for building decarbonization, VMT reductions, and the electrification of the mobile source sector. As such, these are considered appropriate BMPs to assess the Project's cumulative contribution to global climate change.

Using SMAQMD's guidance, the Project would result in a cumulatively significant climate change effect if it would:

- generate construction emissions exceeding 1,100 $MTCO_2e$ per year for any year of construction;
- generate operational emissions exceeding 1,100 $MTCO_2e$ per year following the implementation of SMAQMD's Tier 1 BMPs (i.e., the prohibition on natural gas infrastructure and meeting the current CALGreen Tier 2 Standards for EV charging); or
- if the Project would exceed 1,100 $MTCO_2e$ per year following the application of Tier 1 BMPs, fail to achieve the VMT reduction targets set forth by OPR under SB 743.

Notably, while the SMAQMD guidance was developed in consideration of nearer-term statewide GHG reduction goals (i.e., a 40 percent reduction from 1990 statewide inventory by 2030), SMAQMD's recommended BMPs are highly reflective of the Bay Area Air Quality Management District's (BAAMQD's) thresholds for determining significance in its 2022 CEQA Air Quality Guidelines. As stated in its Justification Report, the BAAQMD thresholds were designed to ensure that local governments do their "fair share" to

contribute to the statewide goal of achieving carbon neutrality by 2045, as codified in AB 1279 (BAAQMD 2022). Moreover, SMAQMD's Tier 1 and Tier 2 BMPs are similar to the direction in Appendix D, "Local Actions," of the 2022 Scoping Plan that identifies building decarbonization, VMT reductions, and the electrification of the mobile source sector as key priority areas that local jurisdictions can target to do their "fair share" in assisting the state in meeting its long-term goal of carbon neutrality by 2045 (CARB 2022b).

Because SMAQMD's Tier 1 and Tier 2 BMPs would result in building decarbonization, VMT reductions, and the infrastructure to support EVs, they are considered appropriate thresholds for use in this analysis.

Methodology

Short-term construction-generated GHG emissions were calculated using the California Emissions Estimator Model (CalEEMod), Version 2022.1.1.21, as recommended by SMAQMD and other air districts in California (CAPCOA 2023). Separate model runs were conducted to estimate GHG emissions from the currently allowed as well as the proposed development on the candidate rezone sites under the Project. Modeling was based on the number of residential units for the proposed and approved land uses to calculate the difference. Modeling assumptions were based on typical construction activities for similar land use projects as well as default values in CalEEMod that are based on the Project location and land use types. Construction of the Project was assumed to commence in 2025 and end in 2029, consistent with the 2021–2029 Housing Element. This assumption is considered conservative, as development of the additional residential capacity allowed under the rezone would likely occur well beyond a 5-year time frame. However, based on the assumed 5-year buildout schedule of the Project, 20 percent of the Project would be constructed each year. For modeling purposes, the Project was modeled as five separate years, each with 20 percent of the acreage and units to get the most accurate representation of emissions per year.

The distinct area plans were modeled separately from the Project as a whole, with construction assumed to begin in 2025. A construction schedule for development in each of the distinct area plans was based on CalEEMod defaults. Construction in each distinct area plans was assumed to occur consecutively, with construction beginning in one distinct area plan after concluding in another. Construction in the distinct area plans was anticipated to begin in 2025 and conclude in late 2028, with Fair Oaks Boulevard Corridor Plan construction anticipated to occur between January 2025 and June 2025, North Watt Avenue Corridor Plan construction occurring between June 2025 and March 2027, and Old Florin Town SPA construction occurring between March 2027 and November 2028.

Operation-related emissions of GHGs were estimated using CalEEMod for the following sources: VMT and vehicle trips, area sources (e.g., landscape maintenance equipment), energy use (i.e., electricity and natural gas consumption), water use, solid waste generation, and mobile sources. For each distinct area plans, CalEEMod defaults for VMT were used. Existing VMT for the proposed rezone sites without the Project was not included in the transportation study prepared by DKS (the transportation study examined countywide VMT for this scenario). To ensure like-scenarios were compared, CalEEMod

defaults were used for existing and existing plus Project scenarios. (Therefore, specific VMT numbers differ between this section and Section 10, Transportation, which was based on the DKS transportation study). Mobile-source emissions were calculated using CalEEMod. Notably, emissions estimates associated with Project-related mobile source emissions are considered conservative, as traffic modeling was based on the inclusion of three additional sites that are no longer considered in the scope of the Project. The three sites were located in a high VMT-generating area; thus, actual VMT and associated mobile-source GHG would be less than the levels described below. Indirect emissions associated with electricity and natural gas consumption were estimated using scaled GHG emissions factors for the Sacramento Municipal Utility District (SMUD) for the first year of operation (i.e., 2030). The Project's electricity, natural gas, and wastewater consumption, as well as waste generation, were based on model defaults.

Detailed model assumptions and inputs for these calculations are presented in Appendix AQ-1.

Issues Not Discussed Further

Adverse Impacts to the Project from Climate Change

The EIRs prepared for the Fair Oaks Boulevard Corridor Plan, North Watt Avenue Corridor Plan, and Old Florin Town SPA analyzed impacts to the plans from climate change. However, consistent with the California Supreme Court's direction in *California Building Industry Association v. Bay Area Air Quality Management District* (2015) 62 Cal.4th 369 (*CBIA v. BAAQMD*), "agencies subject to CEQA generally are not required to analyze the impact of existing environmental conditions on a project's future users or residents. But when a proposed project risks exacerbating those environmental hazards or conditions that already exist, an agency must analyze the potential impact of such hazards on future residents or users." Given this direction from the court, CEQA does not require that a lead agency evaluate the impact of the environment on a project, rather a project's impact on its environment, except in cases where the project may exacerbate an existing adverse environmental condition. Therefore, adverse impacts to projects from climate change are not discussed in the following analysis.

Impact and Analysis

This impact and analysis section is organized by impact, then within each impact, by analysis of Project buildout as compared to the General Plan EIR, and finally by distinct area plan. Mitigation is included or updated, where applicable, from the original environmental documents prepared for the General Plan and distinct area plans. An analysis of cumulative impacts is included at the end of the section.

IMPACT CC-1: GENERATE GHG EMISSIONS, EITHER DIRECTLY OR INDIRECTLY, THAT MAY HAVE A SIGNIFICANT IMPACT ON THE ENVIRONMENT

SACRAMENTO COUNTY GENERAL PLAN

GENERAL PLAN ENVIRONMENTAL IMPACT REPORT DETERMINATION

The General Plan EIR evaluated the potential effects of buildout of the General Plan related to consistency with the goals and strategies of AB 32, as well as the effects of global climate change on the General Plan. The General Plan EIR determined that implementation of the General Plan would have a significant and unavoidable impact related to compliance with AB 32 due to the uncertain nature of the impact. The impact finding was based on the uncertainty surrounding the implementation of SB 375 and how its implementation would affect the adoption of local transportation-related GHG emissions reduction goals, as these had not yet been developed at the time of the writing of the General Plan EIR. When the General Plan EIR was written, AB 32 required that emissions be reduced to 1990 levels by the year 2020, which was estimated in the AB 32 Scoping Plan to be 15 percent below existing (2005) emissions. As the only regulatory document adopted by the state that set a GHG emissions reduction goal at the time, the General Plan EIR relied on the underlying strategy and assumptions of the AB 32 Scoping Plan to develop County targets. Therefore, it was determined that emissions would need to be reduced to 1990 levels by 2020. Reducing the modeled 2005 emissions by 15 percent, the County's 1990 baseline is 5,572,432 $MTCO_2e$. Buildout of the General Plan was shown to result in a 6.7 $MMTCO_2e$ increase above 2005 baseline levels by the year 2030. This amount was 7.7 MMT above the 1990 levels required by AB 32 and was determined to be a significant and unavoidable impact after mitigation. GHG mitigation in the General Plan EIR required County adoption of the AB 32 goal as a General Plan policy, a CAP, and development GHG thresholds. It should be noted that the General Plan EIR did not evaluate construction-related emissions from off-road vehicles. The General Plan EIR stated that construction equipment emissions would need to be addressed on a per-project basis, according to the size of the site, the type of development proposed, and the type of equipment that will be used (Sacramento County 2010).

PROPOSED PROJECT IMPACT EVALUATION

CONSTRUCTION

Construction-related activities that could occur with the increased capacity allowed under the Project would generate emissions of GHGs from the operation of off-road equipment, material delivery, worker commute trips, and other miscellaneous activities. Due to the uncertainties associated with analyzing development at the program level (i.e., there are no specific development proposals; development occurs according to market forces), the exact duration and intensity of construction activities that could occur for individual development as part of the Project is not known. This analysis conservatively assumes that construction of the Project would occur between 2025 and 2029. Construction GHG impacts are analyzed for the individual candidate rezone sites and as an aggregate below.

OPERATION

Consistent with the General Plan horizon year, the Project is conservatively assumed to be fully operational by 2030.[2] Operation related to increased capacity allowed under the Project would result in mobile-source GHG emissions associated with vehicle trips to and from the candidate rezone sites within the County, area-source emissions from the operation of landscape maintenance equipment, energy-source emissions from the utilization of electricity, water-related energy consumption associated with water use and the conveyance and treatment of wastewater, and waste-generated emissions from the transport and disposal of solid waste. The GHG emissions modeling conducted for Project operations assumes that development under the Project would not implement SMAQMD's Tier 1 and Tier 2 BMPs as a design feature. Operational GHG impacts are analyzed for the individual candidate rezone sites and as an aggregate below.

INDIVIDUAL CANDIDATE REZONE SITE IMPACT EVALUATION

CONSTRUCTION

According to the SMAQMD CEQA Guide, like criteria pollutants (NOx and PM), construction GHG emissions may be significant if individual development projects include any of the following parameters:

- include buildings more than 4 stories tall;
- include demolition activities;
- include major trenching activities;
- have a construction schedule that is unusually compact, fast-paced, or involves more than 2 phases (i.e., grading, paving, building construction, and architectural coatings) occurring simultaneously;
- involve cut-and-fill operations (moving earth with haul trucks and/or flattening or terracing hills); and
- require import or export of soil materials that will require a considerable amount of haul truck activity.

If individual projects include one of the listed parameters, construction GHG emissions should be compared against the 1,100 $MTCO_2e$ screening level. At this level of analysis for the Project, it cannot be guaranteed that all future development on individual candidate rezone sites would exclude all of the listed parameters. Therefore, construction screening criteria is not used for this analysis. Instead, GHG emissions are estimated for the largest candidate rezone site (Site 15) as the most conservative scenario for Project GHG construction emissions. Site 15 which is 11.45 acres and has a proposed maximum density of 458 units (an increase of 229 units beyond the existing maximum density permitted). The majority of candidate rezone sites (approximately 85 percent) are below 5 acres in size. Table CC-2 below provides a conservative estimate of emissions that

[2] Project construction was assumed to continue into 2029. Thus, the first full operational year of buildout for development allowed under the Project would be 2030.

could occur during construction activities related to increasing the residential capacity of the largest candidate rezone site, as larger sites with greater residential capacity tend to result in more intense construction activities and, therefore, greater emissions.

As shown in Table CC-2, development of Site 15 would not exceed the 1,100 $MTCO_2e$ screening level in either modeled construction year. Because Site 15 is exemplary in terms of being the largest candidate rezone site in acreage, and one of the greatest increases in units permitted with proposed maximum density, and construction GHG emissions related to increasing residential capacity would not exceed SMAQMD screening levels for GHG emissions, it is unlikely that construction emissions related to increasing capacity on any other individual candidate rezone site would exceed thresholds. However, as discussed above, actual GHG construction emissions for each subsequent project on candidate rezone sites is dependent on a number of factors that are unknown at this time. For example, it is unknown whether some of the sites will be constructed within a very short period of time which may increase emissions in the concentrated time period and require construction GHG BMPs. Future development projects will be reviewed to determine whether the project screens out for construction GHG emissions or if construction GHG BMPs would apply per Mitigation Measure CC-1.

Ultimately, development on individual candidate rezone sites would result in greater GHG emissions compared to the development capacity analyzed in the General Plan EIR because, while the Project footprint remains the same as that which was analyzed in the General Plan EIR, the Project would involve constructing a greater number of units in the same footprint, resulting in more intensive construction activities and longer construction schedules.

OPERATION

According to the SMAQMD CEQA Guide, operational GHG emissions may only screen out for midrise apartments (3 to 10 stories tall) if the District's Tier 1 operational GHG BMPs are implemented and if individual development projects include 88 units or less. The largest site, Site 15, with a potential maximum density of 458 units would not meet the operational screening criteria because it is more than 88 units. Per the SMAQMD CEQA Guide, individual projects that do not meet the screening criteria should be modeled to determine whether GHG emissions exceed the 1,100 $MTCO_2e$ screening level. Table CC-2 provides modeling results for the operational phase of a hypothetical project on Site 15.

Table CC-2: Maximum Construction- and Operation-Generated Annual Emissions of Greenhouse Gas Associated with Largest Individual Candidate Rezone Site (Site 15)

Year	$MTCO_2e$/year
Construction	
2025	853
2026	283
SMAQMD Screening Level	1,100
Screening Level Exceeded?	No

Year	$MTCO_2e$/year
Operations	
2027	4,221
SMAQMD Screening Level[d]	1,100
Screening Level Exceeded?	Yes

Notes: $MTCO_2e$ = metric tons of carbon dioxide equivalent; SMAQMD = Sacramento Metropolitan Air Quality Management District.

Source: Modeling performed by Ascent in 2024.

As shown in Table CC-2, emissions from Site 15, would exceed SMAQMD's 1,100 $MTCO_2e$ screening threshold for operational emissions. It should be noted that this provides a "conservative scenario, and it is likely that smaller sites under the Project would not exceed SMAQMD's 88-unit screening criteria and/or the 1,100 $MTCO_2e$ screening level for operational emissions.

The SMAQMD CEQA Guide indicates that if a project, such as Site 15, exceeds the size limits (more than 88 units) and the 1,100 $MTCO_2e$ screening level, the next level of analysis is to determine if the project meets the Office of Planning and Research (OPR) SB 743 technical advisory de minimis criteria for vehicle miles traveled (VMT). If Tier 1 BMPs 1 and 2 are fully implemented and the site's VMT is de minimis, then no further action is required. Chapter 10 "Transportation," provides a site-by-site VMT analysis, which concluded that 18 of the 79 candidate rezone sites with development allowed under the Project would exceed the 85 percent threshold for VMT. For sites that do not meet the GHG operational screening and are one of the 18 sites that have a VMT impact, SMAQMD requires that Tier 2 BMP 3 is added to the project. Tier 2 BMP 3 requires projects to reduce applicable project VMT by 15 percent residential and 15 percent worker relative to Sacramento County targets, and no net increase in retail VMT. In areas with above-average existing VMT, BMP 3 requires projects to commit to providing electrical capacity for future 100 percent electric vehicles.

The 18 sites (Sites 2, 4, 6, 13, 14, 17, 18, 24, 25, 26, 27, 28, 56, 57, 62, 63, 65, and 66) that exceed VMT thresholds are subject to Mitigation Measure TRAN-1, which requires all feasible VMT reductions consistent with Tier 2 BMP 3. Specifically, Mitigation Measure TRAN-1 includes additional screening for certain types of projects (i.e. affordable developments) as provided for in OPR guidance and in the adopted County Transportation Analysis Guidelines (TAG). If a project still has an impact, Mitigation Measure TRAN-1, requires the project to implement all feasible onsite VMT reduction measures including the California Air Pollution Control Officers Association (CAPOCA) VMT reduction Measure T-16 to unbundle residential parking costs from property costs (i.e., require those who wish to purchase parking spaces to do so at an additional cost) (CAPCOA 2021) and any other feasible onsite reduction measure that may be established. If onsite measures do not reduce the individual project's VMT below applicable thresholds, then the developer shall participate in the County of Sacramento's VMT Mitigation Program, when and if the program has been adopted, prior to development of the individual project.

For the hypothetical development of Site 15, presented above, the development would exceed 88 units and the 1,100 $MTCO_2e$ screening level for operational GHG emissions. Tier 1 BMPs 1 and 2 would be applied and because Site 15 does not exceed VMT thresholds, no further action or mitigation would be required and operational GHG would be considered less than significant with Tier 1 BMPs. Future development projects will be reviewed to determine whether the project screens out for operational GHG emissions and which BMPs apply (at a minimum Tier 1 BMPs 1 and 2 would apply to all projects) as detailed in Mitigation Measure CC-2.

Ultimately, development on individual candidate rezone sites would result in greater operational GHG emissions compared to the development capacity analyzed in the General Plan EIR. Thus, although some individual projects may screen out and result in less than significant impacts with BMPs 1 and 2, some will substantially increase impacts and result in significant operational GHG emissions impacts.

Aggregate Buildout Impact Evaluation

Construction

Table CC-3 summarizes the aggregate estimated annual construction emissions that would occur during construction of allowable development on each candidate rezone site under existing zoning as well as emissions that would occur from implementation of development allowed under the Project for disclosure purposes.

Table CC-3: Summary of Maximum Construction-Generated Emissions of GHG Emissions from Additional Residential Capacity Under the Project (2025–2029)

Construction Year	$MTCO_2e$/year
Previously Approved Land Uses	
2025	1,387
2026	1,692
2027	1,530
2028	1,460
2029	747
Proposed Land Uses	
2025	2,204
2026	2,661
2027	2,424
2028	2,360
2029	1,386
Difference in Total Emissions Between Approved and Proposed Land Uses	+4,219

Notes: $MTCO_2e$ = metric tons of carbon dioxide equivalent; SMAQMD = Sacramento Metropolitan Air Quality Management District.

Source: Modeling performed by Ascent in 2024.

As shown in Table CC-3, based on development assumptions and a conservative 5-year buildout, the anticipated cumulative development that would be allowed under the Project would generate cumulative construction emissions (and on a site by site basis may exceed SMAQMD's 1,100 $MTCO_2e$ per year screening threshold). Implementation of development allowed under the Project would result in an additional 4,219 $MTCO_2e$ per year compared to the development capacity analyzed in the General Plan EIR. As discussed above, pursuant to Mitigation Measure CC-1, individual projects would be reviewed to determine whether the project screens out for construction GHG emissions or if construction GHG BMPs would apply. Overall, the proposed Project would result in greater emissions compared to the development capacity analyzed in the General Plan EIR because, while the Project footprint remains the same as that which was analyzed in the General Plan EIR, the Project would involve constructing a greater number of units in the same footprint, resulting in more intensive construction activities and longer construction schedule.

Pursuant to CEQA Guidelines Section 15162, construction activities related to increased capacity allowed under the Project would generate greater GHG emissions than what would be emitted from potential development of the approved land uses and, the Project would result in a more severe impact as compared to what was identified in the General Plan EIR. The Project's aggregate contribution to construction GHG emissions would be substantial and impacts would remain significant**.**

OPERATION

Table CC-4 summarizes the Project's aggregate unmitigated (no inclusion of SMAQMD's Tier 1 and Tier 2 BMPs) operational emissions by sector for disclosure purposes. For specific operational assumptions and modeling inputs, refer to Appendix AQ-1. Based on the modeling conducted, aggregate Project operations would generate a total of approximately 51,236 $MTCO_2e$ per year.

Table CC-4: Total Project-Generated Operational GHG Emissions in 2030 (Unmitigated)

Emissions Sector	$MTCO_2e$/year
Previously Approved Land uses	
Mobile[1]	25,456
Area	58
Energy	3,939
Water Consumption and Wastewater Treatment	111
Solid Waste Generation	771
Refrigerants	3
Total	30,337
Proposed Land Uses	
Mobile[1]	40,143
Area	128
Energy	9,006

Emissions Sector	$MTCO_2e$/year
Water Consumption and Wastewater Treatment	238
Solid Waste Generation	1,713
Refrigerants	8
Total	51,236
Difference in Total Emissions Between Approved and Proposed Land Uses	+20,899

Notes: $MTCO_2e$ = metric tons of carbon dioxide equivalent; SMAQMD = Sacramento Metropolitan Air Quality Management District. Totals may not sum due to rounding.

[1] Emissions estimates associated with Project-related mobile source emissions are considered conservative, as traffic modeling was based on the inclusion of three additional sites that are no longer considered in the scope of the Project. The three sites were located in a high VMT-generating area; thus, VMT would be reduced with removal of the three sites.

Source: Modeling performed by Ascent in 2024.

As shown in Table CC-4, aggregate Project operational emissions would generate cumulative GHG emissions (and on a site by site basis may exceed SMAQMD's screening threshold of 1,100 $MTCO_2e$ per year). Aggregate operation of the proposed land uses allowed by the Project would result in an additional 20,899 $MTCO_2e$ per year compared to currently allowed development on the candidate rezone sites.

As discussed above, consistent with Mitigation Measure CC-2, future development projects would be reviewed to determine whether the project screens out for operational GHG emissions and which BMPs apply (at a minimum Tier 1 BMPs 1 and 2 would apply to all projects). Overall, the proposed Project would result in greater emissions compared to the development capacity analyzed in the General Plan EIR because, while the Project footprint remains the same as that which was analyzed in the General Plan EIR, the Project would involve the operation of a greater number of units in the same footprint, resulting in more operational emissions per site.

Pursuant to CEQA Guidelines Section 15162, operational activities related to increased capacity allowed under the Project would generate greater GHG emissions than what would be emitted from operation of the residential capacity analyzed in the General Plan EIR. The Project's contribution to impacts would be substantial and overall impacts would remain significant.

Mitigation Measures

Mitigation Measure CC-1: Implement Measures to Reduce Construction Greenhouse Gas Emissions

Future development project on any of the candidate rezone sites including one or more of the following components shall be subject to this mitigation measure. The construction components are:

- include buildings more than 4 stories tall;
- include demolition activities;
- include major trenching activities;

- have a construction schedule that is unusually compact, fast-paced, or involves more than 2 phases (i.e., grading, paving, building construction, and architectural coatings) occurring simultaneously;
- involve cut-and-fill operations (moving earth with haul trucks and/or flattening or terracing hills); and
- require import or export of soil materials that will require a considerable amount of haul truck activity.

If future development on any of the candidate rezone sites include of the above components, individual development projects shall prepare and submit a project-specific GHG analysis utilizing CalEEMod for review and approval by the Environmental Coordinator that shows GHG emissions associated with construction of the project.

If GHG emissions levels would exceed SMAQMD's 1,100 $MTCO_2e$ per year screening thresholds, project applicants shall implement feasible construction-related GHG reduction measures (example measures listed below). The GHG analysis shall demonstrate the project's contribution to GHG and quantify reductions in construction GHG, if necessary, such that construction emissions are minimized. Applicants may choose the mitigation measures to be implemented on a project-by-project basis, as long as the measures selected are sufficient in reducing construction-related GHG impacts to less-than-significant levels (i.e., below SMAQMD's 1,100 $MTCO_2e$ per year threshold). Construction measures may include but are not limited to:

- Use alternative fuels in construction equipment (e.g., electric, hybrid).
- Minimize idling time either by shutting off equipment when not in use or reducing the time of idling to no more than 2 minutes (A 5-minute limit is required by the state airborne toxics control measure [Title 13, Sections 2449(d)(3) and 2485 of the California Code of Regulations].) Provide clear signage that posts this requirement for workers at the entrances to the site, and develop an enforceable mechanism to monitor idling time to ensure compliance with this measure. Require that all diesel-fueled off-road construction equipment be equipped with EPA Tier 4 Final compliant engines or better as a condition of contract.
- Require all on-road heavy-duty trucks to have zero emissions or meet the most stringent emissions standard, such as MY 2024–2026, as a condition of contract.
- Use CARB-approved renewable diesel fuel in off-road construction equipment and on-road trucks.
- Use EPA's SmartWay certified trucks for deliveries and equipment transport.
- Require all construction equipment to be maintained and properly tuned in accordance with manufacturers' specifications.
- Perform checks that determine equipment is running in proper condition prior to operation. These checks must be performed by a certified mechanic.
- Where grid power is available, prohibit portable diesel engines, and provide electrical hookups for electric construction tools, such as saws, drills, and

compressors, and use electric tools whenever feasible. Where grid power is not available, use alternative fuels, such as propane or solar electrical power, for generators at construction sites.

- Provide carpools, shuttle vans, and transit passes to construction workers, and offer meal options on-site or shuttles to nearby meal destinations for construction employees.
- Provide secure bicycle parking for construction workers.
- Reduce electricity use in the construction office by using LED bulbs, powering off computers every day, and, if existing heating and cooling units are determined to be inefficient (i.e., not in compliance with the most recent mandatory efficiency standards of the California Energy Code), replacing these units with more efficient ones.
- Minimize energy used during site preparation by deconstructing existing structures to the greatest extent feasible.
- Recycle or salvage nonhazardous construction and demolition debris, with a goal of recycling at least 15 percent more by weight than the diversion requirement in Title 24.
- Use locally sourced or recycled materials for construction materials (goal of at least 20 percent based on costs for building materials and based on volume for roadway, parking lot, sidewalk, and curb materials). Wood products used should be certified through a sustainable forestry program.
- Use low-carbon concrete, minimize the amount of concrete used, and produce concrete on-site if it is more efficient and lower-emitting than transporting ready-mix.
- Develop a plan to efficiently use water for adequate dust control since substantial amounts of energy can be consumed during the pumping of water.
- Include all requirements in applicable bid documents, purchase orders, and contracts, with successful contractors demonstrating the ability to supply the compliant on- or off-road construction equipment for use prior to any ground-disturbing and construction activities.

OR

When the County adopts the 2022 CAP, future development projects shall incorporate GHG emissions reduction measures contained therein. Such participation shall be subject to a demonstration that the emissions reduction measures selected are equivalent to or more effective than the specific requirements listed above.

MITIGATION MEASURE CC-2: IMPLEMENT MEASURES TO REDUCE OPERATIONAL GREENHOUSE GAS EMISSIONS

Individual development projects shall incorporate the Tier 1 Best Management Practices or propose alternatives that demonstrate the same level of GHG reductions as BMPs 1

and 2, listed below. At a minimum, the individual development projects shall mitigate natural gas emissions and provide necessary wiring for an all-electric retrofit to accommodate future installation of electric space heating, water heating, drying, and cooking appliances.

For projects that exceed SMAQMD's 1,100 $MTCO_2e$ per year screening thresholds after application of Tier 1 BMPs 1 and 2, the individual project shall meet OPRs SB 743 technical advisory de minimis criteria for VMT. If the subject site is one of the 18 candidate rezone sites (Sites 2, 4, 6, 13, 14, 17, 18, 24, 25, 26, 27, 28, 56, 57, 62, 63, 65, and 66) identified as having a VMT impact in Chapter 10 "Transportation," Mitigation Measure TRAN-1 would apply and would satisfy the requirements of SMAQMDs Tier 2 BMP 3.

Tier 1

- **BMPs Required for All Future Projects**
    - BMP 1: No natural gas: Projects shall be designed and constructed without natural gas infrastructure or proposed alternatives that demonstrate the same level of GHG reductions. At a minimum, pre-wiring for an all-electric retrofit as detailed above is required.
    - BMP 2: EV-ready: Projects shall meet the current CALGreen Tier 2 standards, except all EV-capable spaces shall instead be EV-ready. EV-capable requires the installation of "raceway" (the enclosed conduit that forms the physical pathway for electrical wiring to protect it from damage) and adequate panel capacity to accommodate future installation of a dedicated branch circuit and charging station(s). EV-ready requires all EV-capable improvements plus installation of dedicated branch circuit(s) (electrical pre-wiring), circuit breakers, and other electrical components, including a receptacle (240-volt outlet) or blank cover needed to support future installation of one or more charging stations.

Tier 2

- **BMP Required for Sites exceeding 1,100 $MTCO_2e$ operationally after implementing Tier 1 BMPs and not meeting OPRs SB 743 technical advisory de minimis criteria for VMT (potentially (Sites 2, 4, 6, 13, 14, 17, 18, 24, 25, 26, 27, 28, 56, 57, 62, 63, 65, and 66 found to have a VMT impact per Chapter 10, "Transportation"):**
    - BMP 3: Reduce residential VMT by 15 percent relative to Sacramento County targets. In areas with above-average existing VMT, provide electrical capacity for future 100% electric vehicles.
    - To comply with BMP 3, applicable projects shall implement Mitigation Measure TRAN-1 and shall provide electrical capacity for future 100% electric vehicles.

OR

Future 2022 CAP

When the County adopts the 2022 CAP, future development projects shall incorporate GHG emissions reduction measures contained therein. Such participation shall be subject to a demonstration that the emissions reduction measures selected are equivalent to or more effective than the specific requirements listed above.

SIGNIFICANCE AFTER MITIGATION

The application of Mitigation Measure CC-1 would reduce construction-related GHG emissions by requiring individual construction projects to implement GHG reduction measures that would reduce emissions below the SMAQMD threshold for construction or by requiring that applicants implement equal or more effective reduction measures contained in the 2022 CAP once it has been adopted. However, it cannot be determined at this level of analysis whether individual projects could implement the construction-related GHG reduction measures to a degree that would be sufficient in reducing emissions below the SMAQMD threshold. Construction of the additional development allowed under the Project was modeled to reflect the most conservative scenario where all development would be constructed simultaneously. However, this would be unlikely. It is much more likely that, although there would be some overlap, construction activities for individual projects would occur at different times, resulting in GHG emissions being spread across the overall Project construction period. Due to uncertainties surrounding the effectiveness of construction-related GHG reduction measures, it is possible that GHG emissions related to construction of the increased residential capacity allowed under the Project would continue to be greater than the emissions related to construction of the approved residential capacity accounted for in the General Plan EIR. Therefore, construction related to the increased residential capacity allowed under the Project would result in a more severe GHG impact than would occur with construction of development under the current zoning.

Operation-related emissions would be reduced through the implementation of Mitigation Measure CC-2 that would require omitting natural gas from future developments under the Project and compliance with CALGreen Tier 2 prerequisites for EV charging spaces, or by requiring that applicants implement equal or more effective reduction measures contained in the 2022 CAP once it has been adopted. Mitigation Measure CC-2 would also require adherence to the VMT reduction requirements of SMAQMD's Tier 2 BMP 3 for applicable projects.

However, as shown in Table CC-5, operational emissions from development allowed under the Project would be greater than existing conditions and would continue to exceed SMAQMD's screening threshold of 1,100 $MTCO_2e$ per year on some of the candidate rezone sites despite application of feasible mitigation measures.

Table CC-5: Total-Project-Generated Operational GHG Emissions in 2030 (Mitigated)

Emissions Sector	$MTCO_2e$/year
Mobile	40,143
Area	128
Energy	3,729
Water Consumption and Wastewater Treatment	238
Solid Waste Generation	1,713
Refrigerants	8
Total	45,959

Notes: $MTCO_2e$ = metric tons of carbon dioxide equivalent; SMAQMD = Sacramento Metropolitan Air Quality Management District. Totals may not sum due to rounding.

Source: Modeling performed by Ascent in 2024.

In addition, the Project may not comply with the requirements of SMAQMD's Tier 2 BMP 3 because, as detailed in Section 10 "Transportation," development allowed under the Project on individual sites may still exceed the County's VMT threshold despite the application of available mitigation. Finally, as the County's CAP has not been adopted, it cannot be guaranteed that the GHG reduction measures of the CAP would be sufficient in reducing emissions for all development allowed under the Project to a less-than-significant level.

Due to uncertainties surrounding implementation of the 2022 CAP, as well as the effectiveness of VMT reduction measures for individual projects, it is possible that operational emissions would continue to be greater than the emissions related to operation of the approved residential capacity disclosed in the General Plan EIR. Therefore, pursuant to CEQA Guidelines Section 15162, the proposed Project would result in substantially more severe impacts to GHG emissions over what was disclosed in the General Plan EIR. The Project's contribution to impacts would be substantial and overall impacts would remain significant and unavoidable.

It should be noted that while increased residential capacity allowed under the proposed Project could result in more residential units being constructed than what was analyzed in the General Plan EIR, implementation of the Project would result in a more efficient distribution of GHG emissions per capita because of the denser development allowed as part of the rezone. Increasing residential density would result in fewer GHG emissions per capita, or the GHG emissions associated, either directly or indirectly, with a single person because more compact development patterns reduce per capita energy demands, while less-compact sprawl increases demand (CARB 2017). In terms of construction, the energy used to facilitate construction would be more efficient compared to that needed to construct housing for less dense development on a per capita basis (see Table CC-6). In terms of operation, emissions of GHGs associated with sources such as mobile sources, area sources, and energy sources are considered more efficient when the associated development houses a larger number of people in a smaller area (see Table CC-7). Therefore, the additional residential capacity allowed under the Project would be considered more efficient in terms of emissions per capita compared to the residential capacity allowed under current zoning.

Table CC-6: Comparison of Annual Emissions per Capita Associated with Construction of Approved Residential Capacity Under the General Plan and Proposed Residential Capacity Under the Project

Construction Year	Approved Land Uses ($MTCO_2e$/year/capita)	Proposed Land Uses ($MTCO_2e$/year/capita)	Difference in Emissions ($MTCO_2e$/year/capita)
2025	0.14	0.11	(0.04)
2026	0.18	0.13	(0.05)
2027	0.16	0.12	(0.05)
2028	0.16	0.11	(0.04)
2029	0.08	0.07	(0.01)

Notes: $MTCO_2e$/year/capita= metric tons of carbon dioxide equivalent per year per capita; ( ) = negative number. Numbers may not sum due to rounding.

Source: Modeling conducted by Ascent in 2024.

Table CC-7: Comparison of Annual Emissions per Capita Associated with Operation of Approved Residential Capacity Under the General Plan and Proposed Residential Capacity Under the Project

Scenario	Annual $MTCO_2e$ (MT/year/capita)
Operation of Approved Land Uses[1]	3.23
Operation of Proposed Land Uses[2,3]	2.22
Difference	(1.02)

Notes: $MTCO_2e$ = metric tons of carbon dioxide equivalent; MT/year/capita = metric tons per year per capita; ( ) = negative number

[1] Assumed population of 9,347 from CalEEMod defaults

[2] Assumed population of 20,773 from CalEEMod defaults

[3] Includes application of Mitigation Measure CC-2.

Source: Modeling conducted by Ascent in 2024.

Distinct Area Plans

Impacts related to climate change were evaluated in the Fair Oaks Boulevard EIR, North Watt Avenue EIR, and Old Florin Town SPA EIR. At the time the analyses for these EIRs were written, AB 32 was the most current legislation that set statewide GHG reduction targets. However, the analyses stated that the emissions reduction targets established through AB 32 could not be used to establish significance criteria for the analysis because the measures listed in the published Scoping Plan do not clearly identify the reduction targets that will apply specifically to local government. The (2008) Scoping Plan states that local government should set the same ultimate targets as those set forth in AB 32, but does not provide the details necessary to understand how much of the target will be achieved through State actions (such as the low-carbon fuel standard) and how much will be achieved by local action (Sacramento County 2011b, 2011c, 2012).

Therefore, the analysis in each EIR was based on GHG methodology developed by Sacramento County as the lead agency, as permitted by the State CEQA Guidelines in Section 15064.4(c). Using methodology recommended by the then-draft version of the

General Plan EIR and the CAP, the County developed GHG thresholds for the EIRs. These thresholds are as follows:

- 1.30 $MTCO_2e$ per capita for residential energy
- 8.08 $MTCO_2e$ per kilo square feet (Ksf) for commercial and industrial energy
- 4.56 $MTCO_2e$ per capita for transportation use

Since the distinct area plan EIRs were adopted, SMAQMD has adopted thresholds for analyzing project GHG emissions (see "Significance Criteria and Methodology" above) based on the most recent statewide GHG reduction targets set forth by AB 1279. Therefore, the thresholds used in the distinct area plan EIRs are not applied to the analyses below. Rather, the most recent SMAQMD thresholds recommended in the SMAQMD CEQA Guide are used to evaluate GHG emissions that could result from implementation of the anticipated additional residential capacity within the distinct planning areas that would be allowed under the Project.

FAIR OAKS BOULEVARD CORRIDOR PLAN

ENVIRONMENTAL IMPACT REPORT DETERMINATION

The Fair Oaks Boulevard EIR determined that emissions related to the residential transportation sector would be below the 4.56 $MTCO_2e$ per capita threshold and would thus result in less-than-significant impacts related to GHG emissions from residential transportation associated with the Fair Oaks Boulevard Corridor Plan. A separate GHG impact determined that, with the implementation of Mitigation Measure CC-1 in the Fair Oaks Boulevard EIR, per capita emissions related to residential energy could be reduced below the threshold of 1.30 $MTCO_2e$ per capita. The Fair Oaks Boulevard EIR determined that Mitigation Measure CC-1, when applied to residential transportation related to the Fair Oaks Boulevard Corridor Plan, would also reduce commercial transportation emissions because it was assumed that most vehicular travel to and from commercial projects within the Fair Oaks Corridor would be from trips made by residents of the distinct plan area or in the community immediately adjacent. Therefore, this impact was determined to be less than significant. Finally, the Fair Oaks Boulevard EIR determined that, with the implementation of Mitigation Measure CC-2, per capita emissions related to commercial energy could be reduced below the 8.08 $MTCO_2e$ per Ksf threshold. The Fair Oaks Boulevard EIR did not evaluate GHG- or climate change–related impacts that could result from construction.

IMPACT EVALUATION

CONSTRUCTION

As described above, SMAQMD has developed construction emissions screening levels to assist a project proponent or lead agency in determining if criteria pollutants and GHG emissions from constructing a project in Sacramento County would exceed the SMAQMD construction-related GHG emissions significance thresholds. It cannot be guaranteed at this level of analysis, that construction activities associated with increased residential capacity on Site 67 would be within the parameters listed above under Impact CC-1's

"Individual Candidate Rezone Site Impact Evaluation – Construction" section discussion for screening out projects. Therefore, construction screening criteria is not used for this analysis. If individual projects include one of the listed parameters, construction GHG emissions should be compared against the 1,100 $MTCO_2e$ screening level.

The following discussion of estimated construction emission associated with future development on Site 67 as allowed with the Project is provided solely for CEQA disclosure purposes. Actual construction emissions are subject to change, due to specific future development and design proposed, construction year, and construction equipment and activities utilized. Construction-related activities that could occur with the increased capacity allowed under the Project on Site 67 would generate emissions of GHGs from the operation of off-road equipment, material delivery, worker commute trips, and other miscellaneous activities. Construction activities for modeling purposes were assumed to occur in a single year (2025). The site preparation and grading construction phases are the most intensive phases for GHG emissions because both phases use the greatest amount of heavy construction equipment compared to other phases of construction (e.g., building construction, architectural coating). For specific construction assumptions and modeling inputs, refer to Appendix AQ-1. Based on the modeling performed for Site 67, construction on Site 67 would generate a total of approximately 106 $MTCO_2e$ over the 1-year construction period. Table CC-8 presents the estimated construction emissions that would occur on Site 67 under existing zoning (25 units or commercial offices) and with Project (37 units).

Table CC-8: Summary of Maximum Construction-Generated Emissions of GHG Emissions For Site 15 Within the Fair Oaks Boulevard Corridor Plan (2025)

Construction Year	$MTCO_2e$/year
With Existing Zoning	
2025	**100**
SMAQMD Screening Level	1,100
Screening Level Exceeded?	No
With Project	
2025	**106**
SMAQMD Screening Level	1,100
Screening Level Exceeded?	No
Difference in Total Emissions Between Approved and Proposed Land Uses	**+6**

Notes: $MTCO_2e$ = metric tons of carbon dioxide equivalent; SMAQMD = Sacramento Metropolitan Air Quality Management District.
Source: Modeling performed by Ascent in 2024.

As shown in Table CC-8, based on development assumptions and a 1-year buildout period, the proposed residential capacity on Site 67 allowed with the Project would not generate construction emissions that would exceed SMAQMD's 1,100 $MTCO_2e$ screening threshold. In addition, construction emissions associated with development under existing zoning on Site 67 would also result in emissions below the 1,100 $MTCO_2e$ screening threshold. However, comparatively, construction of future development on Site 67 with the Project would result in an additional 6 $MTCO_2e$ per year compared to existing zoning. In this instance, pursuant to CEQA Guidelines Section 15162, because

construction of future development on Site 67 with the Project would not exceed the 1,100 $MTCO_2e$ threshold, no new or more severe impact over what was already disclosed in the Fair Oaks Boulevard EIR would occur.

However, as discussed above, actual GHG construction emissions for development on Site 67 is dependent on a number of factors that are unknown at this time. For example, it is unknown whether construction would occur within a very short period of time which may increase emissions in the concentrated time period and require construction GHG BMPs. Future development on Site 67 will be reviewed to determine whether the project screens out for construction GHG emissions or if construction GHG BMPs would apply per Mitigation Measure CC-1. Given this uncertainty, this impact would be significant prior to application of Mitigation Measure CC-1.

OPERATION

According to the SMAQMD CEQA Guide, operational GHG emissions may only screen out for midrise apartments (3 to 10 stories tall) if the District's Tier 1 operational GHG BMPs are implemented and if individual development projects include 88 units or less. Although the maximum density permitted on Site 67 with the Project is 37 units, which is less than the 88 unit operational GHG threshold identified by SMAQMD for midrise apartments, it cannot be guaranteed at this time that future development would implement the District's Tier 1 operational GHG BMPs.

For modeling purposes, consistent with the General Plan horizon year, development on Site 67 is conservatively assumed to be fully operational by 2030.[3] Based on the modeling conducted for CEQA disclosure purposes, as shown in Table CC-9, operations of future development on Site 67 with the Project would generate a total of approximately 365 $MTCO_2e$ per year. Operational emissions associated with development under existing zoning on Site 67 would generate a total of approximately 319 $MTCO_2e$ per year. Comparatively, operation of future development on Site 67 with the Project would result in an additional 46 $MTCO_2e$ per year compared to existing zoning. For specific operational assumptions and modeling inputs, refer to Appendix AQ-1. The GHG emissions modeling assumed that the development in the Fair Oaks Boulevard Corridor Plan area on Site 67 would not implement SMAQMD's Tier 1 and Tier 2 BMPs as a design feature.

[3] Project construction was assumed to continue into 2029; thus, the first full operational year of buildout for development allowed under the Project would be 2030.

Table CC-9: Summary of Maximum Operational-Generated Emissions of GHG Emissions from Site 67 Within the Fair Oaks Boulevard Corridor Plan (Unmitigated)

Emissions Sector	$MTCO_2e$/year
With Existing Zoning	
Mobile	282
Area	<1
Energy	30
Water Consumption and Wastewater Treatment	1
Solid Waste Generation	6
Refrigerants	<1
Total	319
SMAQMD Screening Level[1]	1,100
Screening Level Exceeded?	No
With Project	
Mobile	296
Area	1
Energy	58
Water Consumption and Wastewater Treatment	1
Solid Waste Generation	9
Refrigerants	<1
Total	365
SMAQMD Screening Level[1]	1,100
Screening Level Exceeded?	No
Difference in Total Emissions Between Approved and Proposed Land Uses	+46

Notes: $MTCO_2e$ = metric tons of carbon dioxide equivalent; SMAQMD = Sacramento Metropolitan Air Quality Management District.

[1] SMAQMD applies a 1,100 $MTCO_2e$ per year screening threshold to projects that comply with its recommended Tier 1 BMPs, which entail designing projects to be fully electric and providing the necessary EV charging infrastructure to meet the Tier 2 voluntary standards of the current CALGreen Code for EV-capable spaces.

Source: Modeling performed by Ascent in 2024.

As shown, operational emissions related to both existing zoning and with Project future development on Site 67 would not exceed SMAQMD's screening threshold of 1,100 $MTCO_2e$ per year. As previously discussed, this threshold is intended to apply to projects that have implemented SMAQMD's Tier 1 BMPs (i.e., fully electric development and incorporation of EV-ready spaces meeting the current CALGreen Tier 2 standards).

However, because the Fair Oaks Boulevard EIR determined that operational emissions would be less than significant and operation of the increased residential capacity on Site 67 would not feature SMAQMD's Tier 1 BMP 1 and BMP 2 by design, the increased residential capacity under the Project on Site 67, if unmitigated, would result in a new and

more severe impact as compared to the impacts disclosed in the Fair Oaks Boulevard EIR. Therefore, impacts would be potentially significant.

MITIGATION MEASURES

As described under "Environmental Impact Report Determination" above, the Fair Oaks Boulevard EIR identified two mitigation measures to reduce per capita emissions related to residential and commercial energy, which would reduce residential and commercial transportation emissions. However, these mitigation measures target an outdated threshold and are not applicable to the current adopted thresholds for project GHG emissions as described under "Distinct Area Plans" above. As such, those mitigation measures (Mitigation Measures CC-1 and CC-2 in the Fair Oaks Boulevard EIR) are not applicable to Site 67 and are replaced with equal or better mitigation for the impact.

Implement Mitigation Measures CC-1 and CC-2.

SIGNIFICANCE AFTER MITIGATION

Mitigation Measure CC-1 would ensure that construction emissions associated with future development on Site 67 would either screen out for construction GHG emissions or if not, the application of construction GHG BMPs would reduce construction GHG emissions to below the SMAQMD's 1,100 $MTCO_2e$ per year screening threshold or comply with the future CAP.

Mitigation Measure CC-2 would require the implementation of SMAQMD's Tier 1 BMP 1 and BMP 2 to eliminate natural gas use during operation and would also require compliance with CALGreen Tier 2 requirements. Applicants may also choose to implement equal or more effective reduction measures contained in the 2022 CAP as mitigation once the 2022 CAP has been adopted.

According to SMAQMD guidance, the implementation of and compliance with Tier 1 BMP 1 and BMP 2 are sufficient in reducing impacts related to operational GHG emissions to a less-than-significant level. Therefore, pursuant to CEQA Guidelines Section 15162 increased residential capacity on Site 67 as allowed under the Project would not result in a new significant impact compared to those disclosed in the Fair Oaks Boulevard EIR. The Project's contribution to impacts would not be substantial and overall impacts would remain less than significant**.**

In addition, while increased residential capacity allowed on Site 67 under the Project could result in more total units being constructed than what was analyzed in the Fair Oaks Boulevard EIR, implementation of development allowed under the Project on Site 67 would result in a more efficient distribution of GHG emissions per capita because of the denser development allowed through rezoning. Increasing residential density would result in fewer GHG emissions per capita, or the GHG emissions associated, either directly or indirectly, with a single person. This is because more compact development patterns reduce per capita energy demands, while less-compact sprawl increases demand (CARB 2017). In terms of construction, the energy used to facilitate construction would be more efficient compared to that needed to construct residences for less-dense development on a per capita basis (see Table CC-10). In terms of operation, emissions of criteria pollutants

associated with sources such as mobile sources, area sources, and energy sources are considered more efficient when the associated development houses a larger number of people in a smaller area (see Table CC-11). Therefore, the additional residential capacity allowed on Site 67 under the Project would be considered more efficient in terms of emissions per capita compared to the residential capacity analyzed in the Fair Oaks Boulevard EIR because the rezone could result in a greater number of people being housed within the same development footprint. Decreasing per capita emissions, especially those related to VMT, aligns with the goals of the 2022 Scoping Plan (CARB 2022a: 194).

Table CC-10: Comparison of Emissions per Capita Associated with Construction of Approved Residential Capacity and Proposed Residential Capacity Under the Fair Oaks Boulevard Corridor Plan

Construction Year	Approve Land Uses ($MTCO_2e$/year/capita)	Proposed Land Uses ($MTCO_2e$/year/capita)	Difference in Emissions ($MTCO_2e$/year/capita)
2025	1.43	1.02	(0.41)

Notes: $MTCO_2e$/year/capita = metric tons of carbon dioxide equivalent per year per capita; ( ) = negative number.

Source: Modeling conducted by Ascent in 2024.

Table CC-11: Comparison of Emissions per Capita Associated with Operation of Approved Residential Capacity and Proposed Residential Capacity Under the Fair Oaks Boulevard Corridor Plan

Scenario	Annual $MTCO_2e$ (MT/year/capita)
Operation of Approved Land Uses[1]	4.55
Operation of Proposed Land Uses[2,3]	3.25
Difference in per Capita Emissions	(1.30)

Notes: $MTCO_2e$ = metric tons of carbon dioxide equivalent; MT/year/capita = metric tons per year per capita; ( ) = negative number.

[1] Assumed population of 70 from CalEEMod defaults

[2] Assumed population of 104 from CalEEMod defaults

[3] Includes application of Mitigation Measure CC-2.

Source: Modeling conducted by Ascent in 2024.

NORTH WATT AVENUE CORRIDOR PLAN

ENVIRONMENTAL IMPACT REPORT DETERMINATION

The North Watt Avenue EIR determined that emissions related to the residential transportation sector would be below the 4.56 $MTCO_2e$ per capita threshold and would thus result in less-than-significant impacts. As a separate impact, the North Watt Avenue EIR determined that, with the implementation of Mitigation Measure CC-1, per capita emissions related to residential energy could be reduced below the threshold of 1.30 $MTCO_2e$ per capita. In addition, the North Watt Avenue EIR determined that emissions related to the commercial transportation sector would be below the 4.56 $MTCO_2e$ per capita threshold and would thus result in less-than-significant impacts related to GHG emissions. Finally, the North Watt Avenue EIR concluded that with the implementation of Mitigation Measure CC-2, per capita emissions related to commercial energy could be

reduced below the 8.08 $MTCO_2e$ per Ksf threshold. The North Watt Avenue EIR did not evaluate GHG- or climate change–related impacts that could result from construction.

PROPOSED PROJECT IMPACT EVALUATION

INDIVIDUAL CANDIDATE REZONE SITE IMPACT EVALUATION

CONSTRUCTION

As described above, SMAQMD has developed construction emissions screening levels to assist a project proponent or lead agency in determining if criteria pollutants and GHG emissions from constructing a project in Sacramento County would exceed the SMAQMD construction-related GHG emissions significance thresholds. It cannot be guaranteed at this level of analysis, that construction activities associated with increased residential capacity on Sites 68 through 72 would be within the parameters listed above under Impact CC-1's "Individual Candidate Rezone Site Impact Evaluation – Construction" section discussion for screening out projects. Therefore, construction screening criteria is not used for this analysis. If individual projects include one of the listed parameters, construction GHG emissions should be compared against the 1,100 $MTCO_2e$ screening level.

Although not located within this distinct area plan, Site 15 is exemplary in terms of being the largest candidate rezone site (11.45 acres) and resulting in the greatest number of units permitted with proposed maximum density (458 units). As shown in Table CC-2, development of Site 15 would not exceed the 1,100 $MTCO_2e$ screening level in either modeled construction year. Compared to Site 15, the greatest number of units allowed with proposed maximum density for Sites 68 through 72 is 190 units (Site 71). As such, it is unlikely that construction emissions related to increasing capacity on Sites 68 through 72 would exceed screening thresholds. However, actual GHG construction emissions for future development on Sites 68 through 72 is dependent on a number of factors that are unknown at this time. For example, it is unknown whether some of the sites will be constructed within a very short period of time which may increase emissions in the concentrated time period and require construction GHG BMPs. Future development projects will be reviewed to determine whether the project screens out for construction GHG emissions or if construction GHG BMPs would apply per Mitigation Measure CC-1.

OPERATION

According to the SMAQMD CEQA Guide, operational GHG emissions may only screen out for midrise apartments (3 to 10 stories tall) if the District's Tier 1 operational GHG BMPs are implemented and if individual development projects include 88 units or less. It should be noted that the maximum permitted density with the Project on one of the candidate rezone sites (Site 72) in the North Watt Corridor Plan area would not exceed 88 units. However, at this level of analysis for the Project, it cannot be guaranteed that future development on Sites 68 through 72 would be under the operational screening criteria.

Although not located within this distinct area plan, Site 15 is exemplary in terms of being the greatest number of units permitted with proposed maximum density (458 units). As shown in Table CC-2, emissions from Site 15 would exceed SMAQMD's 1,100 $MTCO_2e$ screening threshold for operational emissions. Compared to Site 15, the greatest number of units

allowed with proposed maximum density for Sites 68 through 72 is 190 units (Site 71), which is significantly less than Site 15 (458 units). However, without specific future development details and modeling operational emission for Sites 68 through 72, it cannot be guaranteed that future development would not exceed SMAQMD's 88-unit screening criteria and/or the 1,100 $MTCO_2e$ screening level for operational emissions. Future development on Sites 68 through 72 will be reviewed to determine whether the project screens out for operational GHG emissions and which BMPs apply (at a minimum Tier 1 BMPs 1 and 2 would apply to all projects) as detailed in Mitigation Measure CC-2. Given this uncertainty, this impact would be significant prior to application of Mitigation Measure CC-2.

AGGREGATE BUILDOUT IMPACT EVALUATION

CONSTRUCTION

The following discussion of estimated construction emission associated with future development on Sites 68 through 72 as allowed with the Project is provided solely for CEQA disclosure purposes. Actual construction emissions are subject to change, due to specific future development and design proposed, construction year, and construction equipment and activities utilized. Construction-related activities that could occur with the increased capacity allowed under the Project on Sites 68 through 72 would generate emissions of GHGs from the operation of off-road equipment, material delivery, worker commute trips, and other miscellaneous activities. For emissions modeling purposes, construction activities on Sites 68 through 72 were assumed to occur from 2025 to 2027. The site preparation and grading construction phases are the most intensive phases regarding GHG emissions because both phases use the greatest number of heavy construction equipment compared to other phases of construction (e.g., building construction, architectural coating). The emissions from these phases are linked to the size (acres) of the candidate rezone sites.

For specific construction assumptions and modeling inputs, refer to Appendix AQ-1. Based on modeling performed for Sites 68 through 72, aggregate construction would generate a total of approximately 1,875 $MTCO_2e$ over the 3-year construction period.

Table CC-12 presents the estimated construction emissions that would occur aggregately during construction for Sites 68 through 72 under existing zoning (505 units) and with the Project (735 units).

Table CC-12: Summary of Maximum Construction-Generated Emissions of GHG Emissions from Sites 68 Through 72 Within the North Watt Avenue Corridor Plan (2025–2027)

Construction Year	$MTCO_2e$/year
With Existing Zoning	
2025	502
2026	916
2027	43

Construction Year	$MTCO_2e$/year
With Project	
2025	619
2026	1,204
2027	52
Difference in Total Emissions Between Approved and Proposed Land Uses	+414

Notes: $MTCO_2e$ = metric tons of carbon dioxide equivalent; SMAQMD = Sacramento Metropolitan Air Quality Management District.

Source: Modeling performed by Ascent in 2024.

Table CC-12 shows that construction emissions related to the anticipated development on Sites 68 through 72 as part of the Project would generate cumulative construction GHG emissions (and on a site by site basis may exceed SMAQMD's screening threshold of 1,100 $MTCO_2e$ per year). Construction of future of the development allowed under the Project on Sites 68 through 72 would result in an additional 414 $MTCO_2e$ per year compared to the development capacity analyzed in the North Watt Avenue EIR. As discussed above, per Mitigation Measure CC-1, individual projects will be reviewed to determine whether the project screens out for construction GHG emissions or if construction GHG BMPs would apply.

Pursuant to CEQA Guidelines Section 15162, construction activities related to increased capacity allowed under the Project would generate greater GHG emissions than what would be emitted from potential development of the approved land uses and, the Project would result in a more severe impact as compared to what was identified in the North Watt Corridor EIR. The Project's aggregate contribution to construction GHG emissions would be substantial and impacts would remain significant**.**

OPERATION

Table CC-13 summarizes the Project's aggregate unmitigated (no inclusion of SMAQMD's Tier 1 and Tier 2 BMPs) operational emission by sector for Sites 68 through 72 for disclosure purposes. Based on the modeling conducted, aggregate operations of Sites 68 through 72 allowed under the Project would generate a total of approximately 6,209 $MTCO_2e$ per year.

Table CC-13: Summary of Maximum Operational-Generated Emissions of GHG Emissions from Sites 68 Through 72 Within the North Watt Boulevard Corridor Plan (Unmitigated)

Emissions Sector	$MTCO_2e$/year
Previously Approved Land uses	
Mobile	4,948
Area	9
Energy	596
Water Consumption and Wastewater Treatment	16
Solid Waste Generation	117
Refrigerants	1
Total	5,687

Emissions Sector	$MTCO_2e$/year
Proposed Land Uses	
Mobile	5,109
Area	13
Energy	892
Water Consumption and Wastewater Treatment	24
Solid Waste Generation	170
Refrigerants	1
Total	6,209
Difference in Emissions Between Approved and Proposed Land Uses	+522

Notes: $MTCO_2e$ = metric tons of carbon dioxide equivalent; SMAQMD = Sacramento Metropolitan Air Quality Management District.

Source: Modeling performed by Ascent in 2024.

Table CC-13 shows that aggregate operational emissions related to both existing zoning and with the Project future development on Sites 68 through 72 would generate cumulative GHG emissions (and on a site by site basis may exceed SMAQMD's screening threshold of 1,100 $MTCO_2e$ per year). Additionally, aggregate operation of development on Sites 68 through 72 would result in an additional 522 $MTCO_2e$ per year compared to existing land uses analyzed in the North Watt Avenue EIR.

As discussed above, consistent with Mitigation Measure CC-2, future development projects will be reviewed to determine whether the project screens out for operational GHG emissions and which BMPs apply (at a minimum Tier 1 BMPs 1 and 2 would apply to all projects). Overall, the proposed Project would result in greater emissions compared to the development capacity analyzed in the North Watt Corridor EIR because, while the Project footprint remains the same as that which was analyzed in the North Watt Corridor Plan EIR, the Project would involve the operation of a greater number of units in the same footprint, resulting in more operational emissions per site.

Pursuant to CEQA Guidelines Section 15162, operational activities related to increased capacity allowed under the Project would generate greater GHG emissions than what would be emitted from operation of the residential capacity analyzed in the North Watt Corridor EIR. The Project's contribution to impacts would be substantial and overall impacts would remain significant.

MITIGATION MEASURES

As described under "Environmental Impact Report Determination" above, the North Watt Corridor EIR identified two mitigation measures to reduce per capita emissions related to residential and commercial energy, which would reduce residential and commercial transportation emissions. However, these mitigation measures target an outdated threshold and are not applicable to the current adopted thresholds for project GHG emissions as described under "Distinct Area Plans" above. As such, those mitigation measures (Mitigation Measures CC-1 and CC-2 in the North Watt Corridor EIR) are not applicable to Sites 68 through 72 and are replaced with equal or better mitigation for the impact.

Implement Mitigation Measures CC-1 and CC-2.

SIGNIFICANCE AFTER MITIGATION

Mitigation Measure CC-1 would ensure that construction emissions associated with future development on Sites 68 through 72 would either screen out for construction GHG emissions or if not, the application of construction GHG BMPs would reduce construction GHG emissions to below the SMAQMD's 1,100 $MTCO_2e$ per year screening threshold or comply with the future CAP. As part of Mitigation Measure CC-1, if required, applicants for individual project sites within the North Watt Avenue Corridor area would submit a report to the County that quantifies the GHG reductions that would result from the measures selected and demonstrate that the selected measures would reduce construction-related GHG emissions below SMAQMD's 1,100 $MTCO_2e$ per year threshold and achieve a minimum 10 percent reduction in emissions. With the application of Mitigation Measure CC-1 to the aggregate emissions for Sites 68 through 72, a 10 percent reduction in emissions would be effective in reducing construction GHG emissions below the 1,100 $MTCO_2e$ per year threshold, as the mitigation measure is intended to reduce emissions from worker commutes, off-road diesel equipment, and hauling/vendor trips, the primary sources of construction-related GHGs (see Table CC-14). Applicants may also choose to implement equal or more effective reduction measures contained in the 2022 CAP as mitigation once the 2022 CAP has been adopted.

The application of Mitigation Measure CC-2 would require at a minimum the implementation of SMAQMD's Tier 1 BMP 1 and BMP 2 to eliminate natural gas use during operation and would also require compliance with CALGreen Tier 2. Applicants may also choose to implement equal or more effective reduction measures contained in the 2022 CAP as mitigation once the 2022 CAP has been adopted.

According to SMAQMD guidance, the implementation of and compliance with Tier 1 BMP 1 and BMP 2, as well as Tier 2 BMP 3, are sufficient in reducing impacts related to operational GHG emissions to a less-than-significant level typically. As an example and shown in Table CC-15, application of just BMP 1 and BMP 2 would not reduce operational emissions below SMAQMD's 1,100 $MTCO_2e$ per year threshold for some of the sites. Therefore, in these cases Tier 2 BMP 3 would apply.

The North Watt Avenue EIR concluded that impacts related to operational GHG emissions would be less than significant. The proposed increase in residential capacity on Sites 68 through 72 allowed under the Project would result in GHG emissions that may exceed SMAQMD's threshold despite the application of feasible mitigation measures. Therefore, pursuant to CEQA Guidelines Section 15162 increased residential capacity on Sites 68 through 72 would result in a new and substantially more severe GHG impact. The Project's contribution to impacts would be substantial and overall impacts would be significant and unavoidable.

Table CC-14: Summary of Maximum Construction-Generated Emissions of GHG Emissions from Candidate Rezone Sites Within the North Watt Avenue Corridor Plan (2025–2027) (Mitigated)

Construction Year	$MTCO_2e$/year
Proposed Land Uses	
2025	557
2026	1084
2027	47
SMAQMD Threshold	1,100
Threshold Exceeded?	No

Notes: $MTCO_2e$ = metric tons of carbon dioxide equivalent; SMAQMD = Sacramento Metropolitan Air Quality Management District.

Source: Modeling performed by Ascent in 2024.

Table CC-15: Summary of Maximum Operational-Generated Emissions of GHG Emissions from Proposed Land Uses Within the North Watt Avenue Corridor Plan (Mitigated)

Emissions Sector	$MTCO_2e$/year
Mobile	**5,109**
Area	**13**
Energy	**370**
Water Consumption and Wastewater Treatment	**24**
Solid Waste Generation	**170**
Refrigerants	**1**
Total	**5,686**
SMAQMD Threshold[1]	1,100
Threshold Exceeded?	Yes

Notes: $MTCO_2e$ = metric tons of carbon dioxide equivalent; SMAQMD = Sacramento Metropolitan Air Quality Management District.

[1] SMAQMD applies a 1,100 $MTCO_2e$ per year screening threshold to projects that comply with its recommended Tier 1 BMPs, which entail designing projects to be fully electric and providing the necessary EV charging infrastructure to meet the Tier 2 voluntary standards of the current CALGreen Code for EV-capable spaces.

Source: Modeling performed by Ascent in 2024.

However, it should be noted that while increased residential capacity allowed under the Project could result in more total units being constructed than what was analyzed in the North Watt Avenue EIR, implementation of the Project would result in a more efficient distribution of GHG emissions per capita because of the denser development allowed through rezoning. Increasing residential density would result in fewer GHG emissions per capita, or the GHG emissions associated, either directly or indirectly, with a single person. This is because more compact development patterns reduce per capita energy demands, while less-compact sprawl increases demand (CARB 2017). In terms of construction, the energy used to facilitate construction would be more efficient compared to that needed to construct housing for less-dense development on a per capita basis (see Table CC-16). In terms of operation, emissions of criteria pollutants associated with sources such as

mobile sources, area sources, and energy sources are considered more efficient when the associated development houses a larger number of people in a smaller area (see Table CC-17). For this reason, the additional residential capacity on Sites 68 through 72 under the proposed Project would be considered more efficient in terms of emissions per capita compared to the residential capacity analyzed in the North Watt Avenue EIR because the rezone could result in a greater number of people being housed within the same development footprint.

Table CC-16: Comparison of Emissions per Capita Associated with Construction of Approved Residential Capacity and Proposed Residential Capacity Under the North Watt Avenue Corridor Plan

Construction Year	Approve Land Uses ($MTCO_2e$/year/capita)	Proposed Land Uses ($MTCO_2e$/year/capita)	Difference in Emissions ($MTCO_2e$/year/capita)
2025	0.36	0.30	(0.05)
2026	0.65	0.59	0.06)
2027	0.03	0.03	(0.01)

Notes: $MTCO_2e$/year/capita= metric tons of carbon dioxide equivalent per year per capita; ( ) = negative number. Numbers may not sum due to rounding.

Source: Modeling conducted by Ascent in 2024.

Table CC-17: Comparison of Emissions per Capita Associated with Operation of Approved Residential Capacity and Proposed Residential Capacity Under the North Watt Avenue Corridor Plan

Scenario	Annual $MTCO_2e$ (MT/year/capita)
Operation of Approved Land Uses[1]	4.55
Operation of Proposed Land Uses[2,3]	4.02
Reduction in per Capita Emissions	(0.53)

Notes: $MTCO_2e$ = metric tons of carbon dioxide equivalent; MT/year/capita= metric tons per year per capita; ( ) = negative number. Numbers may not sum due to rounding.

[1]Assumed population of 1,414 from CalEEMod defaults

[2]Assumed population of 2,058 from CalEEMod defaults

[3] Includes application of Mitigation Measure CC-2.

Source: Modeling conducted by Ascent in 2024.

OLD FLORIN TOWN SPA

ENVIRONMENTAL IMPACT REPORT DETERMINATION

The Old Florin Town SPA EIR determined that emissions related to the residential transportation sector would be reduced below the 4.56 $MTCO_2e$ per capita threshold with the implementation of Mitigation Measure CC-1, a new policy to the SPA, and would thus result in less-than-significant impacts related to GHG emissions from residential transportation associated with the Old Florin Town SPA. The Old Florin Town SPA EIR further determined that, with the implementation of Mitigation Measure CC-1, per capita emissions related to residential energy could be reduced below the threshold of 1.30 $MTCO_2e$ per capita and would therefore be less than significant. Emissions from

transportation were determined to be reduced below the 4.56 $MTCO_2e$ per capita threshold with the implementation of Mitigation Measure CC-2 in the Old Florin Town SPA EIR, a new policy for the SPA, and would thus result in less-than-significant impacts related to GHG emissions from commercial transportation associated with the Old Florin Town SPA. In addition, the Old Florin Town SPA EIR determined that, with the implementation of Mitigation Measure CC-2, per capita emissions related to commercial energy could be reduced below the 8.08 $MTCO_2e$ per Ksf threshold.

The Old Florin Town SPA EIR did not evaluate GHG- or climate change–related impacts that could result from construction.

PROPOSED PROJECT IMPACT EVALUATION

INDIVIDUAL CANDIDATE REZONE SITE IMPACT EVALUATION

CONSTRUCTION

As stated above, SMAQMD has developed construction emissions screening levels to assist a project proponent or lead agency in determining if criteria pollutants and GHG emissions from constructing a project in Sacramento County would exceed the SMAQMD construction-related GHG emissions significance thresholds. If individual projects include one of the listed parameters, construction GHG emissions should be compared against the 1,100 $MTCO_2e$ screening level. At this level of analysis for the Project, it cannot be guaranteed that all future development on individual candidate rezone sites would exclude all of the listed parameters.

Although not located within this distinct area plan, Site 15 is exemplary in terms of being the largest candidate rezone site (11.45 acres) and resulting in the greatest number of units permitted with proposed maximum density (458 units). As shown in Table CC-2, development of Site 15 would not exceed the 1,100 $MTCO_2e$ screening level in either modeled construction year. Compared to Site 15, the greatest number of units allowed with proposed maximum density for Sites 73 through 79 is 174 units (Site 77). As such, it is unlikely that construction emissions related to increasing capacity on Sites 73 through 79 would exceed screening thresholds. However, actual GHG construction emissions for future development on Sites 73 through 79 is dependent on a number of factors that are unknown at this time. For example, it is unknown whether some of the sites will be constructed within a very short period of time which may increase emissions in the concentrated time period and require construction GHG BMPs. Future development projects will be reviewed to determine whether the project screens out for construction GHG emissions or if construction GHG BMPs would apply per Mitigation Measure CC-1.

OPERATION

According to the SMAQMD CEQA Guide, operational GHG emissions may only screen out for midrise apartments (3 to 10 stories tall) if the District's Tier 1 operational GHG BMPs are implemented and if individual development projects include 88 units or less. It should be noted that the maximum permitted density with the Project on three of the candidate rezone sites (Sites 73, 75, and 79) in the Old Florin Town SPA would not exceed 88 units.

However, at this level of analysis for the Project, it cannot be guaranteed that future development on Sites 73 through 79 would be under the operational screening criteria.

Although not located within this distinct area plan, Site 15 is exemplary in terms of being resulting in the greatest number of units permitted with proposed maximum density (458 units). As shown in Table CC-2, emissions from Site 15 would exceed SMAQMD's 1,100 $MTCO_2e$ screening threshold for operational emissions. Compared to Site 15, the greatest number of units allowed with proposed maximum density for Sites 73 through 79 is 174 units (Site 77), which is significantly less than Site 15 (458 units). However, without specific future development details and modeling operational emission for Sites 73 through 79, it cannot be guaranteed that future development would not exceed SMAQMD's 88-unit screening criteria and/or the 1,100 $MTCO_2e$ screening level for operational emissions. Future development on Sites 73 through 79 will be reviewed to determine whether the project screens out for operational GHG emissions and which BMPs apply (at a minimum Tier 1 BMPs 1 and 2 would apply to all projects) as detailed in Mitigation Measure CC-2. Given this uncertainty, this impact would be significant prior to application of Mitigation Measure CC-2.

AGGREGATE BUILDOUT IMPACT EVALUATION

CONSTRUCTION

The following discussion of estimated aggregate construction emissions associated with future development on Sites 73 through 79 as allowed with the Project is provided solely for CEQA disclosure purposes. Actual construction emissions are subject to change, due to specific future development and design proposed, construction year, and construction equipment and activities utilized. Construction-related activities that could occur with the increased capacity allowed under the Project on Sites 73 through 79 would generate emissions of GHGs from the operation of off-road equipment, material delivery, worker commute trips, and other miscellaneous activities. Modeled construction activities were assumed to occur from 2027 to 2028. The site preparation and grading construction phases are the most intensive phases regarding GHG emissions because both phases use the greatest amount of heavy construction equipment compared to other phases of construction (e.g., building construction, architectural coating). The emissions from these phases are linked to the size (acres) of the candidate rezone sites. For specific construction assumptions and modeling inputs, refer to Appendix AQ-1.

Based on the modeling performed for Sites 73 through 79, construction on Sites 73 through 79 would generate a total of approximately 1,897 $MTCO_2e$ over the 2-year construction period. Table CC-18 presents the aggregate estimated construction emissions that would occur on Sites 73 through 79 under existing zoning (503 units) and with Project (777 units) for disclosure purposes.

Table CC-18: Summary of Maximum Construction-Generated Emissions of GHG Emissions from Candidate Rezone Sites Within the Old Florin Town SPA (2027–2028)

Construction Year	$MTCO_2e$/year
With Existing Zoning	
2027	721
2028	704
With Project	
2027	940
2028	957
Difference in Total Emissions Between Approved and Proposed Land Uses	+472

Notes: $MTCO_2e$ = metric tons of carbon dioxide equivalent; SMAQMD = Sacramento Metropolitan Air Quality Management District.

Source: Modeling performed by Ascent in 2023.

As shown in Table CC-18, based on development assumptions and a 2-year buildout period, the proposed residential capacities on Sites 73 through 79 allowed with the Project would generate cumulative construction GHG emissions (and on a site by site basis may exceed SMAQMD's 1,100 $MTCO_2e$ per year screening threshold). Construction of future development on Sites 73 through 79 with the Project would result in an additional 472 $MTCO_2e$ compared to the development capacity analyzed in the Old Florin Town SPA EIR. As discussed above, per Mitigation Measure CC-1, individual projects will be reviewed to determine whether the project screens out for construction GHG emissions or if construction GHG BMPs would apply.

Pursuant to CEQA Guidelines Section 15162, construction activities related to increased capacity allowed under the Project would generate greater GHG emissions than what would be emitted from potential development of the approved land uses and, the Project would result in a more severe impact as compared to what was identified in the North Watt Corridor EIR. The Project's aggregate contribution to construction GHG emissions would be substantial and impacts would remain significant**.**

OPERATION

The following discussion of estimated aggregate construction emissions associated with future development on Sites 73 through 79 as allowed with the Project is provided solely for CEQA disclosure purposes. Actual operational emissions are subject to change, due to specific future development and design proposed. For modeling purposes, consistent with the General Plan horizon year, development on Sites 73 through 79 is conservatively assumed to be fully operational by 2030.[4] Based on the modeling conducted for CEQA disclosure purposes, as shown in Table CC-19, operational emissions associated with development on Sites 73 through 79 allowed under the Project would generate a total of approximately 4,709 $MTCO_2e$ per year. Operational emissions associated with

[4] Project construction was assumed to continue into 2029; thus, the first full operational year of buildout for development allowed under the Project would be 2030.

development under existing zoning on Sites 73 through 79 would generate a total of approximately 3,973 $MTCO_2e$ per year. Comparatively, operation of future development on Sites 73 through 79 with the Project would result in an additional 736 $MTCO_2e$ per year compared to existing zoning. For specific operational assumptions and modeling inputs, refer to Appendix AQ-1. The GHG emissions modeling assumed that the development within the Old Florin Town SPA on Sites 73 through 79 would not implement SMAQMD's Tier 1 and Tier 2 BMPs as a design feature.

Table CC-19: Summary of Maximum Operational-Generated Emissions of GHG Emissions from Sites 73 Through 79 Within the Old Florin Town SPA (Unmitigated)

Emissions Sector	$MTCO_2e$/year
With Existing Zoning	
Mobile	3,237
Area	9
Energy	594
Water Consumption and Wastewater Treatment	16
Solid Waste Generation	116
Refrigerants	1
Total	3,973
With Project	
Mobile	3,548
Area	13
Energy	943
Water Consumption and Wastewater Treatment	25
Solid Waste Generation	179
Refrigerants	1
Total	4,709
Difference in Emissions Between Approved and Proposed Land Uses	+736

Notes: $MTCO_2e$ = metric tons of carbon dioxide equivalent; SMAQMD = Sacramento Metropolitan Air Quality Management District.

[1] SMAQMD applies a 1,100 $MTCO_2e$ per year screening threshold to projects that comply with its recommended Tier 1 BMPs, which entail designing projects to be fully electric and providing the necessary EV charging infrastructure to meet the Tier 2 voluntary standards of the current CALGreen Code for EV-capable spaces.

Source: Modeling performed by Ascent in 2024.

As shown, operational emissions for future development on Sites 73 through 79 related to both existing zoning and with Project would exceed SMAQMD's screening threshold of 1,100 $MTCO_2e$ per year. Comparatively, operational emissions for future development with the Project would be greater than existing zoning. As previously discussed, this threshold is intended to apply to projects that have implemented SMAQMD's Tier 1 BMPs (i.e., fully electric development and incorporation of EV-ready spaces meeting the current CALGreen Tier 2 standards).

As stated above, the Old Florin Town SPA EIR determined that operational emissions would be less than significant. Without implementation of SMAQMD's Tier 1 BMP 1 and BMP 2, future development on Sites 73 through 79 allowed with the Project would exceed SMAQMD's 1,100 $MTCO_2e$ per year threshold. Therefore, Pursuant to CEQA Guidelines Section 15162 the increased residential capacity under the Project on Sites 73 through 79 would result in a new and more severe impact over what was already disclosed in the Old Florin Town SPA EIR. Impacts would be significant.

MITIGATION MEASURES

As described under "Environmental Impact Report Determination" above, the Old Florin Town SPA EIR identified two mitigation measures to reduce per capita emissions related to residential and commercial energy, which would reduce transportation emissions. However, these mitigation measures target an outdated threshold and are not applicable to the current adopted thresholds for project GHG emissions as described under "Distinct Area Plans" above. As such, those mitigation measures (Mitigation Measures CC-1 and CC-2 in the Old Florin Town SPA EIR) are not applicable to Sites 73 through 79 and are replaced with equal or better mitigation for the impact.

Implement Mitigation Measures CC-1 and CC-2.

SIGNIFICANCE AFTER MITIGATION

Mitigation Measure CC-1 would ensure that construction emissions associated with future development on Sites 73 through 79 would either screen out for construction GHG emissions or if not, the application of construction GHG BMPs would reduce construction GHG emissions to below the SMAQMD's 1,100 $MTCO_2e$ per year screening threshold or comply with the future CAP.

Mitigation Measure CC-2 would require the implementation of SMAQMD's Tier 1 BMP 1 and BMP 2 to eliminate natural gas use during operation and would also require compliance with CALGreen Tier 2 requirements. Applicants may also choose to implement equal or more effective reduction measures contained in the 2022 CAP as mitigation once the 2022 CAP has been adopted.

According to SMAQMD guidance, the implementation of and compliance with Tier 1 BMP 1 and BMP 2, as well as Tier 2 BMP 3, are sufficient in reducing impacts related to operational GHG emissions to a less-than-significant level typically. As an example and shown in Table CC-20, application of just BMP 1 and BMP 2 would not reduce operational emissions below SMAQMD's 1,100 $MTCO_2e$ per year threshold for some of the sites. Therefore, in these cases Tier 2 BMP 3 would apply. Therefore, increased residential capacity on Sites 73 through 79 allowed under the Project would result a new and more severe impact over what was already disclosed in the Old Florin Town SPA EIR. The Project's contribution to impacts would be substantial and overall impacts would be significant and unavoidable.

Table CC-20: Summary of Maximum Operational-Generated Emissions of GHG Emissions from Proposed Land Uses Within the Old Florin Town SPA (Mitigated)

Emissions Sector	$MTCO_2e$/year
Mobile	3,548
Area	13
Energy	391
Water Consumption and Wastewater Treatment	25
Solid Waste Generation	179
Refrigerants	1
Total	4,157
SMAQMD Threshold[1]	1,100
Threshold Exceeded?	Yes

Notes: $MTCO_2e$ = metric tons of carbon dioxide equivalent; SMAQMD = Sacramento Metropolitan Air Quality Management District.

[1] SMAQMD applies a 1,100 $MTCO_2e$ per year screening threshold to projects that comply with its recommended Tier 1 BMPs, which entail designing projects to be fully electric and providing the necessary EV charging infrastructure to meet the Tier 2 voluntary standards of the current CALGreen Code for EV-capable spaces.

Source: Modeling performed by Ascent in 2024.

However, while increased residential capacity allowed under the proposed Project could result in more total units being constructed than what was analyzed in the Old Florin Town SPA EIR, implementation of the Project would result in a more efficient distribution of GHG emissions per capita because of the denser development allowed through rezoning. Increasing housing density would result in fewer GHG emissions per capita, or the GHG emissions associated, either directly or indirectly, with a single person. This is because more compact development patterns reduce per capita energy demands, while less-compact sprawl increases demand (CARB 2017). In terms of construction, the energy used to facilitate construction would be more efficient compared to that needed to construct housing for less-dense development on a per capita basis (see Table CC-21). In terms of operation, emissions of criteria pollutants associated with sources such as mobile sources, area sources, and energy sources are considered more efficient when the associated development houses a larger number of people in a smaller area (see Table CC-22). Therefore, the additional residential capacity on Sites 73 through 79 under the Project would be considered more efficient in terms of emissions per capita compared to the residential capacity analyzed in the Old Florin Town SPA EIR because the rezone could result in a greater number of people being housed within the same development footprint.

Table CC-21: Comparison of Emissions per Capita Associated with Construction of Approved Residential Capacity and Proposed Residential Capacity Under the Old Florin Town SPA Plan

Construction Year	Approve Land Uses ($MTCO_2e$/year/capita)	Proposed Land Uses ($MTCO_2e$/year/capita)	Difference in Emissions ($MTCO_2e$/year/capita)
2027	0.51	0.43	(0.08)
2028	0.50	0.44	(0.06)

Notes: $MTCO_2e$/year/capita= metric tons of carbon dioxide equivalent per year per capita; ( ) = negative number. Numbers may not sum due to rounding.

Source: Modeling conducted by Ascent in 2024.

Table CC-22 Comparison of Emissions per Capita Associated with Operation of Approved Residential Capacity and Proposed Residential Capacity Under the Old Florin Town SPA Plan

Scenario	Annual $MTCO_2e$ (MT/year/capita)
Operation of Approved Land Uses[1]	2.82
Operation of Proposed Land Uses[2,3]	1.91
Reduction in per Capita Emissions	0.91

Notes: $MTCO_2e$ = metric tons of carbon dioxide equivalent; MT/year/capita = metric tons per year per capita. Numbers may not sum due to rounding.

[1]Assumed population of 1,408 from CalEEMod defaults

[2]Assumed population of 2,176 from CalEEMod defaults

[3] Includes application of Mitigation Measure CC-2.

Source: Modeling conducted by Ascent in 2024.

IMPACT CC-2: CONFLICT WITH ANY APPLICABLE PLAN, POLICY, OR REGULATION OF AN AGENCY ADOPTED FOR THE PURPOSE OF REDUCING THE EMISSIONS OF GHG

SACRAMENTO COUNTY GENERAL PLAN

GENERAL PLAN ENVIRONMENTAL IMPACT REPORT DETERMINATION

The General Plan EIR determined that buildout of the General Plan was estimated to result in a 6.7 MMT increase in CO_2e emissions above the 2005 baseline levels by the year 2030. This was estimated to be 7.7 MMT above the 1990 levels required by AB 32 and was therefore determined to be a significant and unavoidable impact following mitigation, which required County adoption of the AB 32 goal as a General Plan policy, a CAP, and development thresholds.

PROPOSED PROJECT IMPACT EVALUATION

SMAQMD's GHG thresholds were developed in consideration of nearer-term statewide GHG reduction goals (i.e., a 40 percent reduction from the 1990 statewide inventory by 2030). This goal is intended to maintain progress toward the GHG reduction goal of the 2022 Scoping Plan, which is to achieve an 85 percent reduction in 1990 emissions goal by 2045. Based on the analysis above, GHG emissions associated with the Project would exceed SMAQMD's numerical thresholds. However, as described in Impact CC-1 and shown in Tables CC-6 and CC-7, construction and operation related to the proposed increase in residential capacity under the General Plan would result in a more efficient distribution of emissions per capita because emissions of criteria pollutants associated with sources such as mobile sources, area sources, and energy sources are considered more efficient when the associated development houses a larger number of people in a smaller area, as is proposed under the Project. As stated in the 2022 Scoping Plan, decreasing per capita emissions, especially those related to VMT, is crucial in achieving the state's climate goals (CARB 2022a: 194). Because implementation of the anticipated increased residential capacity under the General Plan would result in a more efficient

distribution of GHG emissions per capita than the approved residential capacity, the Project would support the goals of the 2022 Scoping Plan.

Pursuant to CEQA Guidelines Section 15162 the Project would not result in a new or more severe impact related to consistency with an applicable GHG reduction plan than what was disclosed in the General Plan EIR. The Project's contribution to impacts would not be substantial and overall impacts would remain less than significant.

DISTINCT AREA PLANS

DISTINCT PLAN AREA ENVIRONMENTAL IMPACT REPORT DETERMINATIONS

As stated above, the Fair Oaks Boulevard Corridor Plan, North Watt Avenue Corridor Plan, and Old Florin SPA evaluated impacts related to climate change that would result from implementation of the distinct area plans. At the time the analyses were written for these EIRs, AB 32 was the most current legislation that set statewide GHG reduction targets. However, the analyses stated that the emissions reduction targets established through AB 32 could not be used to establish significance criteria for the analysis because the measures listed in the published Scoping Plan do not clearly identify the reduction targets that will apply specifically to local government. The (2008) Scoping Plan states that local government should set the same ultimate targets as those set forth in AB 32, but does not provide the details necessary to understand how much of the target will be achieved through State actions (such as the low-carbon fuel standard) and how much will be achieved by local action (Sacramento County 2011a, 2011b, 2012).

Therefore, the analysis in each EIR was based on GHG methodology developed by Sacramento County as the lead agency, as permitted by the State CEQA Guidelines in Section 15064.4I. This methodology applied the thresholds recommended by the then-draft version of the General Plan EIR and the CAP. The analyses in the distinct area plan EIRs did not specifically evaluate consistency with applicable GHG reduction plans.

Since the writing of the Fair Oaks Boulevard EIR, North Watt Avenue EIR, and Old Florin SPA EIR, new legislation such as AB 1279 has gone into effect which sets statewide GHG reduction targets. The 2022 Scoping Plan outlines goals and strategies to achieve a statewide GHG reduction of 85 percent below 1990 levels by 2045, in line with the GHG reduction goals of AB 1279. These goals and strategies prioritize decreasing GHG emissions from the consumption of fossil fuels by reducing VMT, improving energy efficiency, increasing the utilization and generation of renewable energy, and increasing electric vehicle use, among other GHG reduction areas. Therefore, this analysis evaluates consistency of the development allowed within the distinct area plans with the 2022 Scoping Plan.

IMPACT EVALUATION

FAIR OAKS BOULEVARD CORRIDOR PLAN

As shown in Impact CC-1, implementation of Mitigation Measures CC-1 and CC-2 would reduce impacts related to emissions of GHGs associated with development within the Fair Oaks Boulevard Corridor area to a less-than-significant level due to the inclusion of SMAQMD Tier 1 BMP 1 and BMP 2 and construction GHG BMPs, if required. In addition,

the anticipated increase in residential capacity on Site 67 within the Fair Oaks Boulevard Corridor area would comply with OPRs SB 743 technical advisory de minimis criteria for VMT (i.e. Site 67 is not shown to have VMT impacts in Chapter 10 “Transportation”).

As noted above, SMAQMD’s GHG thresholds were developed in consideration of nearer-term statewide GHG reduction goals (i.e., a 40 percent reduction from the 1990 statewide inventory by 2030). This goal is intended to maintain progress toward the GHG reduction goal of the 2022 Scoping Plan, which is to achieve an 85 percent reduction in 1990 emissions goal by 2045. Based on the analysis above, GHG emissions associated with development of the anticipated increase in residential capacity on Site 67 within the Fair Oaks Boulevard Corridor area would be consistent with state GHG reduction goals because the emissions would not exceed SMAQMD’s threshold for construction or operation. Furthermore, the implementation of SMAQMD Tier 1 BMPs would be required through the zoning ordinance for each unit on Site 67 within the Fair Oaks Boulevard Corridor area. Implementation of these BMPs align with the goals of the 2022 Scoping Plan to reduce natural gas use and decrease the consumption of fossil fuels through the increased utilization of EVs.

In addition, as described in Impact CC-1 and shown in Tables CC-10 and CC-11, construction and operation related to the proposed increase in residential capacity on Site 67 would result in a more efficient distribution of emissions per capita because emissions of criteria pollutants associated with sources such as mobile sources, area sources, and energy sources are considered more efficient when the associated development houses a larger number of people in a smaller area, as is proposed under the Project. As stated in the 2022 Scoping Plan, decreasing per capita emissions, especially those related to VMT, is crucial in achieving the state’s climate goals (CARB 2022a: 194). Because implementation of the anticipated increased residential capacity on Site 67 would result in a more efficient distribution of GHG emissions per capita than the approved residential capacity, the Project would support the goals of the 2022 Scoping Plan.

Pursuant to CEQA Guidelines Section 15162 the development on Site 67 as part of the Project would not result in a new or more severe impact related to consistency with an applicable GHG reduction plan than what was disclosed in the Fair Oaks Boulevard EIR. The Project’s contribution to impacts would not be substantial and overall impacts would remain less than significant.

As stated under the “Regulatory Setting” section, the 2022 CAP is currently being prepared. The 2022 CAP will contain GHG reduction measures and actions intended to outline a path toward achieving the GHG reduction goal of the 2022 Scoping Plan. Once adopted, the 2022 CAP may be used in future CEQA analyses to streamline the CEQA process by demonstrating consistency with the reduction measures of the CAP.

MITIGATION MEASURES

Mitigation not required.

NORTH WATT AVENUE CORRIDOR PLAN

As shown in Impact CC-1, implementation of Tier 1 BMP 1 and BMP 2 as detailed in Mitigation Measure CC-2 would not reduce impacts related to emissions of operational GHGs

associated with development within the North Watt Avenue Corridor area to a less than significant level, as BMPs 1 and 2 may not be sufficient in reducing Project related emissions below SMAQMD's 1,100 $MTCO_2e$/year threshold, resulting in a new impact. However, the proposed development on Sites 68 through 72 within the North Watt Avenue Corridor area would comply with OPRs SB 743 technical advisory de minimis criteria for VMT (i.e. Sites 68 through 72 are not shown to have VMT impacts in Chapter 10 "Transportation"). Reducing project-related VMT, and thus transportation-related GHG emissions from the combustion of fossil fuels, is one of the key goals of the 2022 Scoping Plan.

SMAQMD's GHG thresholds were developed in consideration of nearer-term statewide GHG reduction goals (i.e., a 40 percent reduction from the 1990 statewide inventory by 2030). This goal is intended to maintain progress toward the GHG reduction goal of the 2022 Scoping Plan which is to achieve an 85 percent reduction in 1990 emissions goal by 2045. Based on the analysis above, GHG emissions associated with development of the anticipated increase in residential capacity on Site 68 through 72 would be consistent with state GHG reduction goals. In addition, the implementation of SMAQMD Tier 1 BMPs would be required through the zoning ordinance for Sites 68 through 72 within the North Watt Avenue Corridor area. Implementation of these BMPs align with the goals of the 2022 Scoping Plan to reduce natural gas use and decrease the consumption of fossil fuels through the increased utilization of EVs.

Furthermore, as described in Impact CC-1 and shown in Tables CC-14 and CC-15, construction and operation related to the proposed development on Sites 68 through 72 would result in a more efficient distribution of emissions per capita because emissions of criteria pollutants associated with sources such as mobile sources, area sources, and energy sources are considered more efficient when the associated development houses a larger number of people in a smaller area, as is proposed for the increased residential capacity in the North Watt Avenue Corridor area under the Project. As stated in the 2022 Scoping Plan, decreasing per capita emissions, especially those related to VMT, is crucial in achieving the state's climate goals (CARB 2022a: 194). Because implementation of the anticipated increased residential capacity on Sites 68 through 72 would result in a more efficient distribution of GHG emissions per capita than the approved residential capacity accounted for in the North Watt Avenue EIR, the proposed residential capacity on Sites 68 through 72 under the Project would support the goals of the 2022 Scoping Plan.

Pursuant to CEQA Guidelines Section 15162 the development on Sites 68 through 72 as part of the Project would not result in a new or more severe impact related to consistency with an applicable GHG reduction plan than what was disclosed in the North Watt Avenue EIR. The Project's contribution to impacts would not be substantial and overall impacts would remain less than significant.

As stated in the "Regulatory Setting" section, the 2022 CAP is currently being prepared. The 2022 CAP will contain GHG reduction measures and actions intended to outline a path toward achieving the GHG reduction goal of the 2022 Scoping Plan. Once adopted, the 2022 CAP may be used in future CEQA analyses to streamline the CEQA process by demonstrating consistency with the reduction measures of the CAP.

MITIGATION MEASURES

Mitigation not required.

OLD FLORIN TOWN SPA

As shown in Impact CC-1, implementation of Tier 1 BMP 1 and BMP 2 as detailed in Mitigation Measure CC-2 would not reduce impacts related to emissions of operational GHGs associated with development within the Old Florin Town SPA to a less than significant level, as BMPs 1 and 2 may not be sufficient in reducing Project related emissions below SMAQMD's 1,100 $MTCO_2e$/year threshold, resulting in a new impact. However, the proposed development on Sites 73 through 79 within the Old Florin Town SPA would comply with OPRs SB 743 technical advisory de minimis criteria for VMT (i.e. Sites 73 through 79 are not shown to have VMT impacts in Chapter 10 "Transportation"). Reducing project-related VMT, and thus transportation-related GHG emissions from the combustion of fossil fuels, is one of the key goals of the 2022 Scoping Plan.

SMAQMD's GHG thresholds were developed in consideration of nearer-term statewide GHG reduction goals (i.e., a 40 percent reduction from the 1990 statewide inventory by 2030). This goal is intended to maintain progress toward the GHG reduction goal of the 2022 Scoping Plan, which is to achieve an 85 percent reduction in 1990 emissions goal by 2045. Based on the analysis above, GHG emissions associated with development of the anticipated increase in residential capacity on Sites 73 through 79 would be consistent with state GHG reduction goals. In addition, the implementation of SMAQMD Tier 1 BMPs would be required through the zoning ordinance for Sites 73 through 79 within the Old Florin Town SPA. Implementation of these BMPs align with the goals of the 2022 Scoping Plan to reduce natural gas use and decrease the consumption of fossil fuels through the increased utilization of EVs.

In addition, as described in Impact CC-1 and shown in Tables CC-21 and CC-22, construction and operation related to the proposed development on Sites 73 through 79 would result in a more efficient distribution of emissions per capita because emissions of criteria pollutants associated with sources such as mobile sources, area sources, and energy sources are considered more efficient when the associated development houses a larger number of people in a smaller area, as is proposed for the increased residential capacity in the Old Florin Town SPA area under the Project. As stated in the 2022 Scoping Plan, decreasing per capita emissions, especially those related to VMT, is crucial in achieving the state's climate goals (CARB 2022a: 194). Because implementation of the anticipated increased residential capacity on Sites 73 through 79 would result in a more efficient distribution of GHG emissions per capita than the approved residential capacity accounted for in the Old Florin Town SPA EIR, the proposed residential capacity on Sites 73 through 79 under the Project would support the goals of the 2022 Scoping Plan.

Pursuant to CEQA Guidelines Section 15162 the development on Sites 73 through 79 as part of the Project would not result in a new or more severe impact related to consistency with an applicable GHG reduction plan than what was disclosed in the Old Florin Town EIR. The Project's contribution to impacts would not be substantial and overall impacts would remain less than significant.

As stated in the "Regulatory Setting" section, the County's 2022 CAP is currently being prepared. The 2022 CAP will contain GHG reduction measures and actions intended to outline a path toward achieving the GHG reduction goal of the 2022 Scoping Plan. Once adopted, the 2022 CAP may be used in future CEQA analyses to streamline the CEQA process by demonstrating consistency with the reduction measures of the CAP.

MITIGATION MEASURES

Mitigation not required.

CUMULATIVE CLIMATE CHANGE

CUMULATIVE SETTING

Prominent GHGs contributing to the greenhouse effect are CO2, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. Human-caused emissions of these GHGs in excess of natural ambient concentrations are found to be responsible for intensifying the greenhouse effect and leading to a trend of unnatural warming of the earth's climate, known as global climate change or global warming. Climate change is a global problem caused by global pollutants and is inherently cumulative. Therefore, the cumulative setting for climate change is global, which is experiencing an existing adverse cumulative condition.

IMPACT CC-3: THE PROJECT, IN COMBINATION WITH PAST, PRESENT, AND REASONABLY FORESEEABLE PROJECTS, COULD RESULT IN A SIGNIFICANT CUMULATIVE IMPACT WITH RESPECT TO CLIMATE CHANGE

As stated under "Significance Criteria" above, the issue of global climate change is inherently a cumulative issue because the GHG emissions of individual projects cannot be shown to have any material effect on global climate. Therefore, the impact determinations of the General Plan EIR, Fair Oaks Boulevard EIR, North Watt Avenue EIR, and Old Florin Town SPA EIR are also considered the analyses' cumulative impact determinations. Similarly, the Project's impact on climate change is addressed only as a cumulative impact. The impact analyses above concluded that the Project, which includes the proposed additional residential capacity under the General Plan and the three distinct area plans, would result in significant and unavoidable impacts related to the generation of GHG emissions (see Impact CC-1). The analysis concluded that the increased residential capacity proposed under the Project would not conflict with an applicable GHG reduction regulation (i.e., AB 1279) because implementation of the Project would result in the more efficient distribution of per capita GHG emissions due to the proposed increase in residential density. However, according to the criterion set forth in Appendix G of the State CEQA Guidelines meant to determine cumulative GHG impacts, because the Project would result in more severe impacts related to the generation of GHG emissions compared to the impacts disclosed in the General Plan EIR, Fair Oaks Boulevard EIR, North Watt Avenue EIR, and Old Florin Town SPA EIR, the Project's contribution to substantial effects related to GHG emissions would be cumulatively considerable and significant.

7 ENERGY

INTRODUCTION

This chapter describes the existing conditions for energy in the unincorporated County and evaluates the potential effects that implementation of the Project may have on energy. Specifically, this chapter evaluates the potential for the Project to result in impacts related to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction and operation, and conflicts with state or local plan for renewable energy or energy efficiency. Because this analysis is subsequent to the adopted General Plan EIR, the evaluation of impacts focuses on the potential for implementation of the Project to result in new or substantially more severe impacts than presented in the General Plan EIR, given the changes to the General Plan proposed by the Project and changes in environmental and regulatory conditions that have occurred since the certification of the General Plan EIR.

No scoping comments pertaining to energy were received during the notice of preparation (NOP) public review periods. The NOP and comments received in response to the NOP are provided in Appendix INTRO-1.

EXISTING ENERGY ENVIRONMENTAL SETTING

State CEQA Guidelines Section 15162 indicates that should a lead agency determine that substantial changes to the project or its circumstances result in a new or more significant impact compared to what was addressed in a project's previous EIR, or new information of substantial importance results in a new or more significant impact, a subsequent EIR (SEIR) should be prepared. Therefore, this document serves as a SEIR to Sacramento County's 2030 General Plan EIR (General Plan EIR), as well as to EIRs prepared for various distinct area plans within which a portion of the candidate rezone sites are located. Applicable distinct area plan EIRs include the Fair Oaks Boulevard Corridor Plan EIR (Fair Oaks Boulevard EIR), the North Watt Avenue Corridor Plan EIR (North Watt Avenue EIR), and the Old Florin Town Special Planning Area (SPA) EIR (Old Florin Town SPA EIR). The regional housing needs allocation (RHNA) shortfall of 2,884 lower income category units and needed buffer could not have been known at the time of the General Plan EIR certification, and the RHNA is in excess of the number of dwelling units analyzed in the General Plan EIR. The number of additional units required in the distinct area plans was not known at the time the applicable environmental documents were certified. As required by Section 15162, this SEIR evaluates the potential for the proposed Project or changes in the circumstances to result in new or substantially more severe significant environmental impacts than previously analyzed under the General Plan EIR and distinct area plan EIRs. Existing energy settings for the unincorporated County, Fair Oaks Boulevard Corridor Plan area (Fair Oaks Boulevard Corridor area), North Watt Avenue Corridor Plan area (North Watt Avenue Corridor area), and Old Florin Town SPA are summarized below.

Energy Facilities and Services

Energy Facilities and Services in Sacramento County

Electric services are provided to the County by the Sacramento Municipal Utility District (SMUD). Natural gas service is provided by Pacific Gas and Electric (PG&E).

Energy Types and Sources

California relies on a regional power system composed of a diverse mix of natural gas, renewable, hydroelectric, and nuclear generation resources. One-third of energy commodities consumed in California is natural gas. In 2021, approximately 38 percent of natural gas consumed in the State was used to generate electricity. Large hydroelectric powered approximately 9 percent of electricity and renewable energy from solar, wind, small hydroelectric, geothermal, and biomass combustion totaled 34 percent (SMUD 2023). In 2021, SMUD provided its customers with 30 percent eligible renewable energy (i.e., biomass combustion, geothermal, small scale hydroelectric, solar, and wind) and 18 percent and 52 percent from large-scale hydroelectric and natural gas, respectively (SMUD 2023). In the same year, PG&E provided its customers with 48 percent eligible renewable energy while 4 percent, 9 percent, and 39 percent of energy were sourced from large-scale hydroelectric, natural gas, and nuclear, respectively. The contribution of in- and out-of-State power plants depends on the precipitation that occurred in the previous year, the corresponding amount of hydroelectric power that is available, and other factors.

Alternative Fuels

A variety of alternative fuels are used to reduce demand for petroleum-based fuel. The use of these fuels is encouraged through various Statewide regulations and plans (e.g., Low Carbon Fuel Standard, Assembly Bill 32 Scoping Plan and subsequent updates). Conventional gasoline and diesel may be replaced (depending on the capability of the vehicle) with many transportation fuels, including:

- biodiesel,
- electricity,
- ethanol (E-10 and E-85),
- hydrogen,
- natural gas (methane in the form of compressed and liquefied natural gas),
- propane,
- renewable diesel (including biomass-to-liquid),
- synthetic fuels, and
- gas-to-liquid and coal-to-liquid fuels.

California has a growing number of alternative fuel vehicles through the joint efforts of California Energy Commission (CEC), California Air Resources Board (CARB), local air districts, federal government, transit agencies, utilities, and other public and private

entities. As of August 2023, California contained over 16,000 alternative fueling stations (AFDC 2023).

Energy Use for Transportation

In 2021, the transportation sector comprised the largest end-use sector of energy in the State totaling 37.8 percent, followed by the industrial sector totaling 23.2 percent, the residential sector at 20.0 percent, and the commercial sector at 19.0 percent (EIA 2023). On-road vehicles use about 90 percent of the petroleum consumed in California. CEC reported retail sales of 448 million and 45 million gallons of gasoline and diesel, respectively, in Sacramento County in 2021 (the most recent data available) (CEC 2023). The California Department of Transportation (Caltrans) projects that 996 million gallons of gasoline and diesel will be consumed in Sacramento County in 2030 (Caltrans 2008).

Energy Use and Climate Change

Scientists and climatologists have produced evidence that the burning of fossil fuels by vehicles, power plants, industrial facilities, residences, and commercial facilities has led to an increase of the earth's temperature. For an analysis of greenhouse gas (GHG) production and the Project's impacts on climate change, refer to Chapter 6 "Climate Change."

Distinct Area Plan Existing Energy Settings

The three distinct area plans with candidate rezone sites (Fair Oaks Boulevard Corridor Plan, North Watt Avenue Corridor Plan, and Old Florin Town SPA) are located in Sacramento County. Therefore, the existing energy setting is similar to the existing setting for the General Plan described above. Electric services are provided to the County by SMUD. Natural gas service is provided by PG&E.

Existing Energy Regulatory Setting

Federal

Energy Policy and Conservation Act and CAFE Standards

The Energy Policy and Conservation Act of 1975 established nationwide fuel economy standards to conserve oil. Pursuant to this act, the National Highway Traffic and Safety Administration, part of the U.S. Department of Transportation (DOT), is responsible for revising existing fuel economy standards and establishing new vehicle economy standards.

The Corporate Average Fuel Economy (CAFE) program was established to determine vehicle manufacturers' compliance with the government's fuel economy standards. Compliance with the CAFE standards is determined based on each manufacturer's average fuel economy for the portion of their vehicles produced for sale in the county. EPA calculates a CAFE value for each manufacturer based on the city and highway fuel economy test results and vehicle sales. The CAFE values are a weighted harmonic average of the EPA city and highway fuel economy test results. Based on information

generated under the CAFE program, DOT is authorized to assess penalties for noncompliance. Under the Energy Independence and Security Act of 2007 (described below), the CAFE standards were revised for the first time in 30 years.

Energy Policy Act of 1992 and 2005

The Energy Policy Act of 1992 (EPAct) was passed to reduce the country's dependence on foreign petroleum and improve air quality. The EPAct includes several parts intended to build an inventory of alternative fuel vehicles (AFVs) in large, centrally fueled fleets in metropolitan areas. The EPAct requires certain federal, state, and local government and private fleets to purchase a percentage of light-duty AFVs capable of running on alternative fuels each year. In addition, financial incentives are included in the EPAct. Federal tax deductions are allowed for businesses and individuals to cover the incremental cost of AFVs. States are also required by the act to consider a variety of incentive programs to help promote AFVs. The Energy Policy Act of 2005 provides renewed and expanded tax credits for electricity generated by qualified energy sources, such as landfill gas; provides bond financing, tax incentives, grants, and loan guarantees for clean renewable energy and rural community electrification; and establishes a federal purchase requirement for renewable energy.

Energy Independence and Security Act of 2007

The Energy Independence and Security Act of 2007 is designed to improve vehicle fuel economy and help reduce U.S. dependence on oil. It represents a major step forward in expanding the production of renewable fuels, reducing dependence on oil, and confronting global climate change. The Energy Independence and Security Act of 2007 increases the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard requiring fuel producers to use at least 36 billion gallons of biofuel in 2022, which represents a nearly fivefold increase over current levels. It also reduces U.S. demand for oil by setting a national fuel economy standard of 35 miles per gallon by 2020—an increase in fuel economy standards of 40 percent.

By addressing renewable fuels and the CAFE standards, the Energy Independence and Security Act of 2007 builds upon progress made by the Energy Policy Act of 2005 in setting out a comprehensive national energy strategy for the 21st century.

State

Warren-Alquist Act

The 1974 Warren-Alquist Act established the California Energy Resources Conservation and Development Commission, now known as CEC. The creation of the act occurred as a response to the State legislature's review of studies projecting an increase in statewide energy demand, which would potentially encourage the development of power plants in environmentally sensitive areas. The act introduced State policy for siting power plants to reduce potential environmental impacts and sought to reduce demand for these facilities by directing CEC to develop statewide energy conservation measures to reduce wasteful, inefficient, and unnecessary uses of energy. Conservation measures recommended establishing design standards for energy conservation in buildings, which ultimately

resulted in the creation of the Title 24 Building Energy Efficiency Standards (California Energy Code). These standards are updated regularly and remain in effect today. The act additionally directed CEC to cooperate with the Governor's Office of Planning and Research, the California Natural Resources Agency, and other interested parties in ensuring that a discussion of wasteful, inefficient, and unnecessary consumption of energy is included in all CEQA documents required on local projects.

State of California Energy Action Plan

CEC is responsible for preparing the State Energy Plan, which identifies emerging trends related to energy supply, demand, conservation, public health and safety, and the maintenance of a healthy economy. The current plan is the 2003 *Energy Action Plan* (2008 update), which calls for the state to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the least environmental and energy costs. To further this policy, the plan identifies a number of strategies, including assisting public agencies and fleet operators in implementing incentive programs for zero-emission vehicles and addressing their infrastructure needs, as well as encouraging urban design that reduces vehicle miles traveled (VMT) and accommodates pedestrian and bicycle access.

Assembly Bill 2076: Reducing Dependence on Petroleum

Pursuant to AB 2076 (Chapter 936, Statutes of 2000), CEC and CARB prepared and adopted a joint agency report in 2003, *Reducing California's Petroleum Dependence.* Included in this report are recommendations to increase the use of alternative fuels to 20 percent of on-road transportation fuel use by 2020 and 30 percent by 2030, significantly increase the efficiency of motor vehicles, and reduce per capita VMT (CEC and CARB 2003). Further, in response to CEC's 2003 and 2005 Integrated Energy Policy Reports (IEPRs), the governor directed CEC to take the lead in developing a long-term plan to increase alternative fuel use.

A performance-based goal of AB 2076 was to reduce petroleum demand to 15 percent below 2003 demand by 2030.

Integrated Energy Policy Report

Senate Bill (SB) 1389 (Chapter 568, Statutes of 2002) required CEC to "conduct assessments and forecasts of all aspects of energy industry supply, production, transportation, delivery and distribution, demand, and prices. The Energy Commission shall use these assessments and forecasts to develop energy policies that conserve resources, protect the environment, ensure energy reliability, enhance the state's economy, and protect public health and safety" (PRC Section 25301[a]). This work culminated in preparation of the first IEPR.

CEC adopts an IEPR every 2 years and an update every other year. The 2023 IEPR, which is the most recent IEPR, was adopted February 2024. The 2023 IEPR provides a summary of priority energy issues currently facing the state, outlining strategies and recommendations to further the State's goal of ensuring reliable, affordable, and environmentally responsible energy sources. Energy topics covered in the report include progress toward statewide renewable energy targets and issues facing future renewable development; efforts to

increase energy efficiency in existing and new buildings; progress by utilities in achieving energy efficiency targets and potential; improving coordination among the state's energy agencies; streamlining power plant licensing processes; results of preliminary forecasts of electricity, natural gas, and transportation fuel supply and demand; future energy infrastructure needs; the need for research and development efforts to statewide energy policies; and issues facing California's nuclear power plants (CEC 2024).

California Renewables Portfolio Standard

SB X1-2 of 2011 requires all California utilities to generate 33 percent of their electricity from renewables by 2020. SB 100 of 2018 sets a three-stage compliance period requiring all California utilities, including independently owned utilities, energy service providers, and community choice aggregators, to generate 52 percent of their electricity from renewables by December 31, 2027; 60 percent by December 31, 2030; and 100 percent carbon-free electricity by December 31, 2045. On September 16, 2022, SB 1020 was signed into law. This bill supersedes the goals of SB 100 by requiring that eligible renewable energy resources and zero-carbon resources supply 90 percent of all retail sales of electricity to California end-use customers by December 31, 2035, 95 percent of all retail sales of electricity to California end-use customers by December 31, 2040, 100 percent of all retail sales of electricity to California end-use customers by December 31, 2045, and 100 percent of electricity procured to serve all State agencies by December 31, 2035.

Legislation Associated with Electricity Generation

The state has passed multiple pieces of legislation requiring the increasing use of renewable energy to produce electricity for consumers. California's Renewable Portfolio Standard (RPS) Program was established in 2002 (SB 1078) with the initial requirement to generate 20 percent of their electricity from renewable by 2017, 33 percent of their electricity from renewables by 2020 (SB X1-2 of 2011), 52 percent by 2027 (SB 100 of 2018), 60 percent by 2030 (also SB 100 of 2018), and 100 percent by 2045 (also SB 100 of 2018). More detail about these regulations is provided in Chapter 6, "Climate Change."

Senate Bill 350: Clean Energy and Pollution Reduction Act of 2015

The Clean Energy and Pollution Reduction Act of 2015 (SB 350) requires doubling of the energy efficiency savings in electricity and natural gas for retail customers through energy efficiency and conservation by December 31, 2030.

Assembly Bill 1007: State Alternative Fuels Plan

AB 1007 (Chapter 371, Statutes of 2005) required CEC to prepare a state plan to increase the use of alternative fuels in California. CEC prepared the State Alternative Fuels Plan in partnership with CARB and in consultation with other state, federal, and local agencies. The plan presents strategies and actions California must take to increase the use of nonpetroleum fuels in a manner that minimizes the costs to California and maximizes the economic benefits of in-state production. The plan assessed various alternative fuels and developed fuel portfolios to meet California's goals to reduce petroleum consumption, increase alternative fuel use, reduce GHG emissions, and increase in-state production of biofuels without causing a significant degradation to public health and environmental quality.

California Building Energy Efficiency Standards (Title 24, Part 6)

The energy consumption of new residential and nonresidential buildings in California is regulated by the California Energy Code. The code was established by CEC in 1978 in response to a legislative mandate to create uniform building codes to reduce California's energy consumption and provide energy-efficiency standards for residential and nonresidential buildings. CEC updates the California Energy Code every 3 years, typically including more stringent design requirements for reduced energy consumption, which results in the generation of fewer GHG emissions.

The 2022 California Energy Code went into effect on January 1, 2023. The 2022 California Energy Code advances the on-site energy generation progress started in the 2019 California Energy Code by encouraging electric heat pump technology and use, establishing electric-ready requirements when natural gas is installed, expanding solar photovoltaic (PV) system and battery storage standards, and strengthening ventilation standards to improve indoor air quality. CEC estimates that the 2022 California Energy Code will save consumers $1.5 billion and reduce GHGs by 10 million metric tons of carbon dioxide-equivalent over the next 30 years (CEC 2021).

California Green Building Standards (Title 24, Part 11)

The California Green Building Standards, also known as CALGreen, is a reach code (i.e., optional standards that exceed the requirements of mandatory codes) developed by CEC that provides green building standards for Statewide residential and nonresidential construction. The current version is the 2022 CALGreen Code, which took effect on January 1, 2023. As compared to the 2019 CALGreen Code, the 2022 CALGreen Code strengthened sections pertaining to electric vehicle (EV) and bicycle parking, water efficiency and conservation, and material conservation and resource efficiency, among other sections of the CALGreen Code. The CALGreen Code sets design requirements equivalent to or more stringent than those of the California Energy Code for energy efficiency, water efficiency, waste diversion, and indoor air quality. These codes are adopted by local agencies that enforce building codes and used as guidelines by State agencies for meeting the requirements of Executive Order B-18-12.

Legislation Associated with Greenhouse Gas Reduction

The state has passed legislation that aims to reduce GHG emissions. The legislation often has an added benefit of reducing energy consumption. SB 32 requires a statewide GHG emission reduction of at least 40 percent below 1990 levels by no later than December 31, 2030. Executive Order S-3-05 sets a long-term target of reducing statewide GHG emissions by 80 percent below 1990 levels by 2050.

SB 375 aligns regional transportation planning efforts, regional GHG emission reduction targets, and land use and housing allocation. The Advanced Clean Cars II program, approved by CARB in 2023, combines the control of GHG emissions and criteria air pollutants and the increase in the number of zero-emission vehicles into a single package of standards. The program's zero-emission vehicle regulation requires battery, fuel cell, and/or plug-in hybrid electric vehicles to account for up to 100 percent of California's new vehicle sales by 2035.

Implementation of the state's legislation associated with GHG reduction will have the co-benefit of reducing California's dependency on fossil fuel and making land use development and transportation systems more energy efficient.

More details about legislation associated with GHG reduction are provided in the regulatory setting of Chapter 6, "Climate Change."

LOCAL

SACRAMENTO COUNTY GENERAL PLAN

The Sacramento County General Plan includes the following energy-related policies in the Energy Element relevant to the Project (County of Sacramento 2017):

EN-3. Encourage the conservation and rehabilitation of existing housing and the revitalization of older, more intensively developed neighborhoods in the urban area.

EN-5. Reduce travel distances and reliance on the automobile and facilitate increased use of public transit through appropriate land use plans and regulations.

SACRAMENTO COUNTY ZONING CODE

Sacramento County Zoning Code (Zoning Code) Section 5.9.3.A, Electric Vehicle Parking, contains regulations specific to energy. Specifically, the Zoning Code states that electric vehicle parking spaces shall be provided as required by the California Green Building Standards Code (Green Building Code) and subject to approval by the Chief Building Inspector. Electric vehicle charging stations above the number required by the Green Building Code may qualify for parking reductions, as addressed in Section 5.9.5.C.1. Parking spaces designated for electric vehicle charging stations shall be counted toward meeting the minimum parking requirement.

DISTINCT AREA PLANS

The County guides development using several land use plans such as SPAs, Specific Plans, Comprehensive Plans, Community Plans, Corridor Plans, and Neighborhood Preservation Areas (NPAs). As shown in Chapter 2, "Project Description," 13 candidate rezone sites are located within distinct area plans, specifically: Fair Oaks Boulevard Corridor Plan, North Watt Avenue Corridor Plan, and Old Florin Town SPA. These plans provide specific regulations that supplement the Zoning Code and are created when the countywide zoning regulations do not adequately address local concerns (County of Sacramento 2024). Relevant energy policies included in the distinct area plans are summarized below.

FAIR OAKS BOULEVARD CORRIDOR PLAN

The Fair Oaks Boulevard Corridor Plan includes the following policies related to energy:

2.5 COMMUNITY DESIGN PRINCIPLES

CDP 22. Sustainable Energy Design: Encourage and allow "green" distributed generation appropriately screened or designed to integrate with architecture and landscape design.

3A: OVERALL FAIR OAKS BOULEVARD CORRIDOR PLAN CIRCULATION CONCEPTS & ENVIRONMENTAL STANDARD

3A5 CLIMATE CHANGE STANDARDS:

Residential Energy Sector Emission Reductions Future applicants for residential projects shall reduce residential emissions by 0.26 MT CO_2 per capita. Applicants shall submit a plan detailing a set of quantitative and/or qualitative measures that achieve the reduction in CO_2 emissions per capita. This mitigation may be modified to conform with current Sacramento County climate change standards, including but not limited to a Green Building Program and Climate Action Plan. Additionally, applicants may choose to submit revised, project-specific, residential energy-use emissions factors; however, the applicant will be required to provide adequate data to support the revised emission factor.

NORTH WATT AVENUE CORRIDOR PLAN

The North Watt Avenue Corridor Plan includes the following goals and policies related to energy:

2.5 LAND USE GOALS AND POLICIES

2.5.10 SUSTAINABILITY GOALS

- Goal 2.19 Emphasize building and landscape design and construction that encourage energy efficiency.
- Goal 2.20 Utilize building and landscape design that minimizes water use and provides for the reuse of water where feasible.

2.5.11 SUSTAINABILITY POLICIES

- Policy 2.11 All buildings shall be constructed in compliance with State of California Title 24 energy conservation standards.

4.2 TRANSPORTATION GOALS AND POLICIES[1]

4.2.3 TRANSIT GOALS

- Goal 4.6 Coordinate with bus transit service providers to determine system improvements, including routes and the location of transit stops and stations, consistent with Regional Transit's Transit Master Plan Transit-Oriented Development Guidelines.

[1] Transit policies would reduce energy impacts by reducing VMT and thus reducing gasoline and diesel fuel combustion.

- Goal 4.7 Expand local bus service to meet the needs of new development within the Corridor Plan area.
- Goal 4.8 Coordinate with Sacramento Regional Transit to provide bus rapid transit service before full build-out as an incentive for growth and development.
- Goal 4.9 Ensure that local and regional bus service includes logical links to McClellan Business Park and the overall North Highlands community.
- Goal 4.10 Coordinate with private entities, such as McClellan Business Park, to develop a consistent program of transit incentives that serves the Corridor Plan area and North Highlands community, encourages transit use, and reduces single-occupant vehicle trips.
- Goal 4.11 Construct transit facilities suitable for local bus transit and regional bus rapid transit. Such facilities may be separate or combined, as appropriate to routes.
- Goal 4.12 Provide direct and convenient access to all transit stops and stations via the street grid and bicycle and pedestrian routes and trails.

4.2.5 Bicycle and Pedestrian Goals

- Goal 4.13 Create a bicycle and pedestrian circulation system with connections to the regional trail system, as identified in Figure 4.31, “Regional Bicycle Circulation Plan.”
- Goal 4.14 Construct Class I multi-use trails within the north-south paseo and along all open space corridors.
- Goal 4.15 Include Class II bike lanes on Watt Avenue, 34th Street, Elkhorn Boulevard, and all arterial and collector streets in the Corridor Plan area.
- Goal 4.16 Ensure safe and convenient bicycle and pedestrian access at all major intersections and trail crossings with Watt Avenue, 34th Street, and arterial and collector streets.
- Goal 4.17 Provide adequate bicycle parking facilities throughout the Corridor Plan area in accordance with Sacramento Metropolitan Air Quality District standards.

4.2.7 Alternative Transportation Goals

- Goal 4.18 Provide facilities for new transportation technologies that offer energy efficiency and are suitable for implementation in the Corridor Plan area.
- Goal 4.19 Create a neighborhood electric vehicle plan for the Corridor Plan area, and consider extending it to McClellan Business Park and the North Highlands community.

4.2.8 Alternative Transportation Policies

- Policy 4.15 Neighborhood electric vehicles shall be permitted on local serving streets where the speed limit is 35 miles per hour or less.

OLD FLORIN TOWN SPECIAL PLANNING AREA

The Old Florin Town SPA Plan does not contain goals or policies that relate to energy.

OTHER DISTINCT AREA PLANS

In addition to the distinct area plans described above, Stockton Boulevard NPA, Victory Avenue NPA, Greenback Lane SPA, and Downtown Rio Linda SPA also contain candidate rezone sites. The following are intent and goal statements from applicable distinct area plans that pertain to energy.

STOCKTON BOULEVARD NPA

- Intent and Goal 512-307.B Site Design: Whenever possible, residential and commercial mixed-use projects shall design to accommodate pedestrian, bicycling and transit opportunities.

VICTORY AVENUE NPA

The Victory Avenue NPA does not contain any goals or policies pertaining to energy.

GREENBACK LANE SPA

- Intent 506-20.b.1.cc: New development on Greenback Lane east of Chestnut Avenue shall establish a distinct character by incorporating the following guidance in defining Downtown Orangevale as a business district by incorporating enhanced pedestrian promenades along Greenback Lane.

DOWNTOWN RIO LINDA SPA

The Downtown Rio Linda does not contain any goals or policies pertaining to energy.

SIGNIFICANCE CRITERIA AND METHODOLOGY

SIGNIFICANCE CRITERIA

Thresholds of significance are based on Appendix G of the State CEQA Guidelines. The Project would result in an impact on energy resources if it would:

- result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy, or wasteful use of energy resources, during Project construction or operation or
- conflict with or obstruct a State or local plan for renewable energy or energy efficiency.

METHODOLOGY

Construction- and operation-related energy consumption by the Project was measured in megawatt-hours (MWh) of electricity, million British thermal units (MMBtu) of natural gas, gallons of gasoline, and gallons of diesel fuel. Energy consumption estimates were calculated using the California Emissions Estimator Model (CalEEMod) version 2022.1.1.21 computer program. Where Project-specific information was not known,

CalEEMod default values based on the Project's location were used. Project-specific information on number of units constructed and acreage was provided by the County and used in CalEEMod.

Project construction and operations were modeled separately. To model construction emission levels, each distinct planning area and the full Countywide rezone were modeled separately, and total emissions and energy consumption were calculated by year. Additionally, each distinct planning area and Countywide rezone were modeled as a before rezoning and after rezoning scenario to find the additional emission as a result of the rezoning. To model operational at full buildout, each distinct planning area and the County rezone were combined into one CalEEMod run to calculate emissions and energy consumption of the first year of operations at full buildout.

Existing VMT for the proposed rezone sites without the Project was not included in the transportation study prepared by DKS (the transportation study examined countywide VMT for this scenario). To ensure like-scenarios were compared, CalEEMod defaults were used for existing and existing plus Project scenarios.(Therefore, specific VMT numbers differ between this section and Section 10, Transportation, which was based on the DKS transportation study). Fuel consumption during construction was calculated using carbon dioxide equivalent (CO_2e) estimates for worker (gasoline) and off-road equipment, as well as for haul truck trips (diesel). Refer to Appendix AQ-1 for detailed assumptions and modeling results.

IMPACT AND ANALYSIS

This impact and analysis section is organized by impact then, within each impact, by analysis of Project buildout as compared to the General Plan EIR, and finally by distinct area plan. Mitigation is included or updated, where applicable, from the original environmental documents prepared for the General Plan and distinct area plans. An analysis of cumulative impacts is included at the end of the section.

IMPACT EN-1: WASTEFUL, INEFFICIENT, OR UNNECESSARY CONSUMPTION OF ENERGY, DURING PROJECT CONSTRUCTION OR OPERATION

SACRAMENTO COUNTY GENERAL PLAN

GENERAL PLAN ENVIRONMENTAL IMPACT REPORT DETERMINATION

In 2018, Appendix G of the State CEQA Guidelines was updated to include a separate section with new questions associated with evaluating a project's potential impacts related to energy. The General Plan EIR was certified prior to the 2018 update, and therefore did not include a separate section for energy. Rather, impacts related to the construction of new energy production and/or transmission facilities or the expansion of existing facilities are discussed in Section 2.16, "Utilities and Service Systems," of the General Plan EIR. Among the topics that were added to the State CEQA Guidelines in 2018 and, therefore, not addressed in the General Plan EIR is a project's potential to result in an impact due to the wasteful, inefficient, or unnecessary consumption of energy

resources. The General Plan EIR does not include an impact evaluation that specifically addresses this topic.

PROPOSED PROJECT IMPACT EVALUATION

Appendix G of the State CEQA Guidelines requires the consideration of the energy implications of a project. CEQA requires mitigation measures to reduce "wasteful, inefficient and unnecessary" energy usage (Public Resources Code Section 21100, subdivision (b)(3)). Neither the law, nor the State CEQA Guidelines establish criteria that define wasteful, inefficient, or unnecessary use. Compliance with current California Energy Code standards for building energy efficiency and future updates to the standards would result in energy-efficient buildings developed as part of the Project. However, compliance with building codes does not adequately address all potential energy impacts during project construction and operation. For example, energy would be required to transport people and goods to and from the proposed candidate rezone sites. This analysis considers all energy uses associated with the Project.

Because the Project includes only rezoning of specific properties, the specific details of the eventual residential developments that would be permitted under the proposed new zoning are unknown. Therefore, this analysis includes general and conservative assumptions to determine whether a significant impact would likely occur.

CONSTRUCTION ENERGY

Energy would be required to construct, operate, and maintain construction equipment and to produce and transport construction materials associated with construction of the additional residential units that would result of future development under the Project. It is assumed that this construction would occur over a period of 5 years with activities commencing in 2025 and concluding in 2029. The one-time energy expenditure required to construct the physical buildings and infrastructure associated with the Project would be nonrecoverable. Most energy consumption would result from operation of construction equipment and vehicle trips associated with commutes by construction workers and haul trucks supplying materials. Tables EN-1 and EN-2 summarize the estimate of fuel needed for construction activities associated with the approved and proposed land uses on candidate rezone sites as part of the Project. Tables EN-3 and EN-4 summarize the gallons of fuel per capita required for construction associated with development allowed with and without the Project.

Although construction activities would require fuel and other energy sources, consumption of fuel and energy uses would be temporary. Construction contractors strive to complete construction projects in an efficient manner to meet project schedules and minimize cost (to maximize their profitability). Therefore, only the necessary amount of fuel would be consumed. Additionally, the acreage assumed for development that would be allowed as part of the Project is the same as what was evaluated in the General Plan EIR for the candidate rezone sites (i.e., all candidate rezone sites were analyzed as being developed in the General Plan EIR). The proposed rezone would increase the development density of the candidate rezone sites, which would result in higher energy output, but more efficient use of gasoline on a per capita basis. Even though the site acreage is not changing, increasing the density of the units would require more

construction on the same construction schedule since the number of housing units would increase. While fuel consumption and number of workers would increase as a result, the worker trips would not increase as much as the population in the new units allowed under the Project would increase, thus making construction more efficient with fuel usage.

Table EN-1: Total Construction Energy Consumption on Candidate Rezone Sites Before Rezone

Year	Diesel (Gallons)[1]	Gasoline (Gallons)[2]	Total (Gallons)
2025	84,405	59,812	144,218
2026	90,351	87,558	177,909
2027	88,627	71,090	159,717
2028	79,671	73,690	153,361
2029	42,936	35,117	78,054
Total	385,990	327,268	713,258

[1] Diesel gallons include off-road equipment and on-road gallons from worker and vendor trips.

[2] Gasoline gallons include on-road gallons from worker trips.

Source: Calculations by Ascent Environmental in 2024.

Table EN-2: Total Construction Energy Consumption on Candidate Rezone Sites After Rezone

Year	Diesel (Gallons)[1]	Gasoline (Gallons)[2]	Total (Gallons)
2025	108,969	124,396	233,365
2026	119,318	164,295	283,613
2027	115,032	142,238	257,270
2028	106,129	145,356	251,486
2029	61,891	85,850	147,741
Total	511,340	662,136	1,173,475

[1] Diesel gallons include off-road equipment and on-road gallons from worker and vendor trips.

[2] Gasoline gallons include on-road gallons from worker trips.

Source: Calculations by Ascent Environmental in 2024.

Table EN-3: Total Per Capita Construction Energy Consumption on Candidate Rezone Sites Before Rezone

Year	Diesel (Gallons)[1]	Gasoline (Gallons)[2]	Total (Gallons)
2025	9.0	6.4	15.4
2026	9.7	9.4	19.0
2027	9.5	7.6	17.1
2028	8.5	7.9	16.4
2029	4.6	3.8	8.4
Total Per Capita	41.3	35.0	76.3

[1] Diesel gallons include off-road equipment and on-road gallons from worker and vendor trips.

[2] Gasoline gallons include on-road gallons from worker trips.

Based on Assumed Population of 9,347. From CalEEMod Defaults

Source: Calculations by Ascent Environmental in 2024.

Table EN-4: Total Per Capita Construction Energy Consumption on Candidate Rezone Sites After Rezone

Year	Diesel (Gallons)[1]	Gasoline (Gallons)[2]	Total (Gallons)
2025	6.0	5.2	11.2
2026	7.9	5.7	13.7
2027	6.8	5.5	12.4
2028	7.0	5.1	12.1
2029	4.1	3.0	7.1
Total Per Capita	31.9	24.6	56.5

[1] Diesel gallons include off-road equipment and on-road gallons from worker and vendor trips.

[2] Gasoline gallons include on-road gallons from worker trips.

Based on an assumed population of 20,773 from CalEEMod Defaults

Source: Calculations by Ascent Inc. in 2024.

BUILDING ENERGY

The operation of future development allowed under the Project would be typical of primarily multi-family residential land uses regarding use of electricity for lighting, space and water heating, appliances, and landscape maintenance activities. Residential development that would be allowed under the proposed Project would, at a minimum, be built to meet the 2022 California Energy Code requirements. The 2022 California Energy Code requires the use of efficient electric heat pumps, establishes electric-ready requirements for new homes, expands solar photovoltaic and battery storage standards, and strengthens ventilation standards (CEC 2022). All buildings that would be allowed as a result of the Project would be required to comply with the California Energy Code standards for building energy efficiency. As residential development associated with the Project proceeds through 2029, the California Energy Code would continue to be updated on a triennial basis with the expectation that the mandatory requirements of the code would require increasingly more stringent energy efficiency requirements. This would result in increased building energy efficiency over time as buildings continue to be developed, as a result of future development allowed under the Project. The total electricity demand on the proposed candidate rezone sites is estimated to be 17 gigawatt hours per year (GWh/year) without the proposed rezone and 37 GWh/year with the proposed rezone, as shown in Tables EN-5 and EN-6, respectively. Natural gas demand would be approximately 42,513 MMBtu per year (MMBTU/year) without the proposed rezone and 99,177 with the proposed rezone, as shown in Tables EN-5 and EN-6, respectively. Tables EN-5 and EN-6 provide a summary of the estimated operational energy consumption associated with the Project with the existing and proposed land use and zoning designations on the candidate rezone sites, respectively. For a list of assumptions made to estimate operational energy consumption, see Appendix AQ-1.

However, GHG emission reduction best management practices (BMPs), such as requiring new development to eliminate natural gas, would be required for future development as part of the Project pursuant to Mitigation Measure CC-2, in Chapter 6 “Climate Change. This measure would offset GHG emissions associated with the energy sector. Therefore, emissions presented in EN-5 and EN-6 represent a worst-case scenario estimate of energy consumption associated with the Project and future energy consumption would likely be lower.

Table EN-5: Total Operational Energy Consumption on Candidate Rezone Sites Before Rezone

Land Use/Energy Type	Energy Consumption	Units
Electricity	17	GWh/year
Natural Gas	42,513	MMBTU/year

Notes: GWh/year = gigawatt-hours per year; MMBTU = million British thermal units.

Source: Calculations by Ascent Environmental in 2024.

Table EN-6: Total Operational Energy Consumption on Candidate Rezone Sites After Rezone

Land Use/Energy Type	Energy Consumption	Units
Electricity	37	GWh/year
Natural Gas	99,177	MMBTU/year

Notes: GWh/year = gigawatt-hours per year; MMBTU = million British thermal units.

Source: Calculations by Ascent Environmental in 2024.

Table EN-7: Total Per Capita Operational Energy Consumption on Candidate Rezone Sites Before Rezone

Land Use/Energy Type	Energy Consumption	Units
Electricity	0.0018	GWh/year/capita
Natural Gas	4.55	MMBTU/year/capita

Notes: GWh/year = gigawatt-hours per year; MMBTU = million British thermal units.

Assumed Population of 9,346 from CalEEMod defaults.

Source: Calculations by Ascent Environmental in 2024.

Table EN-8: Total Per Capita Operational Energy Consumption on Candidate Rezone Sites After Rezone

Land Use/Energy Type	Energy Consumption	Units
Electricity	0.0018	GWh/year/capita
Natural Gas	4.77	MMBTU/year/capita

Notes: GWh/year = gigawatt-hours per year; MMBTU = million British thermal units.

Assumed Population of 20,773 from CalEEMod defaults.

Source: Calculations by Ascent Environmental in 2024.

Increasing density allowed on the candidate rezone sites would result in an increase in operational electricity or natural gas demand, as shown in Tables EN-5 and EN-6. Similarly, the Project would not be as efficient for natural gas usage on a per capita basis as compared to development allowed on the candidate rezone sites and would have the same electricity efficiency. An increase in natural gas would result from development allowed under the Project because natural gas consumption is based on number of units developed and every unit would require a base amount of natural gas to power that unit. As unit size increases, less natural gas is necessary to power the increased size of the unit. Therefore, natural gas consumption efficiency would increase as unit size increases. Since density is increasing, the average size of each unit would decrease, and thus natural gas consumption would become less efficient. As stated above, as the 2022 Building Code

continues to be updated, energy efficiency would improve, and thus efficiency would improve over time as individual developments allowed under the Project are constructed.

TRANSPORTATION ENERGY

Residential trips would make up the majority of VMT associated with the Project. Other VMT would consist of occasional maintenance and delivery trips. The net fuel consumption associated with Project-related vehicle trips would not be considered wasteful, inefficient, or unnecessary in comparison to other similar developments in the region. State and federal regulations regarding fuel efficiency standards for vehicles in California are designed to reduce wasteful, inefficient, and unnecessary use of energy for transportation. For example, the Energy Independence and Security Act, the State of California Energy Action Plan, and AB 2076 aim to increase the fuel economy standard, encourage urban designing to reduce vehicle trip lengths and VMT, and reduce VMT per capita by encouraging alternative fuel usage, respectively. Table EN-9 provides a summary of annual VMT and annul VMT per capita for the existing and proposed land use and zoning designations on the candidate rezone sites.

Table EN-9: Total Operational VMT from Candidate Rezone Sites

Scenario	Annual VMT	Annual VMT/Capita
Before Rezone	74,558,290	7,978
After Rezone	117,577,192	5,660

Notes: VMT = Vehicle Miles Traveled

Source: Calculations by Ascent Environmental in 2024.

As shown in Table EN-9, as residential density increases with the Project, total annual VMT also increases; however, VMT per capita becomes more efficient. This is because denser development on the candidate rezone sites, which are primarily located in infill and corridor areas, would decrease the length of the average trip, resulting in a more efficient VMT per capita as density increases. Therefore, the Project would not result in a new or more severe significant impact related to wasteful and inefficient use of transportation energy.

SUMMARY

Development allowed under the Project would require increased energy consumption for temporary construction activities related to vehicle use and material transport. Once operational, development allowed under the Project would increase the total amount of transportation-related energy, but the transportation energy would be more efficient on a per-capita basis. The Project would require additional building energy and natural gas consumption as compared to exiting development allowed on the candidate rezone sites.

According to Appendix F of the State CEQA Guidelines, the means to achieve the goal of conserving energy include decreasing overall per capita energy consumption, decreasing reliance on oil, and increasing reliance on renewable energy sources. As described in Chapter 2 “Project Description,” the Project would modify existing zoning designations to increase multi-family housing, resulting in more dwelling units per acre compared to the zoning designations identified in the General Plan EIR. This increase in

density would correspond with less energy consumed per capita compared to the energy that would be used for less dense land uses or single-family residences.

As described above, a detailed analysis of construction and operational energy demands was not provided in the General Plan EIR. However, numerous regulations have been implemented since the adoption of the General Plan EIR. These regulations set rigorous standards for energy efficiency as well as sustainability-focused electricity generation. Additionally, there have been significant technological advancements since the certification of the General Plan EIR, such as vehicle fuel efficiency, renewable energy generation, and building-design efficiencies – all of which increase overall Project energy efficiencies. For these reasons, increased residential development allowed under the Project would be overall more energy efficient than development that would have been evaluated in the General Plan EIR on the proposed candidate rezone sites. Additionally, GHG emissions reduction BMPs would apply to these sites pursuant to Mitigation Measure CC-2, in Chapter 6 “Climate Change. BMPs include elimination of natural gas from future development resulting in reduced GHG emissions.

Pursuant to CEQA Guidelines Section 15162, the proposed Project would not result in new or more severe impacts related to energy and the usage of energy for construction and operation of the Project would not be considered wasteful, inefficient, or unnecessary. The Project’s contribution to impacts would not be substantial and overall impacts would be less than significant.

MITIGATION MEASURES

Mitigation not required.

DISTINCT AREA PLANS

Since certification of the Fair Oaks Boulevard EIR, North Watt Avenue EIR, and Old Florin Town SPA EIR (collectively the distinct area plan EIRs), Appendix G of the State CEQA Guidelines has been amended to address energy consumption and compliance with applicable renewable energy or energy efficiency plans. At the time the three distinct area plan EIRs were prepared and certified, energy efficiency related impacts were included as Appendix F to the State CEQA Guidelines. Each of the distinct area plan EIRs evaluated energy demand and impacts related to energy use, but in the context of utilities and utility infrastructure.

Because the distinct area plan EIRs did not evaluate energy efficiency impacts, this section includes an analysis whether implementing the Project would result in an environmental impact related to the inefficient, wasteful, or unnecessary consumption of energy. The capacity of existing and proposed infrastructure to serve the distinct planning areas is evaluated in Section 12, “Utilities.”

FAIR OAKS BOULEVARD CORRIDOR PLAN

CONSTRUCTION ENERGY

Energy would be required to construct, operate, and maintain construction equipment and to produce and transport construction materials associated with construction of the additional residential units on Site 67 within the Fair Oaks Boulevard Corridor area. For purposes of this analysis, it is assumed that this construction would begin in January 2025 and conclude in June 2025. The one-time energy expenditure required to construct the physical buildings and infrastructure associated with Site 67 would be nonrecoverable. Most energy consumption would result from operation of construction equipment and vehicle trips associated with commutes by construction workers and haul trucks supplying materials. Tables EN-10 and EN-11 summarize the estimated amounts of fuel needed for construction activities associated with development on Site 67 with and without the proposed rezone, respectively. Tables EN-12 and EN-13 summarize the gallons of fuel per capita required for construction for the existing and proposed land use and zoning designations on Site 67, respectively.

Although construction activities would require fuel and other energy sources, consumption of fuel and energy uses would be temporary. Construction contractors strive to complete construction projects in an efficient manner to meet project schedules and minimize cost (to maximize their profitability). Therefore, only the necessary amount of fuel would be consumed. Had the Fair Oaks Boulevard EIR conducted an analysis of energy consumed during construction, the energy expenditure would be comparable to the energy needed to construct housing under the proposed rezone. Additionally, Site 67 was assumed to be developed as part of the analysis for the Fair Oaks Boulevard EIR. The Project would result in increased density of Site 67 as compared to what was analyzed in the Fair Oaks Boulevard EIR. Therefore, development on Site 67 as part of the Project would result in more efficient energy expenditure during construction on a per capita basis as shown in Tables EN-12 and EN-13. The majority of energy expended during construction would occur during the building of the foundation. Less energy is needed to construct the units inside the building, so as more units are added, efficiency would be expected to increase.

Table EN-10: Fair Oaks Boulevard Corridor Plan Construction Energy Consumption Before Rezone

Year	Diesel (Gallons)[1]	Gasoline (Gallons)[2]	Total (Gallons)
2025	8,925	1,035	9,987

[1] Diesel gallons include off-road equipment and on-road gallons from worker and vendor trips.

[2] Gasoline gallons include on-road gallons from worker trips.

Source: Calculations by Ascent Environmental in 2024.

Table EN-11: Fair Oaks Boulevard Corridor Plan Construction Energy Consumption After Rezone

Year	Diesel (Gallons)[1]	Gasoline (Gallons)[2]	Total (Gallons)
2025	9,124	1,511	10,636

[1] Diesel gallons include off-road equipment and on-road gallons from worker and vendor trips.

[2] Gasoline gallons include on-road gallons from worker trips.

Source: Calculations by Ascent Environmental in 2024.

Table EN-12: Fair Oaks Boulevard Corridor Plan Construction Energy Consumption Before Rezone Per Capita

Year	Diesel (Gallons)[1]	Gasoline (Gallons)[2]	Total (Gallons)
2025	127.9	14.8	142.7

[1] Diesel gallons include off-road equipment and on-road gallons from worker and vendor trips.

[2] Gasoline gallons include on-road gallons from worker trips.

Based on Assumed Population of 70 from CalEEMod defaults

Source: Calculations by Ascent Environmental in 2024.

Table EN-13: Fair Oaks Boulevard Corridor Plan Construction Energy Consumption After Rezone Per Capita

Year	Diesel (Gallons)[1]	Gasoline (Gallons)[2]	Total (Gallons)
2025	87.7	14.5	102.3

[1] Diesel gallons include off-road equipment and on-road gallons from worker and vendor trips.

[2] Gasoline gallons include on-road gallons from worker trips.

Based on an assumed population of 104 from CalEEMod defaults

Source: Calculations by Ascent Inc. in 2024.

BUILDING ENERGY

As shown in Tables EN-14 and EN-15 operational electricity and natural gas demand associated with residential development on Site 67 would increase as part of the rezone. However, GHG emissions reduction BMPs, such as requiring new developments to eliminate natural gas, pursuant to Mitigation Measure CC-2, in Chapter 6 “Climate Change. would be required for future projects. This measure would offset GHG emissions associated with the energy sector. Therefore, emissions presented in EN-15 and EN-17 represent a worst-case scenario of energy consumption associated with the proposed rezone on Site 67 and future energy consumption would likely be lower. For a list of assumptions made to estimate operational energy consumption, see Appendix AQ-1. However, as shown in Tables EN-16 and EN-17, per capita energy consumption would decrease as part of development on Site 67 allowed under the Project. Therefore, as population and units developed on Site 67 increase, energy efficiency also increases. Building energy is more tied to the size of the building, rather than the number of units in the building. So as more people are able to live in the building, efficiency would increase.

Table EN-14: Fair Oaks Boulevard Corridor Plan Operational Energy Consumption Before Rezone

Land Use/Energy Type	Energy Consumption	Units
Electricity	0.12	GWh/year
Natural Gas	318	MMBTU/year

Notes: GWh/year = gigawatt-hours per year; MMBTU = million British thermal units.

Source: Calculations by Ascent Environmental in 2024.

Table EN-15: Fair Oaks Boulevard Corridor Plan Operational Energy Consumption After Rezone

Land Use/Energy Type	Energy Consumption	Units
Electricity	0.18	GWh/year
Natural Gas	495	MMBTU/year

Notes: GWh/year = gigawatt-hours per year; MMBTU = million British thermal units.

Source: Calculations by Ascent Environmental in 2024.

Table EN-16: Fair Oaks Boulevard Corridor Plan Operational Energy Consumption Per Capita Before Rezone

Land Use/Energy Type	Energy Consumption	Units
Electricity	0.000013	GWh/year/capita
Natural Gas	0.03	MMBTU/year/capita

Notes: GWh/year = gigawatt-hours per year; MMBTU = million British thermal units.

Assumed Population of 70 from CalEEMod Defaults

Source: Calculations by Ascent Environmental in 2024.

Table EN-17: Fair Oaks Boulevard Corridor Plan Operational Energy Consumption Per Capita After Rezone

Land Use/Energy Type	Energy Consumption	Units
Electricity	0.000009	GWh/year/capita
Natural Gas	0.02	MMBTU/year/capita

Notes: GWh/year = gigawatt-hours per year; MMBTU = million British thermal units.

Assumed Population of 104 from CalEEMod Defaults

Source: Calculations by Ascent Environmental in 2024.

TRANSPORTATION ENERGY

Residential trips would make up the majority of VMT associated with Site 67, with occasional maintenance and delivery trips accounting for other VMT. The net fuel consumption associated with development on Site 67 would not be considered wasteful, inefficient, or unnecessary in comparison to other similar developments in the region. State and federal regulations regarding fuel efficiency standards for vehicles in California are designed to reduce wasteful, inefficient, and unnecessary use of energy for transportation, such as the Energy Independence and Security Act which increases the average fuel economy of cars over time and the State of California Energy Action Plan which encourages urban designs that reduce the average trip length, which reduces VMT. Table EN-18 provides a summary of annual VMT and annual VMT per capita for currently permitted and proposed development on Site 67.

Table EN-18: Fair Oaks Boulevard Corridor Plan Operational VMT

Scenario	Annual VMT	Annual VMT/Capita
Before Rezone	834,025	11,915
After Rezone	875,808	8,421

Notes: VMT = Vehicle Miles Traveled

Source: Calculations by Ascent Environmental in 2024

As shown in Table EN-18, as population increases VMT also increases. However, VMT per capita becomes more efficient as density increases, thus the Fair Oaks Boulevard Corridor Plan would be more VMT efficient with development allowed on Site 67 under the proposed rezone when compared to the approved land uses.

Although Site 67 would require more fuel, energy, and natural gas consumption, while also increasing VMT, with the proposed land uses when compared to the approved land uses, the Project becomes more fuel, energy, and VMT efficient as shown in Tables EN-16, EN-17, and EN-18.

SUMMARY

Fuel consumption, energy and natural gas demand, and VMT per capita would all become more efficient with increased density as a result of development on Site 67 as part of the proposed rezone.

Pursuant to CEQA Guidelines Section 15162, development on Site 67 as part of the proposed rezone would not result in new or more severe impacts related to energy and the usage of energy for construction and operation on Site 67 would not be considered wasteful, inefficient, or unnecessary. The Project's contribution to impacts would not be substantial and overall impacts would be less than significant.

MITIGATION MEASURES

Mitigation not required.

NORTH WATT AVENUE CORRIDOR PLAN

CONSTRUCTION ENERGY

Energy would be required to construct, operate, and maintain construction equipment and to produce and transport construction materials associated with construction of additional residential units on Sites 68 through 72 within the North Watt Avenue Corridor area. It is assumed that this construction would begin in June 2025 and conclude in March 2027. The one-time energy expenditure required to construct the physical buildings and infrastructure associated with future development on Site 68 through 72 would be nonrecoverable. Most energy consumption would result from operation of construction equipment and vehicle trips associated with commutes by construction workers and haul trucks supplying materials. Tables EN-19 and EN-20 summarize the estimate of fuel needed for construction activities associated with development on Sites 68 through 72 without and with the proposed rezone, respectively. Tables EN-21 and EN-22 summarize the gallons of fuel per capita required for construction on Sites 68-72 with and without the proposed rezone, respectively.

Although construction activities would require fuel and other energy sources, consumption of fuel and energy uses would be temporary. Construction contractors strive to complete construction projects in an efficient manner to meet project schedules and minimize cost (to maximize their profitability). Therefore, only the necessary amount of fuel would be consumed. The energy expenditure as part of development currently allowed on the candidate rezone sites is anticipated to be comparable to the energy needed to construct on Sites 68 through 72 as part of the proposed rezone (see Tables EN-19 and EN-20). The

Project would result in increased density of Sites 68 through 72 as compared to what was analyzed in the North Watt Avenue EIR. Therefore, development on Sites 68 through 72 as part of the Project would result in more efficient energy expenditure on a per capita basis as shown in Tables EN-21 and EN-22. Since more of the energy consumed during construction would occur during construction of the building foundation, as density of the building increases, energy efficiency during construction would become more efficient.

Table EN-19: North Watt Avenue Corridor Plan Construction Energy Consumption Before Rezone

Year	Diesel (Gallons)[1]	Gasoline (Gallons)[2]	Total (Gallons)
2025	31,234	20,861	52,095
2026	46,327	50,342	96,669
2027	2,478	1,999	4,477
Total	80,039	73,202	153,241

[1] Diesel gallons include off-road equipment and on-road gallons from worker and vendor trips.

[2] Gasoline gallons include on-road gallons from worker trips.

Source: Calculations by Ascent Environmental in 2024.

Table EN-20: North Watt Avenue Corridor Plan Construction Energy Consumption After Rezone

Year	Diesel (Gallons)[1]	Gasoline (Gallons)[2]	Total (Gallons)
2025	34,682	30,200	64,882
2026	54,848	73,349	128,197
2027	2,659	2,831	5,491
Total	92,189	106,380	198,569

[1] Diesel gallons include off-road equipment and on-road gallons from worker and vendor trips.

[2] Gasoline gallons include on-road gallons from worker trips.

Source: Calculations by Ascent Environmental in 2024.

Table EN-21: North Watt Avenue Corridor Plan Construction Energy Consumption Before Rezone Per Capita

Year	Diesel (Gallons)[1]	Gasoline (Gallons)[2]	Total (Gallons)
2025	22.1	14.8	36.8
2026	32.8	35.6	68.4
2027	1.8	1.4	3.2
Average	18.9	17.3	36.1

[1] Diesel gallons include off-road equipment and on-road gallons from worker and vendor trips.

[2] Gasoline gallons include on-road gallons from worker trips.

Based on Assumed Population of 1,414 from CalEEMod defaults

Source: Calculations by Ascent Environmental in 2024.

Table EN-22: North Watt Avenue Corridor Plan Construction Energy Consumption After Rezone Per Capita

Year	Diesel (Gallons)[1]	Gasoline (Gallons)[2]	Total (Gallons)
2025	16.9	14.7	31.5
2026	26.7	35.6	62.3
2027	1.3	1.4	2.7
Average	14.9	17.2	32.2

[1] Diesel gallons include off-road equipment and on-road gallons from worker and vendor trips.

[2] Gasoline gallons include on-road gallons from worker trips.

Based on an assumed population of 2,058 from CalEEMod defaults

Source: Calculations by Ascent Inc. in 2024.

BUILDING ENERGY

As shown in Tables EN-23 and EN-24, operational electricity and natural gas demand associated with residential development on Site 68 through 72 would increase as part of development allowed under the rezone. For a list of assumptions made to estimate operational energy consumption, see Appendix AQ-1. However, as shown in Tables EN-25 and EN-26, per capita energy consumption would decrease with the proposed rezone on Sites 68 through 72. A similar amount of energy is required to power the buildings of the same size, regardless of units in that building. Therefore, as density within the building increases, energy efficiency would increase. As population and units developed Sites 68 through 72 increase, energy efficiency also increases.

In addition, GHG emissions reduction BMPs, such as requiring new developments to eliminate natural gas, would be required for future projects pursuant to Mitigation Measure CC-2, in Chapter 6 “Climate Change. This measure would offset GHG emissions associated with the energy sector. Therefore, emissions presented in EN-24 and EN-26 represent a worst-case scenario of energy consumption associated with the proposed rezone on Sites 68 through 72 and future energy consumption would likely be lower.

Table EN-23: North Watt Avenue Corridor Plan Operational Energy Consumption Before Rezone

Land Use/Energy Type	Energy Consumption	Units
Electricity	2.5	GWh/year
Natural Gas	6,431	MMBTU/year

Notes: GWh/year = gigawatt-hours per year; MMBTU = million British thermal units.

Source: Calculations by Ascent Environmental in 2024.

Table EN-24: North Watt Avenue Corridor Plan Operational Energy Consumption After Rezone

Land Use/Energy Type	Energy Consumption	Units
Electricity	3.6	GWh/year
Natural Gas	9,825	MMBTU/year

Notes: GWh/year = gigawatt-hours per year; MMBTU = million British thermal units.

Source: Calculations by Ascent Environmental in 2024.

Table EN-25: North Watt Avenue Corridor Plan Operational Energy Consumption Per Capita Before Rezone

Land Use/Energy Type	Energy Consumption	Units
Electricity	0.00027	GWh/year/capita
Natural Gas	0.69	MMBTU/year/capita

Notes: GWh/year = gigawatt-hours per year; MMBTU = million British thermal units.

Assumed Population of 1,414 from CalEEMod Defaults

Source: Calculations by Ascent Environmental in 2024.

Table EN-26: North Watt Avenue Corridor Plan Operational Energy Consumption Per Capita After Rezone

Land Use/Energy Type	Energy Consumption	Units
Electricity	0.00018	GWh/year/capita
Natural Gas	0.47	MMBTU/year/capita

Notes: GWh/year = gigawatt-hours per year; MMBTU = million British thermal units.

Assumed Population of 2,058 from CalEEMod Defaults

Source: Calculations by Ascent Environmental in 2024.

TRANSPORTATION ENERGY

Residential trips would make up the majority of VMT associated with Sites 68 through 72, with occasional maintenance and delivery trips accounting for the other VMT. The net fuel consumption associated with development on Sites 68 through 72 would not be considered wasteful, inefficient, or unnecessary in comparison to other similar developments in the region. State and federal regulations regarding fuel efficiency standards for vehicles in California are designed to reduce wasteful, inefficient, and unnecessary use of energy for transportation, such as the Energy Independence and Security Act which increases the average fuel economy of cars over time and the State of California Energy Action Plan which encourages urban designs that reduce the average trip length, which reduces VMT. Table EN-27 provides a summary of annual VMT and annual VMT per capita for currently permitted and proposed development on Sites 68 through 72.

Table EN-27: North Watt Avenue Corridor Plan Operational VMT

Scenario	Annual VMT	Annual VMT/Capita
Before Rezone	14,594,777	10,322
After Rezone	15,071,676	7,323

Notes: VMT = Vehicle Miles Traveled.

Source: Calculations by Ascent Environmental in 2024.

As seen in Table EN-27, as population increases VMT also increases. However, VMT per capita becomes more efficient as density increases, thus the North Watt Avenue Corridor Plan would be more VMT efficient with development on Sites 68 through 72 as part of the proposed rezone when compared to the approved land uses.

Although Sites 68-72 would require more fuel, energy, and natural gas consumption, while also increasing VMT, with the proposed land uses when compared to the approved land uses, the Project becomes more fuel, energy, and VMT efficient as shown in Tables EN-25, EN-26, and EN-27.

SUMMARY

Fuel consumption, energy and natural gas demand, and VMT per capita would all become more efficient with increased density as a result of development on Sites 68 through 72 as part of the proposed rezone.

Pursuant to CEQA Guidelines Section 15162, development on Sites 68 through 72 as part of the proposed rezone would not result in new or more severe impacts related to energy and the usage of energy for construction and operation on Sites 68 through 72 would not be considered wasteful, inefficient, or unnecessary. The Project's contribution to impacts would not be substantial and overall impacts would be less than significant.

MITIGATION MEASURES

Mitigation not required.

OLD FLORIN TOWN SPA

CONSTRUCTION ENERGY

Energy would be required to construct, operate, and maintain construction equipment and to produce and transport construction materials associated with construction of the additional residential units allowed on Sites 73 through 79 as part of the Project. It is assumed that construction would begin in March 2027 and conclude in November 2028. The one-time energy expenditure required to construct the physical buildings and infrastructure associated with Sites 73 through 79 would be nonrecoverable. Most energy consumption would result from operation of construction equipment and vehicle trips associated with commutes by construction workers and haul trucks supplying materials. Tables EN-28 and EN-29 summarize the estimated amounts of fuel needed for construction activities associated development on Sites 73 through 79 with and without the proposed rezone, respectively. Tables EN-30 and EN-31 summarize the gallons of fuel per capita required for construction of the existing and proposed land uses and zoning designations on Sites 73 through 79.

Although construction activities would require fuel and other energy sources, consumption of fuel and energy uses would be temporary. Construction contractors strive to complete construction projects in an efficient manner to meet project schedules and minimize cost (to maximize their profitability). Therefore, only the necessary amount of fuel would be consumed. Had the Old Florin Town SPA EIR conducted an analysis of energy consumed during construction, the energy expenditure would be comparable to the energy needed to construct housing under the proposed rezone on Sites 73 through 79. Additionally, Sites 73 through 79 were assumed to be developed as part of the analysis for the Old Florin Tonw EIR. The Project would result in increased development density on Sites 73 through 79 as compared to what was analyzed in the Old Florin Town SPA EIR. The majority of energy expended during construction would occur during the building of the foundation. Less energy is needed to construct the units inside the building, so as more units are added, efficiency would be expected to increase. Therefore, development on Sites 73 through 79 as part of the Project would result in more efficient energy expenditure on a per capita basis as shown in Tables EN-30 and EN-31.

Table EN-28: Old Florin Town SPA Construction Energy Consumption Before Rezone

Year	Diesel (Gallons)[1]	Gasoline (Gallons)[2]	Total (Gallons)
2027	42,517	32,575	75,092
2028	36,339	37,910	74,249
Total	78,856	70,485	149,341

1 Diesel gallons include off-road equipment and on-road gallons from worker and vendor trips.

2 Gasoline gallons include on-road gallons from worker trips.

Source: Calculations by Ascent Environmental in 2024.

Table EN-29: Old Florin Town SPA Construction Energy Consumption After Rezone

Year	Diesel (Gallons)[1]	Gasoline (Gallons)[2]	Total (Gallons)
2027	48,981	50,115	99,096
2028	43,535	58,343	101,878
Total	92,516	108,458	200,974

[1] Diesel gallons include off-road equipment and on-road gallons from worker and vendor trips.

[2] Gasoline gallons include on-road gallons from worker trips.

Source: Calculations by Ascent Environmental in 2024.

Table EN-30: Old Florin Town SPA Construction Energy Consumption Before Rezone Per Capita

Year	Diesel (Gallons)[1]	Gasoline (Gallons)[2]	Total (Gallons)
2027	30.2	23.1	53.3
2028	25.8	26.9	52.7
Average	28.0	25.0	53.0

[1] Diesel gallons include off-road equipment and on-road gallons from worker and vendor trips.

[2] Gasoline gallons include on-road gallons from worker trips.

Based on Assumed Population of 1,408 from CalEEMod defaults

Source: Calculations by Ascent Environmental in 2024.

Table EN-31: Old Florin Town SPA Construction Energy Consumption After Rezone Per Capita

Year	Diesel (Gallons)[1]	Gasoline (Gallons)[2]	Total (Gallons)
2027	22.5	23.0	45.5
2028	20.0	26.8	46.8
Average	21.3	24.9	46.2

[1] Diesel gallons include off-road equipment and on-road gallons from worker and vendor trips.

[2] Gasoline gallons include on-road gallons from worker trips.

Based on an assumed population of 2,176 from CalEEMod defaults

Source: Calculations by Ascent Inc. in 2024.

BUILDING ENERGY

As shown in Tables EN-32 and EN-33, operational electricity and natural gas demand associated with residential development on Sites 73 through 79 would increase as part of the rezone. For a list of assumptions made to estimate operational energy

consumption, see Appendix AQ-1. However, as shown in Tables EN-34 and EN-35, per capita energy consumption would decrease as part of development on Sites 73 through 79 under the Project. Building energy is more tied to the size of the building, rather than the number of units in the building. Therefore, as more people are able to live in the building, efficiency would increase. As population and units developed Sites 73 through 79 increase, energy efficiency also increases.

In addition, GHG emissions reduction BMPs, such as requiring new developments to eliminate natural gas would be required for future projects pursuant to Mitigation Measure CC-2, in Chapter 6 “Climate Change. This measure would offset GHG emissions associated with the energy sector. Therefore, emissions presented in EN-32 and EN-35 represent a worst-case scenario of energy consumption associated with the proposed rezone on Sites 73 through 79 and future energy consumption would likely be lower.

Table EN-32: Old Florin Town SPA Operational Energy Consumption Before Rezone

Land Use/Energy Type	Energy Consumption	Units
Electricity	2.5	GWh/year
Natural Gas	6,406	MMBTU/year

Notes: GWh/year = gigawatt-hours per year; MMBTU = million British thermal units.

Source: Calculations by Ascent Environmental in 2024.

Table EN-33: Old Florin Town SPA Operational Energy Consumption After Rezone

Land Use/Energy Type	Energy Consumption	Units
Electricity	3.9	GWh/year
Natural Gas	10,387	MMBTU/year

Notes: GWh/year = gigawatt-hours per year; MMBTU = million British thermal units.

Source: Calculations by Ascent Environmental in 2024.

Table EN-34: Old Florin Town SPA Operational Energy Consumption Per Capita Before Rezone

Land Use/Energy Type	Energy Consumption	Units
Electricity	0.00027	GWh/year/capita
Natural Gas	0.69	MMBTU/year/capita

Notes: GWh/year = gigawatt-hours per year; MMBTU = million British thermal units.

Assumed Population of 1,408 from CalEEMod Defaults

Source: Calculations by Ascent Environmental in 2024.

Table EN-35: Old Florin Town SPA Operational Energy Consumption Per Capita After Rezone

Land Use/Energy Type	Energy Consumption	Units
Electricity	0.00019	GWh/year/capita
Natural Gas	0.50	MMBTU/year/capita

Notes: GWh/year = gigawatt-hours per year; MMBTU = million British thermal units.

Assumed Population of 2,176 from CalEEMod Defaults

Source: Calculations by Ascent Environmental in 2024.

TRANSPORTATION ENERGY

Residential trips would make up the majority of VMT associated with Sites 73 through 79, with occasional maintenance and delivery trips accounting for the other VMT. The net fuel consumption associated with Sites 73 through 79 would not be considered wasteful, inefficient, or unnecessary in comparison to other similar developments in the region. State and federal regulations regarding fuel efficiency standards for vehicles in California are designed to reduce wasteful, inefficient, and unnecessary use of energy for transportation, such as the Energy Independence and Security Act which increases the average fuel economy of cars over time and the State of California Energy Action Plan which encourages urban designs that reduce the average trip length, which reduces VMT. Table EN-36 provides a summary of annual VMT and annual VMT per capita for currently permitted and proposed development on Sites 73 through 79.

Table EN-36: Old Florin Town SPA Operational VMT

Scenario	Annual VMT	Annual VMT/Capita
Before Rezone	9,423,871	6,693
After Rezone	10,328,814	4,747

Notes: VMT = Vehicle Miles Traveled.

Source: Calculations by Ascent Environmental in 2024

As shown in Table EN-36, as population increases VMT also increases. However, VMT per capita becomes more efficient as density increases, thus development in the Old Florin Town SPA as part of the rezone would be more VMT efficient with development on Sites 73 through 79 compared to the currently approved land uses. Although Sites 73 through 79 would require more fuel, energy, and natural gas consumption, while also increasing VMT, with the proposed land uses when compared to the approved land uses the Project becomes more fuel, energy, and VMT efficient as shown in Tables EN-34, EN-35, and EN-36.

SUMMARY

Fuel consumption, energy and natural gas demand, and VMT per capita all become more efficient with increased density as a result of development on Sites 73 through 79 as part of the proposed rezone.

Pursuant to CEQA Guidelines Section 15162, development on Sites 73 through 79 as part of the proposed rezone would not result in new or more severe impacts related to energy and the usage of energy for construction and operation on Sites 73 through 79 would not be considered wasteful, inefficient, or unnecessary. The Project's contribution to impacts would not be substantial and overall impacts would be less than significant.

MITIGATION MEASURES

Mitigation not required.

IMPACT EN-2: OBSTRUCT A STATE OR LOCAL PLAN FOR RENEWABLE ENERGY OR ENERGY EFFICIENCY

SACRAMENTO COUNTY GENERAL PLAN

GENERAL PLAN ENVIRONMENTAL IMPACT REPORT DETERMINATION

As discussed above, because Appendix G of the State CEQA Guidelines was updated in 2018, prior to certification of the General Plan EIR new significance criteria associated with evaluating a project's potential impacts related to energy were not addressed in the General Plan EIR, including the significance criteria related to a project's potential to obstruct a state or local plan for renewable energy or energy efficiency. The General Plan EIR does not include an impact evaluation that specifically addresses this topic.

PROPOSED PROJECT IMPACT EVALUATION

Relevant plans that pertain to the efficient use of energy include the Energy Efficiency Action Plan, which focuses on energy efficiency and building decarbonization (CEC 2019), as well as the 2022 Scoping Plan.

The Energy Efficiency Action Plan aims to drive energy efficiency: doubling energy efficiency savings by 2030, removing and reducing barriers to energy efficiency in low-income and disadvantaged communities, and reducing GHG emissions from the buildings sector. The 2022 Scoping Plan focuses on achieving Carbon Neutrality and reduce GHG emissions by 85 percent below 1990 levels no later than 2045 by deploying clean technologies and fuels, further reductions in short-lived climate pollutants, support for sustainable development, increased action on natural and working lands to reduce emissions and sequester carbon, and the capture and storage of carbon.

As discussed in the preceding impact, although future development associated with the Project has the potential to result in the overall increase in consumption of energy resources during construction and operation, development as part of the Project would result in implementation of various energy conservation features. The energy conservation features would be incorporated into new development as part of the Project, such as the installation of energy efficient appliances and increasing residential density, which increases energy efficiency associated with the Project, and aligning with the Energy Efficiency Action Plan. Energy reduction features would align with the GHG reduction and energy efficiency goals of the 2022 Scoping Plan by deploying clean technologies and support sustainable development. Additionally, the 2022 CALGreen requires installation of EV charging stations, which would align with the goal of reducing fossil fuel consumption set forth in the 2022 Scoping Plan. Since certification of the General Plan EIR, the regulatory setting related to energy has become more stringent in its energy efficiency and conservation requirements and goals. Therefore, future development as part of the Project would be required to comply with stricter regulations than those were in place at the time the General Plan EIR was certified. Because development as part of the Project would be subject to these stricter regulations, the Project would not conflict with the goals of the 2022 Scoping Plan, as regulations are often created in consideration of scoping plan goals. Therefore, the Project would not

result in a new or substantially more severe impact related to conflicts with a State or local plan for renewable energy. Impacts would be **less than significant.**

MITIGATION MEASURES

Mitigation not required.

DISTINCT AREA PLANS

As discussed above, because Appendix G of the State CEQA Guidelines was updated in 2018, prior to certification of the distinct area plan EIRs, new significance criteria associated with evaluating a project's potential impacts related to energy were not addressed in the distinct area plan EIRs, including the significance criteria related to a project's potential to obstruct a state or local plan for renewable energy or energy efficiency. The distinct area plan EIRs do not include impact evaluations that specifically address this topic.

FAIR OAKS BOULEVARD CORRIDOR PLAN

Although development on Site 67 within the Fair Oaks Boulevard Corridor area has the potential to result in the overall increase in consumption of energy resources during construction and operation, development as part of the rezone on Site 67 would ensure various energy conservation and generation features would be incorporated into new development, such as the installation of energy efficient appliances and elimination of new natural gas infrastructure, aligning with the Energy Efficiency Action Plan. Installation of energy efficient features would align with the GHG reduction and energy efficiency goals of the 2022 Scoping Plan by deploying clean technologies and support sustainable development. Additionally, the 2022 CALGreen requires installation of EV charging stations, which would align with the goal of reducing fossil fuel consumption set forth in the 2022 Scoping Plan. Since certification of the Fair Oaks Boulevard EIR, the regulatory setting related to energy has become more stringent in its energy efficiency and conservation requirements and goals. Therefore, Site 67 would be required to comply with stricter regulations than those were in place at the time the Fair Oaks Boulevard EIR was certified. Because the Fair Oaks Boulevard Corridor Plan would be subject to these stricter regulations, development on Site 67 would not conflict with the goals of the 2022 Scoping Plan, as these regulations are often created in consideration of these goals. Pursuant to CEQA Guidelines Section 15162, development on Site 67 would not result in a new or more severe impact related to conflicts with a State or local plan for renewable energy. Impacts would be less than significant. The contribution to impacts from the proposed rezone on Site 67 would not be substantial and overall impacts would be less than significant.

MITIGATION MEASURES

Mitigation not required.

NORTH WATT AVENUE CORRIDOR PLAN

Although implementation of the North Watt Avenue Corridor Plan has the potential to result in the overall increase in consumption of energy resources during construction and operation of new buildings and facilities, implementation of the North Watt Avenue Corridor Plan would ensure various energy conservation and generation features would be incorporated into new development including the installation of energy efficient

appliances aligning with the Energy Efficiency Action Plan. These features would also align with the GHG reduction and energy efficiency goals of the 2022 Scoping Plan by deploying clean technologies and support sustainable development. Additionally, the 2022 CALGreen requires installation of electric vehicle charging stations, which would also align with the goal of reducing fossil fuel consumption set forth in the 2022 Scoping Plan. Since certification of the North Watt Avenue EIR, the regulatory setting related to energy has become more stringent in its energy efficiency and conservation requirements and goals. Therefore, Sites 68 through 72 would be required to comply with stricter regulations than those were in place at the time the North Watt Avenue EIR was certified. Because the North Watt Avenue Corridor Plan would be subject to these stricter regulations, it is unlikely that Sites 68 through 72 would conflict with the goals of the 2022 Scoping Plan, as these regulations are often created in consideration of these goals. Pursuant to CEQA Guidelines Section 15162, development on Sites 68 through 72 would not result in a new or more severe impact related to conflicts with a State or local plan for renewable energy. Impacts would be less than significant. The contribution to impacts from the proposed rezone on Sites 68 through 72 would not be substantial and overall impacts would be less than significant.

OLD FLORIN TOWN SPA

Although implementation of the Old Florin Town SPA has the potential to result in the overall increase in consumption of energy resources during construction and operation of new buildings and facilities, implementation of the Old Florin Town SPA would ensure various energy conservation and generation features would be incorporated into new development including the installation of energy efficient appliances aligning with the Energy Efficiency Action Plan. These features would also align with the GHG reduction and energy efficiency goals of the 2022 Scoping Plan by deploying clean technologies and support sustainable development. Additionally, the 2022 CALGreen requires installation of electric vehicle charging stations, which would also align with the goal of reducing fossil fuel consumption set forth in the 2022 Scoping Plan. Since certification of the Old Florin Town SPA EIR, the regulatory setting related to energy has become more stringent in its energy efficiency and conservation requirements and goals. Therefore, Sites 73 through 79 would be required to comply with stricter regulations than those were in place at the time the Old Florin Town SPA EIR was certified. Because Sites 73 through 79 would be subject to these stricter regulations, it is unlikely that the Old Florin Town SPA would conflict with the goals of the 2022 Scoping Plan, as these regulations are often created in consideration of these goals. Pursuant to CEQA Guidelines Section 15162, development on Sites 73 through 79 would not result in a new or more severe impact related to conflicts with a State or local plan for renewable energy. Impacts would be less than significant. The contribution to impacts from the proposed rezone on Sites 73 through 79 would not be substantial and overall impacts would be less than significant.

CUMULATIVE ENERGY

CUMULATIVE SETTING

The geographic area considered for cumulative impacts related to energy use includes SMUD and PG&E service areas. SMUD and PG&E employ various programs and mechanisms to support the provision of electricity and natural gas services to new

development and recoup costs of new infrastructure. Connection fees are typically charged through standard billing for services.

Past, present, or reasonably foreseeable projects could also receive electricity service from SMUD and natural gas service from PG&E. These projects would consume energy related to transportation (i.e., gasoline and diesel consumption for passenger vehicles, trucks, buses, and other vehicles) and construction and operations. There is no evidence to suggest that implementation of development would result in a significant cumulative energy impact related to the wasteful or inefficient use of energy.

EN-3: The Project, In Combination With Past, Present, And Reasonably Foreseeable Projects, Could Result In A Significant Cumulative Impact With Respect To Energy

Impact EN-1 concludes that the Project would not result in the wasteful or inefficient use of energy and that the Project would be more efficient with the proposed land uses compared to the approved land uses. Although construction would be slightly less efficient with the proposed land uses, building energy efficiency would be more than twice as efficient and VMT per capita would decrease by an estimated 29 percent. This would more than make up for the 0.6 percent increase in construction fuel consumption per capita. Because implantation of the Project would not result in the wasteful or inefficient use of energy, the Project's contribution would not be cumulatively considerable. Impact EN-2 concludes that the Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. Development as part of the Project would be required by state regulations to install EV chargers and GHG emission reduction BMPs (e.g., eliminating natural gas infrastructure) pursuant to Mitigation Measure CC-2, in Chapter 6 "Climate Change. Additionally, as stated above, the Project would increase energy efficiency in the County. The Project would be required to implement energy efficiency measures in accordance with Part 6 of the Title 24 California Building Code (California Energy Code) to reduce energy demand from buildings. Therefore, the Project's contribution to cumulative energy would not be cumulatively considerable and thus not significant.

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8 NOISE AND VIBRATION

INTRODUCTION

This chapter includes a summary of applicable regulations related to noise and vibration, a description of existing ambient-noise conditions, and an analysis of potential short-term and long-term operational-source noise impacts associated with increased residential development that would be allowed under the Project. The primary sources of information used for this analysis are the Sacramento County 2030 General Plan (General Plan) and the General Plan Final EIR (General Plan EIR), the Fair Oaks Boulevard Corridor Plan EIR (Fair Oaks Boulevard EIR), the North Watt Avenue Corridor Plan EIR (North Watt Avenue EIR), and the Old Florin Town Special Planning Area (SPA) EIR (Old Florin Town SPA EIR).

No scoping comments were received regarding noise and vibration in response to the notice of preparation (NOP) public review periods. The NOP and comments received in response to the NOP are provided in Appendix INTRO-1.

ACOUSTIC OVERVIEW

ACOUSTIC FUNDAMENTALS

Before discussing the noise environmental setting for the Project, background information about sound, noise, vibration, and common noise descriptors is needed to provide context and a better understanding of the technical terms referenced throughout this section.

SOUND, NOISE, AND ACOUSTICS

Sound can be described as the mechanical energy of a vibrating object transmitted by pressure waves through a liquid or gaseous medium (e.g., air) to a human ear. Noise is defined as loud, unexpected, annoying, or unwanted sound.

In the science of acoustics, the fundamental model consists of a sound (or noise) source, a receiver, and the propagation path between the two. The loudness of the noise source and obstructions or atmospheric factors affecting the propagation path to the receiver determines the sound level and characteristics of the noise perceived by the receiver. The field of acoustics deals primarily with the propagation and control of sound.

FREQUENCY

Continuous sound can be described by frequency (pitch) and amplitude (loudness). A low-frequency sound is perceived as low in pitch. Frequency is expressed in terms of cycles per second, or hertz (Hz) (e.g., a frequency of 250 cycles per second is referred to as 250 Hz). High frequencies are sometimes more conveniently expressed in kilohertz or thousands of hertz. The audible frequency range for humans is generally between 20 Hz and 20,000 Hz.

Sound Pressure Levels and Decibels

The amplitude of pressure waves generated by a sound source determines the loudness of that source. Sound pressure amplitude is measured in micro-Pascals (mPa). One mPa is approximately one hundred billionths (0.00000000001) of normal atmospheric pressure. Sound pressure amplitudes for different kinds of noise environments can range from less than 100 to 100,000,000 mPa. Because of this large range of values, sound is rarely expressed in terms of mPa. Instead, a logarithmic scale is used to describe sound pressure level (SPL) in terms of decibels (dB).

Addition of Decibels

Because decibels are logarithmic units, SPLs cannot be added or subtracted through ordinary arithmetic. Under the decibel scale, a doubling of sound energy corresponds to a 3-dB increase. In other words, when two identical sources are each producing sound of the same loudness at the same time, the resulting sound level at a given distance would be 3 dB higher than if only one of the sound sources was producing sound under the same conditions. For example, if one idling truck generates an SPL of 70 dB, two trucks idling simultaneously would not produce 140 dB; rather, they would combine to produce 73 dB. Under the decibel scale, three sources of equal loudness together produce a sound level of approximately 5 dB louder than one source.

A-Weighted Decibels

The decibel scale alone does not adequately characterize how humans perceive noise. The dominant frequencies of a sound have a substantial effect on the human response to that sound. Although the intensity (energy per unit area) of the sound is a purely physical quantity, the loudness or human response is determined by the characteristics of the human ear.

Human hearing is limited in the range of audible frequencies, as well as in the way it perceives the SPL in that range. In general, people are most sensitive to the frequency range of 1,000–5,000 Hz and perceive sounds within this range better than sounds of the same amplitude with frequencies outside of this range. To approximate the response of the human ear, sound levels of individual frequency bands are weighted, depending on the human sensitivity to those frequencies. Then, an “A-weighted” sound level (expressed in units of A-weighted decibels) can be computed based on this information.

The A-weighting network approximates the frequency response of the average young ear when listening to most ordinary sounds. When people make judgments of the relative loudness or annoyance of a sound, their judgment correlates well with the A-scale sound levels of those sounds. Thus, noise levels are typically reported in terms of A-weighted decibels. All sound levels discussed in this section are A-weighted decibels. Table NOI-1: Typical A-Weighted Noise Levels describes typical A-weighted noise levels for various noise sources.

Table NOI-1: Typical A-Weighted Noise Levels

Common Outdoor Activities	Noise Level (dB)	Common Indoor Activities
	— 110 —	Rock band
Jet fly-over at 1,000 feet	— 100 —	
Gas lawn mower at 3 feet	— 90 —	
Diesel truck at 50 feet at 50 miles per hour	— 80 —	Food blender at 3 feet, Garbage disposal at 3 feet
Noisy urban area, daytime, Gas lawn mower at 100 feet	— 70 —	Vacuum cleaner at 10 feet, Normal speech at 3 feet
Commercial area, Heavy traffic at 300 feet	— 60 —	
Quiet urban daytime	— 50 —	Large business office, Dishwasher next room
Quiet urban nighttime	— 40 —	Theater, large conference room (background)
Quiet suburban nighttime	— 30 —	Library, Bedroom at night
Quiet rural nighttime	— 20 —	
	— 10 —	Broadcast/recording studio
Lowest threshold of human hearing	— 0 —	Lowest threshold of human hearing

Source: Caltrans 2013: Table 2-5.

HUMAN RESPONSE TO CHANGES IN NOISE LEVELS

As described above, the doubling of sound energy results in a 3-dB increase in the sound level. However, given a sound level change measured with precise instrumentation, the subjective human perception of a doubling of loudness will usually be different from what is measured.

Under controlled conditions in an acoustical laboratory, the trained, healthy human ear is able to discern 1-dB changes in sound levels when exposed to steady, single-frequency ("pure-tone") signals in the mid-frequency (1,000–8,000 Hz) range. In general, the healthy human ear is most sensitive to sounds between 1,000 and 5,000 Hz and perceives both higher and lower frequency sounds of the same magnitude with less intensity (Caltrans 2013:2-18). In typical noisy environments, changes in noise of 1–2 dB are generally not perceptible. However, it is widely accepted that people are able to begin to detect sound level increases of 3 dB in typical noisy environments. A doubling of sound energy (e.g., doubling the volume of traffic on a highway) that would result in a 3-dB increase in sound would generally be perceived as barely detectable. Further, a 5 dB increase is generally perceived as a distinctly noticeable increase, and a 10-dB increase is generally perceived as a doubling of loudness (Caltrans 2013: 2-10).

VIBRATION

Vibration is the periodic oscillation of a medium or object with respect to a given reference point. Sources of vibration include natural phenomena (e.g., earthquakes, volcanic eruptions, sea waves, landslides) and those introduced by human activity (e.g., explosions, machinery, traffic, trains, construction equipment). Vibration sources may be continuous, (e.g., operating factory machinery) or transient in nature (e.g., explosions).

Vibration levels can be depicted in terms of amplitude and frequency relative to displacement, velocity, or acceleration.

Vibration amplitudes are commonly expressed in peak particle velocity (PPV) or root-mean-square (RMS) vibration velocity. PPV and RMS vibration velocity are normally described in inches per second (in/sec) or in millimeters per second. PPV is defined as the maximum instantaneous positive or negative peak of a vibration signal. PPV is typically used in the monitoring of transient and impact vibration and has been found to correlate well to the stresses experienced by buildings (FTA 2018: 110, Caltrans 2020: 6).

Although PPV is appropriate for evaluating the potential for building damage, it is not always suitable for evaluating human response. It takes some time for the human body to respond to vibration signals. In a sense, the human body responds to average vibration amplitude. The RMS of a signal is the average of the squared amplitude of the signal, typically calculated over a 1-second period. As with airborne sound, the RMS velocity is often expressed in decibel notation as vibration decibels (VdB), which serves to compress the range of numbers required to describe vibration (FTA 2018: 110, Caltrans 2020: 7). This is based on a reference value of 1 micro inch per second.

The typical background vibration-velocity level in residential areas is approximately 50 VdB. Ground vibration is normally perceptible to humans at approximately 65 VdB. For most people, a vibration-velocity level of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels (FTA 2018: 120, Caltrans 2020: 27).

Typical outdoor sources of perceptible ground vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If a roadway is smooth, the ground vibration from traffic is rarely perceptible. The range of interest is from approximately 50 VdB, which is the typical background vibration-velocity level, to 100 VdB, which is the general threshold where minor damage can occur to fragile buildings. Construction activities can generate sufficient ground vibrations to pose a risk to nearby structures. Constant or transient vibrations can weaken structures, crack facades, and disturb occupants (FTA 2018: 113).

Vibrations generated by construction activity can be transient, random, or continuous. Transient construction vibrations are generated by blasting, impact pile driving, and wrecking balls. Continuous vibrations are generated by vibratory pile drivers, large pumps, and compressors. Random vibration can result from jackhammers, pavement breakers, and heavy construction equipment. Table NOI-2 summarizes the general human response to different ground vibration-velocity levels.

Table NOI-2: Human Response to Different Levels of Ground Noise and Vibration

Vibration-Velocity Level	Human Reaction
65 VdB	Approximate threshold of perception.
75 VdB	Approximate dividing line between barely perceptible and distinctly perceptible. Many people find that transportation-related vibration at this level is annoying.
85 VdB	Vibration tolerable only if there are an infrequent number of events per day.

Notes: VdB = vibration decibels referenced to 1 µ inch/second and based on the RMS velocity amplitude.

Source: FTA 2018: 120.

COMMON NOISE DESCRIPTORS

Noise in our daily environment fluctuates over time. Various noise descriptors have been developed to describe time-varying noise levels. Table NOI-3 summarizes common noise terms used throughout this section.

Table NOI-3: Definition of Common Noise Descriptors

Terms	Definitions
Equivalent Continuous Sound Level (L_{eq})	L_{eq} represents an average of the sound energy occurring over a specified period. In effect, L_{eq} is the steady-state sound level containing the same acoustical energy as the time-varying sound level that occurs during the same period (Caltrans 2013: 2-48). For instance, the 1-hour equivalent sound level, also referred to as the hourly L_{eq}, is the energy average of sound levels occurring during a 1-hour period and is the basis for noise abatement criteria used by the California Department of Transportation (Caltrans) and the Federal Highway Administration (FHWA) (Caltrans 2013: 2-47, FTA 2018: Table 3-1).
Percentile-Exceeded Sound Level (L_x)	L_x represents the sound level exceeded for a given percentage of a specified period (e.g., L_{10} is the sound level exceeded 10 percent of the time, and L_{90} is the sound level exceeded 90 percent of the time) (Caltrans 2013: 2-48).
Maximum Sound Level (L_{max})	L_{max} is the highest instantaneous sound level measured during a specified period (Caltrans 2013: 2-48, FTA 2018: Table 3-1).
Day-Night Sound Level (L_{dn})	L_{dn} is the energy average of A-weighted sound levels occurring over a 24-hour period, with a 10-dB "penalty" applied to sound levels occurring during nighttime hours between 10:00 p.m. and 7:00 a.m. (Caltrans 2013: 2-48, FTA 2018: Table 3-1).
Community Noise Equivalent Level (CNEL)	CNEL is the energy average of the A-weighted sound levels occurring over a 24-hour period, with a 10-dB penalty applied to sound levels occurring during the nighttime hours between 10:00 p.m. and 7:00 a.m. and a 5-dB penalty applied to the sound levels occurring during evening hours between 7:00 p.m. and 10:00 p.m. (Caltrans 2013: 2-48). Many agencies and local jurisdictions in California have established noise standards using the CNEL metric. The CNEL metric is not used by federal agencies and not commonly used in standards established by local communities outside of California.

SOUND PROPAGATION

When sound propagates over a distance, it changes in level and frequency content. The manner in which a noise level decreases with distance depends on the factors described below.

GEOMETRIC SPREADING

Sound from a localized source (i.e., a point source) propagates uniformly outward in a spherical pattern. The sound level attenuates (or decreases) at a rate of 6 dB for each doubling of distance from a point source. Roads and highways consist of several localized noise sources on a defined path and hence can be treated as a line source, which approximates the effect of several point sources, thus propagating at a slower rate in

comparison to a point source. Noise from a line source propagates outward in a cylindrical pattern, often referred to as cylindrical spreading. Sound levels attenuate at a rate of 3 dB for each doubling of distance from a line source.

GROUND ABSORPTION

The propagation path of noise from a source to a receiver is usually very close to the ground. Noise attenuation from ground absorption and reflective wave canceling provide additional attenuation associated with geometric spreading. Traditionally, this additional attenuation has also been expressed in terms of attenuation per doubling of distance. This approximation is usually sufficiently accurate for distances of less than 200 feet. For acoustically hard sites (i.e., sites with a reflective surface between the source and the receiver, such as a parking lot or body of water), no excess ground attenuation is assumed. For acoustically absorptive or soft sites (i.e., those sites with an absorptive ground surface between the source and the receiver, such as soft dirt, grass, or scattered bushes and trees), additional ground-attenuation value of 1.5 dB per doubling of distance is normally assumed. When added to the attenuate rate associated with cylindrical spreading, the additional ground attenuation results in an overall drop-off rate of 4.5 dB per doubling of distance. This would hold true for point sources, resulting in an overall drop-off rate of up to 7.5 dB per doubling of distance.

ATMOSPHERIC EFFECTS

Receivers located downwind from a source can be exposed to increased noise levels relative to calm conditions, whereas locations upwind can have lowered noise levels, as wind can carry sound. Sound levels can be increased over large distances (e.g., more than 500 feet) from the source because of atmospheric temperature inversion (i.e., increasing temperature with elevation). Other factors such as air temperature, humidity, and turbulence can also affect sound attenuation.

SHIELDING BY NATURAL OR HUMAN-MADE FEATURES

A large object or barrier in the path between a noise source and a receiver attenuate noise levels at the receiver. The amount of attenuation provided by shielding depends on the size of the object and the frequency content of the noise source. Natural terrain features (e.g., hills and dense woods) and human-made features (e.g., buildings and walls) can substantially reduce noise levels. A barrier that breaks the line of sight between a source and a receiver will typically result in at least 5 dB of noise reduction (Caltrans 2013: 2-41, FTA 2018: 15, 16). Barriers higher than the line of sight provide increased noise reduction (FTA 2018: 16). Vegetation between the source and receiver is rarely effective in reducing noise because it does not create a solid barrier unless there are multiple rows of vegetation (FTA 2018: 15, 104, 106).

EXISTING NOISE ENVIRONMENTAL SETTING

State CEQA Guidelines Section 15162 indicates that should a lead agency determine that substantial changes to the project or its circumstances result in a new or more significant impact compared to what was addressed in a project's previous EIR, or new

information of substantial importance results in a new or more significant impact, a subsequent EIR (SEIR) should be prepared. Therefore, this document serves as a SEIR to General Plan EIR, as well as to EIRs prepared for various distinct area plans within which a portion of the candidate rezone sites are located. As discussed in "Introduction" section above, applicable distinct area plan EIRs include Fair Oaks Boulevard EIR, North Watt Avenue EIR, and Old Florin Town SPA EIR. The regional housing needs allocation (RHNA) shortfall of 2,884 lower income category units and needed buffer could not have been known at the time of the General Plan EIR certification, and the RHNA is in excess of the number of dwelling units analyzed in the General Plan EIR. The number of additional units required in various distinct area plans was not known at the time the applicable environmental documents were certified. As required by Section 15162, this SEIR evaluates the potential for the proposed Project or changes in the circumstances to result in new or substantially more severe significant environmental impact than previously analyzed under the General Plan and distinct area plan EIRs. The existing noise settings for unincorporated County, Fair Oaks Boulevard Corridor Plan area, North Watt Avenue Corridor Plan area, and Old Florin Town SPA are summarized below.

General Plan Existing Noise Setting

Existing Noise- and Vibration-Sensitive Land Uses

Noise sensitive land uses are generally considered to include those uses where noise exposure could result in health-related risks to individuals, as well as places where quiet is an essential element of their intended purpose. Residential uses are of primary concern because of the potential for increased and prolonged exposure of individuals to both interior and exterior noise levels, and because these land uses are places of rest and sleep for residents. Additional land uses such as parks, historic sites, cemeteries, sensitive habitats, and recreation areas are also considered sensitive to increases in exterior noise levels. Places of worship, hotels, transient lodging, schools, libraries, hospitals and nursing homes, office buildings, playgrounds, parks, and other places where low interior noise levels are desirable are also considered noise-sensitive land uses. These noise-sensitive uses are also considered vibration-sensitive land uses in addition to commercial and industrial buildings where vibration would interfere with operations within the building, including levels that may be well below those associated with human annoyance. Therefore, although commercial and industrial land uses are included in the existing noise settings, they are not considered noise sensitive.

Existing Noise Sources

The noise environment in Sacramento County is defined primarily by transportation, which includes car, aircraft, and train traffic. In addition to transportation noise sources, there are stationary noise sources within the County including commercial and industrial uses.

Traffic Noise

Several major roadways run through the County and contribute a notable amount of noise to the ambient environment. These roadways include Interstate 5 (I-5), Interstate 80 (I-80), State Route 99, SR-16, and United States Highway (US) 50. Noise levels along roadways are affected by various traffic characteristics, including average daily traffic

(ADT) volumes, vehicle mix, roadway conditions, vehicle speed, and the gradient of the roadway. Additionally, the extent to which nearby land uses are affected by exiting traffic noise depends on multiple factors, including their respective proximity to the roadways, shielding provided by intervening terrain and structures, and their individual sensitivity to noise. Existing noise levels associated with vehicle traffic near the candidate rezone sites were modeled using ADT (Table NOI-20).

RAILROAD NOISE

The heavy rail operators within Sacramento County are the Union Pacific Railroad (UPRR), Burlington Northern Santa Fe, and Amtrak. The unincorporated county is also served by Regional Transit Light Rail.

AIRPORT NOISE

There are seven airports within Sacramento County. Major airports include Sacramento International Airport, Mather Airport, Executive Airport, and McClellan Airport. Noise contours are presented in each airport's respective Comprehensive Land Use Plan and in Plate NOI-1.

FAIR OAKS BOULEVARD CORRIDOR PLAN EXISTING NOISE SETTING

There is a single site, Site 67, located within the Fair Oaks Boulevard Corridor area.

EXISTING NOISE- AND VIBRATION-SENSITIVE LAND USES

Site 67 is located south of Fair Oaks Boulevard. As shown in Plate NOI-2, sensitive receptors within the vicinity of Site 67 include multi-family residential land uses approximately 50 feet east (sensitive receptor [SR] 19); single-family residential uses approximately 20 feet south along Delaware Avenue (SR 18); commercial uses approximately 7 feet west along Ross Avenue; and commercial uses approximately 100 feet to the north.

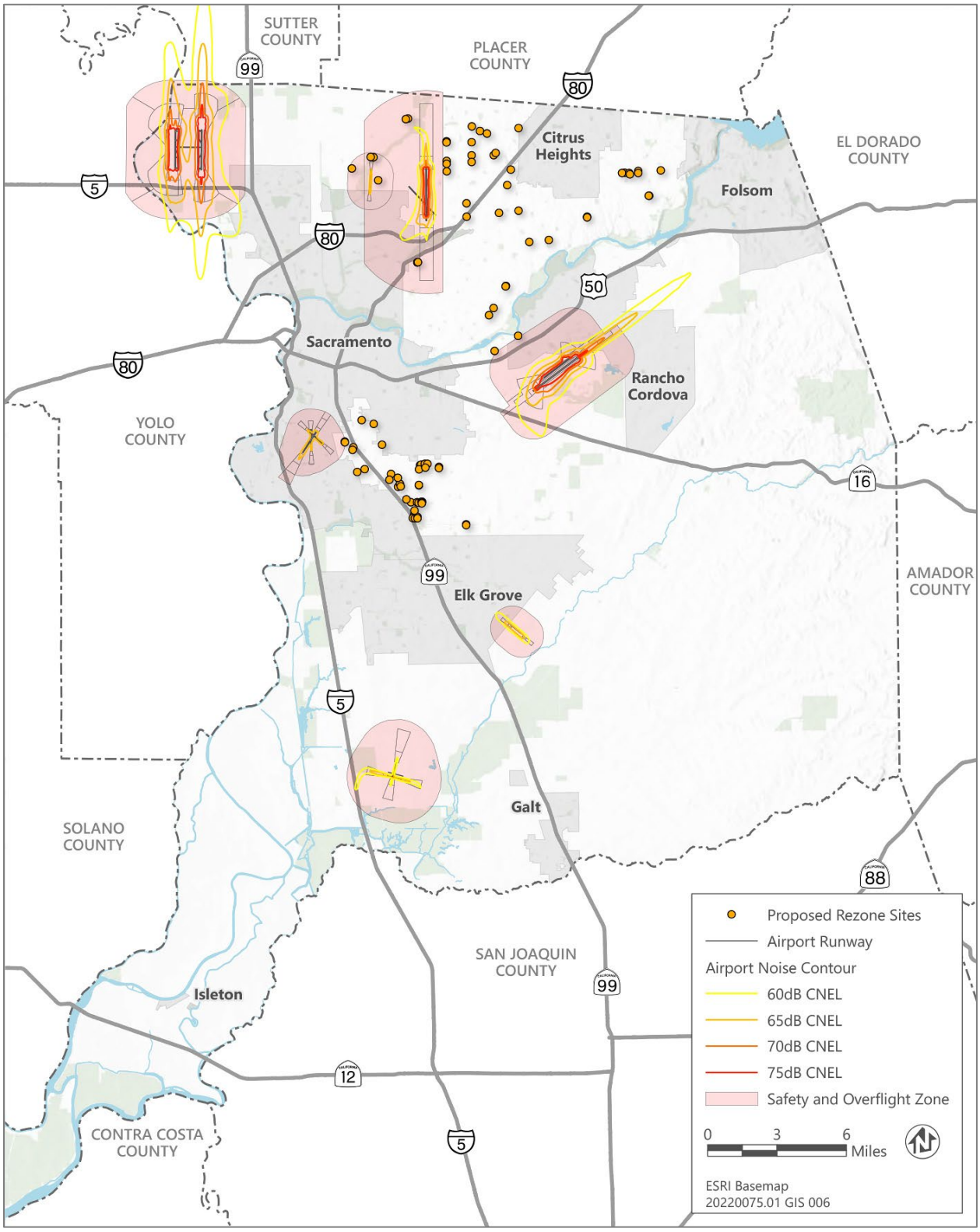
EXISTING NOISE SOURCES

Existing noise sources within the Fair Oaks Boulevard Corridor area are included below.

TRAFFIC NOISE

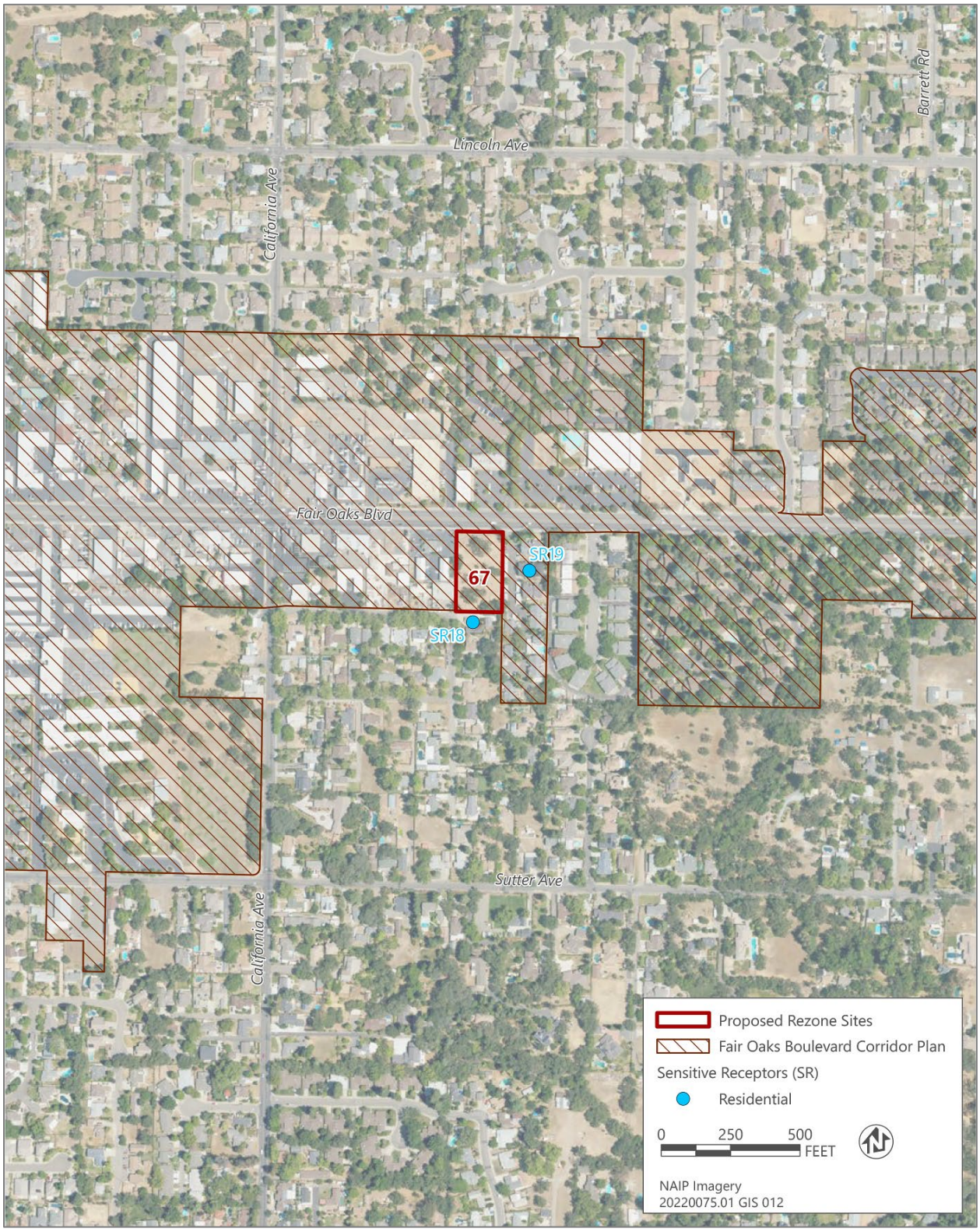
Fair Oaks Boulevard and Manzanita Avenue are the predominant sources of traffic noise within the Fair Oaks Boulevard Corridor area. The distances from the centerline of selected roadways to the 60 dB, 65 dB, 70 dB, and 75 dB L_{dn} contours, as calculated in the Fair Oaks Boulevard Corridor area, are summarized in Table NOI-4. The Fair Oaks Boulevard EIR used cumulative development scenarios to determine future traffic noise levels in the Fair Oaks Boulevard Corridor Plan area with and without implementation of the Fair Oaks Boulevard Corridor plan. The Fair Oaks Boulevard EIR defines the "cumulative scenario" as the expected future traffic volumes based on full development of existing (i.e., before implementation of the Fair Oaks Boulevard Corridor Plan) zoning in the area.

Plate NOI-1: Sacramento Airport Noise Contours



Source: Data received from Sacramento County in 2024; Data downloaded from SACOG in 2024; adapted by Ascent in 2024.

Plate NOI-2: Sensitive Receptors in the Fair Oaks Boulevard Corridor Area



Source: Data received from Sacramento County in 2024 and adapted by Ascent in 2024.

The Fair Oaks Boulevard EIR defines "cumulative plus project" as the expected future traffic volumes based on development of the Fair Oaks Boulevard Corridor Plan. Therefore, this SEIR compares the potential impact of the proposed rezone to the cumulative plus Project scenario described in the Fair Oaks Boulevard EIR, as this scenario represents existing conditions in the Fair Oaks Boulevard Corridor Plan area.

Table NOI-4: Fair Oaks Boulevard: California Avenue to Marshall Avenue Traffic Noise[1]

L_{dn} Contour, dB	Distance for Cumulative	Distance for Cumulative Plus Development Under the Fair Oaks Boulevard Corridor Plan
75	35	40
70	76	86
65	164	185
60	353	399

Notes: [1]All distances are measured from the centerline of the roadway. The typical half section width of the roadway is at least 42-feet (one-half of 84-foot arterial street).

Source: Fair Oaks Boulevard EIR Table NS-15.

RAILROAD NOISE

The Fair Oaks Boulevard Corridor Plan area is located approximately 2.4 miles southwest of the UPRR and thus does not fall within the 65 dB L_{dn} railroad noise contour established in the County General Plan.

AIRPORT NOISE

The Fair Oaks Boulevard Corridor area is located approximately 3.3 miles northwest of Mather Airport, the nearest airport, and thus is not subject to excessive levels of airport noise.

NORTH WATT AVENUE CORRIDOR PLAN EXISTING NOISE SETTING

There are five sites (Sites 68 through 72) proposed for rezone that are located within the North Watt Avenue Corridor Plan area.

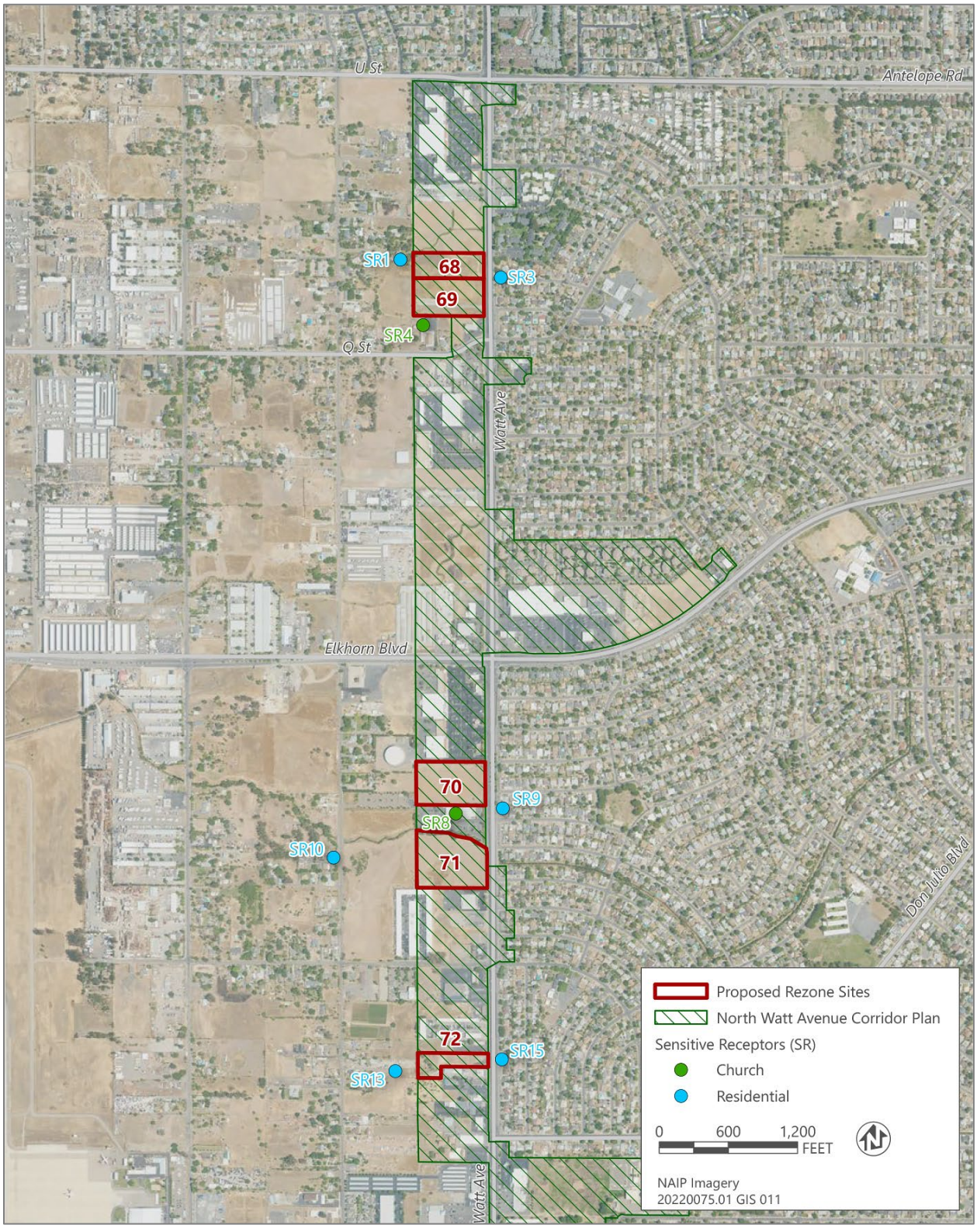
EXISTING NOISE SENSITIVE LAND USES

There are residential land uses along Watt Avenue approximately 100 feet east of all five candidate rezone sites in the North Watt Avenue Corridor Plan area. Additional noise sensitive receptors within the vicinity of individual sites are shown in Plate NOI-3 and detailed below.

SITE 68

There are residential land uses along 34th Street approximately 94 feet west of the site (SR 1) and a commercial land use is located approximately 442 feet north of the site.

Plate NOI-3: Sensitive Receptors in the North Watt Avenue Corridor Area



Source: Data received from Sacramento County in 2024 and adapted by Ascent in 2024.

SITE 69

In addition to the residential land uses east of Site 69, there is a residential land use approximately 175 feet northwest of the site along 34th Street (SR 1), as well as a church (SR 4) and commercial land use located approximately 60 feet south of the site along Q Street.

SITE 70

There are commercial/industrial land uses approximately 34 feet north, and 107 feet northwest of Site 70. There is a church (SR 8) approximately 7 feet south of the southern frontage of Site 70. Site 70 is also located approximately 232 feet south of Site 69.

SITE 71

There are commercial land uses located approximately 12 feet south of Site 71. The Second Slavic Baptist Church (SR 8) is located approximately 157 feet north of Site 71. In addition to the residential land uses east of Site 71, there are residences (SR 10) approximately 674 west of Site 71 along 34th Street.

SITE 72

Site 72 is located approximately 16 feet north and 130 feet south of commercial land uses. In addition to residences located east of Site 72, there are residential land uses approximately 177 feet west (SR 13).

EXISTING NOISE SOURCES

Existing noise sources within the North Watt Avenue Corridor area include airport operations, traffic on roadways, and commercial and light-industrial land uses as described below.

TRAFFIC NOISE

Watt Avenue is the major roadway that runs through the North Watt Avenue Corridor area and contributes a notable amount of noise to the ambient environment. Sites 68 through 72 are all adjacent to Watt Avenue. The distances from the centerlines of selected segments of Watt Avenue to the 65 dB, 70 dB, and 75 dB contours, as calculated in the North Watt Avenue EIR, are summarized in Table NOI-5.

Table NOI-5: Existing Traffic Noise Conditions

Roadway	Segment From	Segment To	Daily Traffic	Distance to 75 dB Contour (ft)	Distance to 70 dB Contour (ft)	Distance to 65 dB Contour (ft)
Watt Avenue	Antelope Road	Elkhorn Boulevard	33,100	38	121	383
Watt Avenue	Elkhorn Boulevard	Don Julio Boulevard	36,900	43	135	427
Watt Avenue	Don Julio Boulevard	James Way/A Street	36,800	43	135	426

Roadway	Segment From	Segment To	Daily Traffic	Distance to 75 dB Contour (ft)	Distance to 70 dB Contour (ft)	Distance to 65 dB Contour (ft)
Watt Avenue	James Way/A Street	Airbase Drive	44,100	51	161	510
Watt Avenue	Airbase Drive	Roseville Road	44,900	52	164	520
Watt Avenue	Roseville Road	Winona Way	42,700	49	156	494
Watt Avenue	Winona Way	I-80 Ramps	54,700	63	200	633

Source: County of Sacramento 2012: 10-11.

RAILROAD NOISE

The UPRR line transects the North Watt Avenue Corridor Plan area directly north of the Triangle Gateway District and parallel to Roseville Road. Although noise along freight and passenger heavy rail lines is intermittent, trains use the railroad tracks at all times of day. Pursuant to the County General Plan, the 65 dB L_{dn} railroad noise contour extends 742 feet from the railroad tracks. The estimated daily operations and distances to railroad noise contours are shown in Table NOI-6.

Table NOI-6: Estimated Daily Operations and Distances to Railroad Contours

	Distance to 65 dB L_{dn} (feet)	Distance to 65 dB L_{dn} (feet)
Daily Operations	Without Horn	With Horn
20	217	467
25	252	542
30	284	612
35	315	679
40	344	742

Source: North Watt Avenue EIR Table NS-10.

AIRPORT NOISE

The McClellan Airport (formerly the McClellan Air Force Base) is located approximately 0.38 miles west of candidate rezone sites 68 through 72. The land use compatibility planning noise contours for the McClellan Airport indicate that the 60 dB CNEL noise contour does extend into the southwestern portion of the North Watt Avenue Corridor Plan area (County of Sacramento 2012). However, the 60 dB CNEL noise contour ends approximately 0.47 miles west of the closest point of Sites 70, 71, and 72.

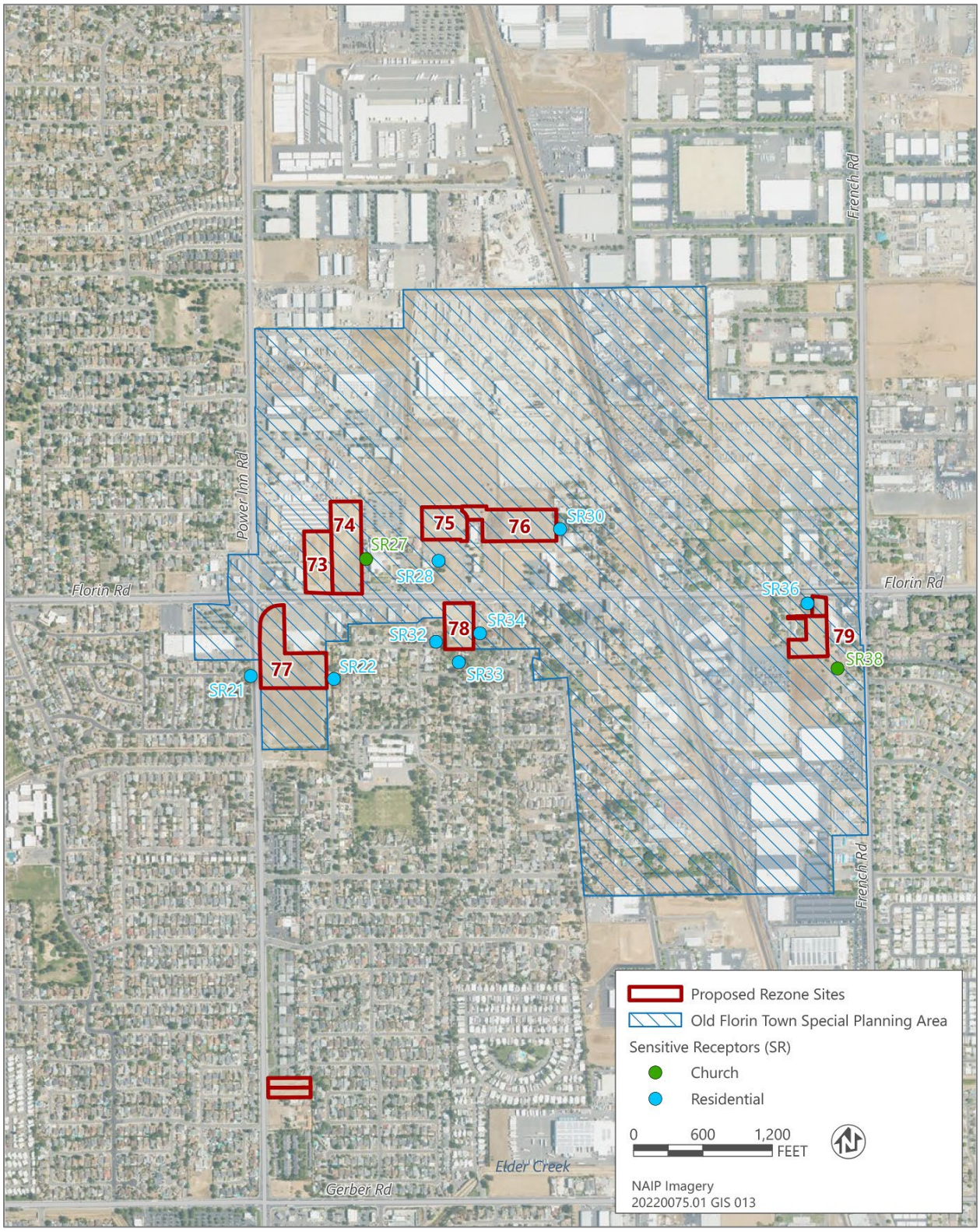
OLD FLORIN TOWN SPA EXISTING NOISE SETTING

There are seven sites (Sites 73 through79) proposed for rezoning that are located within the Old Florin Town SPA. There are various commercial and industrial land uses within the Old Florin Town SPA that contribute to the noise environment.

EXISTING NOISE SENSITIVE LAND USES

The sensitive receptors in the vicinity of individual sites within the Old Florin Town SPA are shown in Plate NOI-4 and detailed below.

Plate NOI-4: Sensitive Receptors in the Old Florin Town SPA



Source: Data received from Sacramento County in 2024 and adapted by Ascent in 2024.

SITE 73 AND SITE 74

Sites 73 and 74 are located adjacent to one another, north of Florin Road. Site 73 is approximately 10 feet east of a commercial land use and approximately 5 feet south of a commercial land use . Site 74 is approximately 42 feet west of a church (SR 27).

SITE 75 AND SITE 76

Sites 75 and 76 are located adjacent to one another, north of Florin Road. They are surrounded by commercial and industrial land uses to the north, east, south, and west. Specifically, Site 75 is located approximately 14 feet west of the nearest commercial land use and 185 feet from residential uses (SR 28). Site 76 is located approximately 16 feet west of nearby residential land uses along McCurdy Lane (SR 30).

SITE 77

Site 77 is located south of Florin Road and east of Power Inn Road. There are residences located approximately 90 feet west (SR 21) and 10 feet east (SR 22) of Site 77. There are also commercial land uses located approximately 192 feet northeast, 145 feet north, and 206 feet west of Site 77.

SITE 78

Site 78 is located south of Florin Road. There are residences approximately 24 feet east (SR 34), 72 feet south (SR 33), and 13 feet west (SR 32) of the site. The site is also approximately 165 feet south of commercial land uses located north of Florin Road.

SITE 79

Site 79 is located south of Florin Road and is approximately 5 feet from commercial land uses and approximately 10 feet from the nearest residential land use (SR 36). Additionally, Site 79 is approximately 130 northwest of a church (SR 38).

EXISTING NOISE SOURCES

Existing noise sources within the Old Florin Town SPA include traffic on roadways, railroad operations, and commercial and industrial land uses.

TRAFFIC NOISE

Major roadways that run through the Old Florin Town SPA include Florin Road, Power Inn Road, Florin Perkins Road/French Road, and Alta Florin Road. The distances from the centerlines of selected roadways to the 60, 65 dB, 70 dB, and 75 dB contours, as calculated in the Old Florin Town SPA EIR, are summarized in Table NOI-7.

Table NOI-7: Old Florin Town Special Planning Area Roadway Noise Contours

Roadway	Segment	L_{dn} Contour (dB)	Distance from Centerline (ft)
Power Inn Road	Elder Creek to Florin Road		
		75	44
		70	97
		65	203
		60	437
	Florin Road to Gerber Road		
		75	40
		70	86
		65	184
		60	397
Florin Road	Power Inn Road to Kara Drive		
		75	39
		70	85
		65	183
		60	394
	Kara Drive to Florin-Perkins Road		
		75	38
		70	82
		65	176
		60	380
Alta Florin Road	Power Inn Road to Florin Perkins Road		
		75	40
		70	85
		65	184
		60	397
Florin-Perkins Road	Elder Creek Road to Florin Road		
		75	40
		70	87
		65	188
		60	404
French Road	Florin Road to Gerber Road		
		75	28
		70	60
		65	130
		60	279

Notes: ft = feet; dB = decibels; L_{dn} = day-night noise level

Source: County of Sacramento 2011.

RAILROAD NOISE

The UPRR runs north to south through the Old Florin Town SPA, and train traffic is a main contributor to noise within the plan area. The estimated daily operations and distance to the 65 dB L_{dn} noise contour, as calculated in the Old Florin Town SPA EIR, are summarized in Table NOI-8.

Table NOI-8: Estimated Daily Operations and Distances to Railroad Contours

	Distance to 65 dB L_{dn} (ft)	Distance to 65 dB L_{dn} (ft)
Daily Operations	Without Horn	With Horn
20	217	467
25	252	542
30	284	612
35	315	679
40	344	742

Source: County of Sacramento 2011: 9-16.

Notes: ft = feet; L_{dn} = day-night noise level

AIRPORT NOISE

The Old Florin Town SPA is located approximately 4 miles southeast of Mather Airport, the nearest airport, and thus is not exposed to excessive aircraft noise levels.

EXISTING NOISE REGULATORY SETTING

FEDERAL

FEDERAL TRANSIT ADMINISTRATION

To address the human response to ground vibration, the Federal Transit Administration (FTA) has set forth guidelines for maximum-acceptable vibration criteria for different types of land uses. These guidelines are presented in Table NOI-9. In addition, FTA has also established construction vibration damage criteria, shown below in Table NOI-10.

Table NOI-9: Ground-borne Vibration (GBV) Impact Criteria for General Assessment

Land Use Category	GBV Impact Levels (VdB re 1 micro-inch/second)		
	Frequent Events[1]	Occasional Events[2]	Infrequent Events[3]
Category 1: Buildings where vibration would interfere with interior operations	65[4]	65[4]	65[4]
Category 2: Residences and buildings where people normally sleep.	72	75	80
Category 3: Institutional land uses with primarily daytime uses	75	78	83

Notes: VdB = vibration decibels referenced to 1 μ inch/second and based on the root mean square (RMS) velocity amplitude.

[1] "Frequent Events" is defined as more than 70 vibration events of the same source per day.

[2] "Occasional Events" is defined as between 30 and 70 vibration events of the same source per day.

[3] "Infrequent Events" is defined as fewer than 30 vibration events of the same source per day.

[4] This criterion is based on levels that are acceptable for most moderately sensitive equipment such as optical microscopes. Vibration-sensitive manufacturing or research would require detailed evaluation to define acceptable vibration levels.

Source: FTA 2018: 126.

Table NOI-10: FTA Construction Damage Vibration Criteria

Land Use Category		PPV, in/sec
Reinforced-concrete, steel or timber (no plaster)		0.50
Engineered concrete and masonry (no plaster)		0.30
Non-engineered timber and masonry buildings		0.20
Buildings extremely susceptible to vibration damage		0.12

Source: FTA 2018.

STATE

CALIFORNIA BUILDING CODE SOUND TRANSMISSION STANDARDS

Noise within habitable units that is attributable to external sources is regulated by the California Building Standards codified in the California Code of Regulations, Title 24, Part 2, Section 1206. These standards are enforceable at the time of construction or during occupancy and apply to habitable units with common interior walls, partitions, and ceilings or those adjacent to public areas, such as halls, corridors, stairways, and service areas. Under these standards, the interior noise levels attributable to exterior sources shall not exceed 45 decibels (dB) in any habitable room. The noise metrics used to measure these levels can be L_{dn} or CNEL, consistent with the local general plan. An acoustical analysis documenting compliance with the interior sound level standards shall be prepared for structures containing habitable rooms. Under PRC Section 25402.1(g), all cities and counties in the State are required to enforce the adopted California Building Code, including these standards for noise in interior environments.

LOCAL

SACRAMENTO AREA COUNCIL OF GOVERNMENTS

The Sacramento Area Council of Governments (SACOG) is an association that includes the Counties of El Dorado, Placer, Sacramento, Sutter, Yolo, and Yuba. Under provisions of the California Public Utilities Code, Chapter 4, Article 35, Section 21670.1, Airport Land Use Commission Law, SACOG has been designated the Airport Land Use Commission for Sacramento, Sutter, Yolo, and Yuba counties. One of the primary functions of the Airport Land Use Commission is to develop and adopt Comprehensive Land Use Plans (CLUPs) which include noise contours and policies focused on safety, noise, airspace protection, and overflight notification for each airport under its jurisdiction (SACOG 2024a). CLUPs have been prepared for the seven airports within Sacramento County.

SACRAMENTO COUNTY GENERAL PLAN

The General Plan Noise Element was adopted in December 1993 and most recently amended in December 2022. The following General Plan policies related to noise are applicable to the Project.

TRAFFIC AND RAILROAD NOISE SOURCES

NO-1. The noise level standards for noise-sensitive areas of new uses affected by traffic or railroad noise sources in Sacramento County are shown by Table 1 [presented in this SEIR as Table NOI-11]. Where the noise level standards of Table 1 are predicted to be exceeded at new uses proposed within Sacramento County which are affected by traffic or railroad noise, appropriate noise mitigation measures shall be included in the project design to reduce projected noise levels to a state of compliance with the Table 1 [presented in this SEIR as Table NOI-11] standards.

Table NOI-11: Noise Standards for New Uses Affected by Traffic and Railroad Noise

New Land Use	Sensitive[1] Outdoor Area – L_{dn}	Sensitive Interior[2] Area - L_{dn}
All Residential[5]	65	45
Transient lodging[3,5]	65	45
Hospitals and nursing homes[3,4,5]	65	45
Theaters and auditoriums3	---	35
Churches, meeting halls, schools, libraries, etc. [3]	65	40
Office buildings[3]	65	45
Commercial buildings[3]	---	50
Playgrounds, parks, etc.	70	---
Industry[3]	65	50

[1] Sensitive areas are defined in the acoustical terminology section.

[2] Interior noise level standards are applied within noise-sensitive areas of the various land uses, with windows and doors in the closed positions.

[3] Where there are no sensitive exterior spaces proposed for these uses, only the interior noise level standard shall apply.

[4] Hospitals are often noise-generating uses. The exterior noise level standards for hospitals are applicable only at clearly identified areas designated for outdoor relaxation either by hospital staff or patients.

[5] If this use is affected by railroad noise, a maximum (L_{max}) noise level standard of 70 dB shall be applied to all sleeping rooms to reduce the potential for sleep disturbance during nighttime train passages.

AIRCRAFT NOISE SOURCES

NO-2. Proposals for new development within Sacramento County which may be affected by aircraft noise shall be evaluated relative to Table 4: Land Use Compatibility for Aircraft Noise [presented in this SEIR as Table NOI-12], except in the following case. Development proposals which may be affected by aircraft noise from Sacramento International Airport shall be evaluated relative to the Land Use Compatibility Plan prepared for Sacramento International Airport dated December 12, 2013, adopted herein by reference. Development proposals which may be affected by aircraft noise from Mather Airport shall be

evaluated relative to the Land Use Compatibility Plan prepared for Mather airport dated February 2021, adopted herein reference, as well as applicable footnotes in Table 4 [presented as Table NOI-12 in this SEIR].

Table NOI-12: Land Use Compatibility for Airport Noise

Land Use Designation	60-65 CNEL	65-70 CNEL	70-75 CNEL	75-80 CNEL	80-85 CNEL
Residential[1,7]	Residential	Residential	Residential	Residential	Residential
Single-family detached[2]	No[6]	No	No	No	No
Two-family dwelling	No[6]	No	No	No	No
Multi-family dwelling (3+ families)	No[6]	No	No	No	No
Group Quarters & Rooming Houses	No[6]	No	No	No	No
Mobile Home Parks or Courts	No[6]	No	No	No	No
Agricultural/Residential (min. 2 ac parcel size)	Yes[6,8]	Yes	No	No	No

A. This compatibility table does not apply to Borges-Clarksburg Airport, as no noise contours exist there. Also, it does not apply to Executive Airport, as the noise contours do not extend into the unincorporated area of Sacramento County.

B. These guidelines define only compatible land uses within noise contours. Where proposed land uses fall within the established Safety Areas or may penetrate any of the imaginary height surfaces, additional restrictions do apply, which can be found in the safety and height policy sections of this Plan.

[1] Caretaker residences are a compatible use within all CNEL ranges, provided that they are ancillary to the primary use of a property, intended for the purpose of property protection or maintenance, and subject to the condition that all residential units must be designed to limit intruding noise such that interior levels do not exceed 45 CNEL, with windows closed, in any habitable room.

[2] Second residential units are a compatible use within all CNEL ranges, subject to the condition that the proposed second unit be consistent with the provisions of Section 6582.1 and 6582.2 of the California Government Code.

[3] Measures to achieve an interior noise level of 50 CNEL must be incorporated into the design and construction of portions where the public is received, office areas, and other areas where people work or congregate.

[4] Measures to achieve an interior noise level of 45 CNEL must be incorporated into the design and construction of all noise sensitive areas including, but not limited to, rooms designed for the purpose of sleep, libraries, churches, and areas intended for indoor entertainment events.

[5] Only indoor uses permitted.

[6] Compatible at Sacramento International Airport and Franklin Field only if the residential use is directly related to agricultural uses, such as dwelling units for the land owner, the owner's immediate family, or for employees may be compatible at Mather Airport if approved by the Board of Supervisors as a component of a master plan and all criteria set forth in Footnote 2 above are satisfied. All residential units shall be designed to limit intruding noise such that interior noise levels do not exceed 45 CNEL, with windows closed, in any habitable room.

[7] Use not compatible at Mather Airport.

[8] New residential uses within 60 CNEL are not compatible, with the exception of accessory residential dwellings on parcels zoned Agricultural, Agricultural-Residential, Interim Agricultural, Interim General Agricultural, or Interim Limited Agricultural, or single-family dwelling as set forth in Footnote 2 above. Except as provided in Footnotes 2 and 6 above, new residential development within the Mather Airport Policy Area boundaries but outside the 60 CNEL shall be subject to the following conditions:

A. Provide minimum noise insulation to provide 45 dB within new residential dwellings, including detached single family dwellings, with windows closed, in any habitable room.

B. Notification in the Public Report prepared by the California Department of Real Estate disclosing the fact to prospective buyers that the parcel is located within the Mather Airport Policy Area.

C. An Aviation Easement prepared by the Sacramento County Counsel's Office granted to the County of Sacramento and recorded with the Sacramento County Recorder and filed with the Department of Airports. Such Avigation Easement shall acknowledge the property location within the Mather Airport Policy Area and shall grant the right of flight and unobstructed passage of all aircraft into and out of Mather Airport.

New residential development within the Mather Airport Policy Area outside the 65 dB CNEL but inside the 60 dB CNEL shall be subject to Conditions A through C above and a County-approved noise analysis and mitigation to reduce interior noise impacts to 45 dB with windows closed, in any habitable room.

[9] Compatible with McClellan Park and Mather Airfield only up to 70 dB CNEL.

NO-3. New residential development within the 60 CNEL noise contours adopted by the County for land use planning purposes at any airport or Helipad within Sacramento County shall be prohibited. This policy is not applicable to Executive Airport.

NO-4. New residential development within adopted Airport Policy Area boundaries, but outside the 60 CNEL, shall be subject to the following conditions:

A. Provide minimum noise insulation to 45 dB CNEL within new residential dwellings, including detached single-family dwellings, with windows closed in any habitable room.

B. Notification in the Public Report prepared by the California Department of Real Estate disclosing the fact to prospective buyers that the parcel is located within an Airport Policy Area.

C. An Avigation Easement prepared by the Sacramento County Counsel's Office granted to the County of Sacramento, recorded with the Sacramento County Recorder, and filed with Department of Airports. Such Avigation Easement shall acknowledge the property location within an Airport Planning Policy Area and shall grant the right of flight and unobstructed passage of all aircraft into and out of the subject Airport.

Exceptions: New accessory residential dwellings on parcels zoned Agricultural, Agricultural-Residential, Interim Agricultural, Interim General Agricultural, or Interim Limited Agricultural and between the 60 and 65 CNEL contours, shall be permitted within adopted Airport Policy Area boundaries, but would be subject to the conditions listed above.

NON-TRANSPORTATION NOISE SOURCES

NO-5. The interior and exterior noise level standards for noise-sensitive areas of new uses affected by existing non-transportation noise sources in Sacramento County are shown in Table 2 [presented in this SEIR as Table NOI-13]. Where the noise level standards of Table 2 [presented in this SEIR as Table NOI-13] are predicted to be exceeded at a proposed noise-sensitive area due to existing non-transportation noise sources, appropriate noise mitigation measures shall be included in the project design to reduce projected noise levels to a state of compliance with the standards within sensitive areas.

Table NOI-13: Sacramento County Non-Transportation Noise Standards Median (L_{50})/Maximum (L_{max})

Receiving Land Use	Outdoor Area[2]	Outdoor Area[2]	Interior Area[3]
	Daytime	Nighttime	Day & Night
All Residential	55 / 75	50 / 70	35/55
Transient lodging[4]	55 / 75	---	35/55
Hospitals and nursing homes[5,6]	55 / 75	---	35/55
Theaters and auditoriums[6]	---	---	30/50
Churches, meeting halls, schools, libraries, etc.[6]	55 / 75	---	35/60
Office buildings[6]	60 / 75	---	45/65
Commercial buildings[6]	---	---	45/65
Playgrounds, parks, etc[6]	65 / 75	---	---
Industry[6]	60 / 80	---	50/70
All Residential	55 / 75	50 / 70	35/55

1. The Table 2 standards shall be reduced by 5 dB for sounds consisting primarily of speech or music, and for recurring impulsive sounds. If the existing ambient noise level exceeds the standards of Table 2, then the noise level standards shall be increased at 5 dB increments to encompass the ambient.
2. Sensitive areas are defined acoustic terminology section.
3. Interior noise level standards are applied within noise-sensitive areas of the various land uses, with windows and doors in the closed positions.
4. Outdoor activity areas of transient lodging facilities are not commonly used during nighttime hours.
5. Hospitals are often noise-generating uses. The exterior noise level standards for hospitals are applicable only at clearly identified areas designated for outdoor relaxation by either hospital staff or patients.
6. The outdoor activity areas of these uses (if any), are not typically utilized during nighttime hours.
7 Where median (L_{50}) noise level data is not available for a particular noise source, average (L_{eq}) values may be substituted for the standards of this table provided the noise source in question operates for at least 30 minutes of an hour. If the source in question operates less than 30 minutes per hour, then the maximum noise level standards shown would apply.

NO-6. Where a project would consist of or include non-transportation noise sources, the noise generation of those sources shall be mitigated so as not exceed the interior and exterior noise level standards of Table 2 [presented in this SEIR as Table NOI-13] at existing noise-sensitive areas in the project vicinity.

NO-7. The "last use there" shall be responsible for noise mitigation. However, if a noise-generating use is proposed adjacent to lands zoned for uses which may have sensitivity to noise, then the noise generating use shall be responsible for mitigating its noise generation to a state of compliance with the Table 2 [presented in this SEIR as Table NOI-13] standards at the property line of the generating use in anticipation of the future neighboring development.

CONSTRUCTION NOISE

NO-8. Noise associated with construction activities shall adhere to the County Code requirements. Specifically, Section 6.68.090(e) addresses construction noise within the County.

TRANSPORTATION PROJECTS

NO-9. For capacity enhancing roadway or rail projects, or the construction of new roadways or railways, a noise analysis shall be prepared in accordance with Table 3 [presented in this SEIR as Table NOI-15] requirements. If projected post-project traffic noise levels at existing uses exceed the noise standards of Table 1 [presented in this SEIR as Table NOI-11], then feasible methods of reducing noise to levels consistent with the Table 1 [presented in this SEIR as Table NOI-11] standards shall be analyzed as part of the noise analysis. In the case of existing residential uses, sensitive outdoor areas shall be mitigated to 60 dB, when possible, through the application of feasible methods to reduce noise. If 60 dB cannot be achieved after the application of all feasible methods of reducing noise, then noise levels up to 65 dB are allowed.

If pre-project traffic noise levels for existing uses already exceed the noise standards of Table 1 [presented in this SEIR as Table NOI-11] and the increase is significant as defined below, feasible methods of reducing noise to levels consistent with the Table 1 [presented in this SEIR as Table NOI-11] standards should be applied. In no case shall the long-term noise exposure for non-industrial uses be greater than 75 dB; long-term noise exposure above this level has the potential to result in hearing loss.

A significant increase is defined as follows:

Table NOI-14: Sacramento County Thresholds for a Significant Increase in Traffic Noise

Pre-Project Noise Environment (L_{dn})	Significant Increase
Less than 60 dB	5+ dB
60 – 65 dB	3+ dB
Greater than 65 dB	1.5+ dB

Source: Sacramento County 2022.

GENERAL NOISE POLICY

NO-12. All noise analyses prepared to determine compliance with the noise level standards contained within the Noise Element shall be prepared in accordance with Table 3 [presented in this SEIR as Table NOI-15].

Table NOI-15: Requirements for Acoustical Analyses Prepared in Sacramento County

An acoustical analysis prepared pursuant to the Noise Element shall:	
1.	Be the responsibility of the applicant.
2.	Be prepared by qualified persons experienced in the fields of environmental noise assessment and architectural acoustics.
3.	Include representative noise level measurements with sufficient sampling periods and locations to adequately describe local conditions.
4.	Estimate projected future (20 years) noise levels in terms of the Standards of Tables 1 and 2 [presented in this SEIR as Tables NOI-11 and NOI-13] and compare those levels to the adopted policies of the Noise Element.
5.	Recommend appropriate mitigation to achieve compliance with the adopted policies and standards of the Noise Element.
6.	Estimate interior and exterior noise exposure after the prescribed mitigation measures have been implemented.

Source: Sacramento County 2022.

NO-13. Where noise mitigation measures are required to satisfy the noise level standards of the Noise Element, emphasis shall be placed on the use of setbacks and site design to the extent feasible, prior to consideration of the use of noise barriers.

NO-14. Noise analyses prepared for multi-family residential projects, town homes, mixed-use, condominiums, or other residential projects where floor ceiling assemblies or party-walls shall be common to different owners/occupants, shall be consistent with the State of California Noise Insulation standards.

NO-15. The County shall have the flexibility to consider the application of 5 dB less restrictive exterior noise standards than those prescribed in Tables 1 and 2 [presented as Tables NOI-11 and NOI-13 in this SEIR, respectively] in cases where it is impractical or infeasible to reduce exterior noise levels within infill projects to a state of compliance with the Table NOI-11 or NOI-13 standards. In such cases, the rationale for such consideration shall be clearly presented and disclosure statements and noise easements should be included as conditions of project approval. The interior noise level standards of Tables NOI-11 and NOI-13 would still apply. The maximum allowable long-term noise exposure permissible for non-industrial uses is 75 dB.

Sacramento County Code

Chapter 6.68 of the Sacramento County Code addresses noise control. The County Code sets limits for exterior noise levels on some designated agricultural-residential and all residential properties. The standards found in the County Noise Control Ordinance are based on the duration of noise on private property over 1-hour periods. The ordinance is primarily concerned with regulating noise other than noise generated by transportation noise sources (e.g., passing cars or aircraft flyovers). The ordinance limits the duration of noise based on many factors, including the type of source, tonal characteristics of the

source, ambient noise levels, and time of day, by utilizing a system of noise criteria not to be exceeded based on the duration of noise over any given hour.

Section 6.68.070 of the Sacramento County Code contains exterior noise standards for residential zoning districts. In recognition of ambient noise, the ordinance allows the standards set forth in Table NOI-16 to be adjusted in 5 dB increments to encompass the ambient noise level. The Noise Control Ordinance states that each of the standards identified in Table NOI-16 should be reduced by 5 dB for impulsive or simple tone noises, or for noises consisting of speech or music.

Table NOI-16: Sacramento County Noise Ordinance Residential Exterior Noise Standards

Cumulative Duration of the Intrusive Sound	Descriptor	Exterior Noise Standard	Exterior Noise Standard
		Daytime (7:00 a.m. – 10:00 p.m.)	Nighttime (10:00 p.m. – 7:00 a.m.)
30 – 60 minutes per hour	L_{50}	55	50
15 – 30 minutes per hour	L_{25}	60	55
5 – 15 minutes per hour	L_{08}	65	60
1 – 5 minutes per hour	L_{08}	70	65
Level not to be exceeded at any time	L_{max}	75	70

Source: Sacramento County, Noise Control Ordinance. Chapter 6.68.070.

Section 6.68.090 of the County Code provides exemptions to all noise regulations specified within Chapter 6.68 of the Code. Exemptions applicable to the Project include:

- Noise sources associated with construction, repair, remodeling, demolition, paving or grading of any real property, provided said activities do not take place between the hours of 8:00 p.m. and 6:00 a.m. on weekdays and Friday commencing at 8:00 p.m. through and including 7:00 a.m. on Saturday; Saturdays commencing at 8:00 p.m. through and including 7:00 a.m. on the next following Sunday and on each Sunday after the hour of 8:00 p.m. Provided, however, when an unforeseen or unavoidable condition occurs during a construction project and the nature of the project necessitates that work in process be continued until a specific phase is completed, the contractor or owner shall be allowed to continue work after 8:00 p.m. and to operate machinery and equipment necessary until completion of the specific work in progress can be brought to conclusion under conditions which will not jeopardize inspection acceptance or create undue financial hardships for the contractor or owner; and
- Noise sources associated with maintenance of residential area property, provided said activities take place between the hours of 6:00 a.m. and 8:00 p.m. on any day except Saturday or Sunday, or between the hours of 7:00 a.m. and 8:00 p.m. on Saturday or Sunday.

The County Code also includes specific regulations about the use of noise-generating mechanical equipment. Section 6.68.120 Machinery, Equipment, Fans, and Air Conditioning establishes the following:

a. It is unlawful for any person to operate any mechanical equipment, pump, fan, air conditioning apparatus, stationary pumps, stationary cooling towers, stationary compressors, similar mechanical devices, or any combination thereof installed after July 1, 1976, in any manner so as to create any noise which would cause the maximum noise level to exceed:
    1. Sixty dB at any point at least one foot inside the property line of the affected residential property and three to five feet above ground level;
    2. Fifty-five dB in the center of a neighboring patio three to five feet above ground level;
    3. Fifty-five dB outside of the neighboring living area window nearest the equipment location. Measurements shall be taken with the microphone not more than three feet from the window opening but at least three feet from any other surface.

Sacramento County Zoning Code

Sacramento County Design Guidelines

The Sacramento County Design Guidelines provide a set of cohesive design principles to implement the General Plan. The purpose of design guidelines is to create design recommendations and standards for review of projects that are easy to understand and result in well-designed and sustainable projects that raise the overall design quality of development occurring within the County. Development under the Project would be subject to the Countywide Design Guidelines, including the following design guidelines, which pertain specifically to addressing noise impacts for development projects.

Multifamily Design Standards

Fencing/Walls

- Sound walls, masonry walls, and fences shall be designed with changes in plane, height, material, and material texture. Masonry walls shall change material, plane, or height every 50 feet. Fences shall have a masonry column every 40 feet. Tubular steel or iron architectural fencing may be continuous in height and material and are not required to provide masonry columns.

Village Centers/Mixed-Use Design Guidelines

Connections to the Community

- Unnecessary tall concrete block sound walls should not separate commercial uses from residential uses. Where sounds walls exist or are necessary, provide breaks in the sound walls for access from adjacent neighborhoods and designed as “live-ends.”

BLOCK SIZES, LOT PATTERNS AND BUILDING ORIENTATION

- Special siting and building design strategies that protect residential livability near service areas should be incorporated into project design. Avoid trash enclosures, loading docks or other noise-generating areas in close proximity to residential uses. If proximity is unavoidable, establish operational requirements for noise and odors to residents.

PARKING

- Parking areas should incorporate designs that include: trees, lighting, landscaped storm water features, cool and pervious pavement and pavers. Plant trees and shrubs to soften the overall impact of parking areas and to provide shade and noise reduction, heat island cooling and improved air quality.
- Parking for commercial or mixed use buildings should be designed and located to mitigate noise and visual impact on adjoining residential neighborhoods.

SERVICE AREAS

- Locate noise-generating services so that vehicular service drives have a minimized noise impact on any adjacent residential uses.

DISTINCT AREA PLANS

The County guides development using several land use plans such as Special Planning Areas (SPAs), Specific Plans, Comprehensive Plans, Community Plans, Corridor Plans, and Neighborhood Preservation Areas (NPAs). As shown in Chapter 2, "Project Description," 13 sites are located within distinct area plans. These plans provide community-specific regulations that supplement the County Zoning Code and are created when the countywide zoning regulations do not adequately address local concerns (County of Sacramento 2024). Relevant noise policies are summarized below.

FAIR OAKS BOULEVARD CORRIDOR PLAN

As noted above, there is one candidate rezone site, Site 67, located within the Fair Oaks Boulevard Corridor Plan. The Fair Oaks Boulevard Corridor Plan was adopted by the Board of Supervisors on October 26, 2011. The accompanying environmental document, Fair Oaks Boulevard EIR (Control No. PLNP2008-00147), was also certified at the Board of Supervisors hearing. The following regulatory background summarizes the Fair Oaks Boulevard EIR.

Site 67 is located in the East Fair Oaks District of the Fair Oaks Boulevard Corridor Plan. Projects located outside of the Main Street District are encouraged to opt into and follow any part of the development and design standards contained in the Fair Oaks Boulevard Corridor Plan. If applicants choose not to opt-in, projects in the East Fair Oaks District are regulated pursuant to the Zoning Code based on the site zoning. The Fair Oaks Boulevard Corridor Plan contains the following relevant noise standards if the applicant chooses to opt-in:

- To ensure compliance with General Plan Noise Element standards of 45 dB L_{dn} or less for residential interiors, the following measure shall apply:

- Any/all new residential construction within the plan area shall be located at or beyond the 70 dB noise contours as shown in Table NS-6 through Table NS-17 [relevant Table NS-15 presented as Table NOI-4in this SEIR] of the EIR. Any departure or deviation from the above measure must be accompanied by an acoustical analysis, prepared by a qualified acoustical consultant and verified by the Department of Environmental Review and Assessment, substantiating that the General Plan Noise Element standard cited above is met.

NORTH WATT AVENUE CORRIDOR PLAN

As noted above, there are five candidate rezone sites, Sites 68 through 72, located within the North Watt Avenue Corridor Plan. The North Watt Avenue Corridor Plan was adopted by the Board of Supervisors on July 17, 2012. The accompanying environmental document, the North Watt Avenue EIR (Control No. PLNP2008-00153), was also certified at the Board of Supervisors hearing. The following regulatory background summarizes and supplements the North Watt Avenue EIR.

Sites 68 through 71 are located within the Elkhorn District and Site 72 is located within the Town Center District of the North Watt Avenue Corridor Plan. The North Watt Avenue Corridor Plan acknowledges that the plan area is subjected to noise from vehicular, air, and rail transportation sources along with some non-transportation sources (such as the Transfer Station located in the Triangle Gateway District).

The North Watt Corridor Plan Land Use Table provides the following noise policy for residential uses:

Policy 7: To comply with General Plan Noise Element standards of 65 dB L_{dn} or less for residential/transient lodging outdoor activity areas and 45 dB L_{dn} or less for residential/transient lodging interiors: An acoustical analysis, prepared by a qualified acoustical consultant and verified by the Department of Environmental Review and Assessment, substantiating that the Interior noise level does not exceed 45 Db L_{dn} shall be provided.

OLD FLORIN TOWN SPECIAL PLANNING AREA

As noted above, there are seven candidate rezone sites, Sites 73 through 79, located within the Old Florin Town SPA. The Old Florin Town SPA was adopted by the Board of Supervisors on May 25, 2011. The accompanying environmental document, the Old Florin Town SPA EIR (Control No. PLNP2007-0075), was also certified at the Board of Supervisors hearing on May 4, 2011. The following regulatory background summarizes and supplements the Old Florin Town SPA EIR.

The Old Florin Town SPA EIR acknowledges that the plan area is subjected to noise from vehicular and rail transportation sources and that the buildout of the Old Florin Town SPA will result in construction and operational noise.

The SPA and the EIR include the following relevant policies/measures to reduce noise impacts:

NO-1. To ensure compliance with General Plan Noise Element standards of 45 dB L_{dn} or less for residential interiors, the following measure shall apply:

Any/all new residential construction shall be located at or beyond the 70 dB noise contour, as indicated in Tables NS-6 through NS-12 [presented in this SEIR as Table NOI-7] of the EIR.

Any departure or deviation from the above measure must be accompanied by an acoustical analysis, prepared by a qualified acoustical consultant and verified by the Department of Environmental Review and Assessment, substantiating that the General Plan Noise Element standard cited above is met.

NO-3. To ensure compliance with General Plan Noise Element standards for interior noise levels at sensitive residential receptors subjected to railroad noise, the following policy shall be added to the SPA:

No use shall be operated or constructed that would result in interior noise levels at sensitive residential receptors that exceed the General Plan Noise Element noise standards. Proponents applying for sensitive uses in close proximity to the Union Pacific Railroad shall submit a noise analysis substantiating compliance with interior noise standards of the General Plan Noise Element noise standards.

NO-4. To ensure compliance with General Plan Noise Element standards for non-transportation sources, the following policy shall be added to the SPA:

No use shall be operated so as to generate recurring noises that are unreasonably loud or create a nuisance to any person of ordinary sensitivities. No nonresidential use shall be operated so as to generate any noise in an adjacent residential area, as detected in that area without instruments, that is louder than the noise which could be generally expected from uses permitted in that area.

OTHER DISTINCT AREA PLANS

In addition to the distinct area plans described above, Stockton Boulevard NPA, Victory Avenue NPA, Greenback Lane SPA, and Downtown Rio Linda SPA also contain proposed candidate rezone sites. Relevant noise policies from these land use plans are provided below.

STOCKTON BOULEVARD SPA

The Stockton Boulevard SPA includes the following relevant regulations to reduce noise impacts:

> Section 512-305(B) Noise Attenuation: Because the Stockton Boulevard Special Planning Area is located on a heavily traveled roadway, noise attenuation measures must be incorporated into building design. Accordingly, the building design of all new

residential structures shall include the following construction standards to reduce interior noise levels:

1. All penetrations of exterior walls shall include a one-half inch airspace. This space shall be filled loosely with fiberglass insulation. The space shall be sealed airtight on both sides of the wall with a resilient, non-hardening caulking or mastic.

2. The roof shall be finished with a minimum seven-sixteenths in OSB or ply board of equivalent weight, minimum 30 pound felt paper and minimum 240 lb/square foot composition shingles or equivalent.

3. Skylights shall not be used unless they have an STC rating of 29 or better.

4. Windows shall have a minimum STC rating of 28.

5. Windows shall have an air filtration rate of less than or equal to 0.15 CFM/lineal foot when tested with a 25-mph wind per ASTM standards.

6. Sliding glass doors shall have a minimum STC rating of 29.

7. A heating, ventilation, and air conditioning (HVAC) system shall be installed which will provided minimum air circulation and fresh air supply requirements as specified in the Uniform Building Code (UBC).

8. Gravity vent openings in attic space shall not exceed code minimum in size and number.

9. Alternative methods and materials may be used to achieve an interior noise level of 45 dB L_{dn} or less, provided that it is substantiated by an acoustical analysis prepared by a qualified acoustical consultant.

Section 512-306. Design Review Required. All building permits for any new structure or building, or for the remodeling or alteration of the exterior of any structure or building, shall be subject to review by the Sacramento County Planning Department pursuant to Section 512-309. Construction shall be consistent with the Broadway/Stockton Urban Design Plan and with guidelines set forth in this ordinance.

VICTORY AVENUE NPA

The Victory Avenue NPA includes the following relevant regulations to reduce noise impacts:

Section 530-43 Development Plan Review. No development shall take place on any property to which this Article applies until final development plans have been approved by the Project Planning Commission as provided herein. The Planning Commission shall approve the development plan if the location and design of the proposed use mitigates potential adverse effects consistent with development standards established below. The Planning Commission shall not approve development plans under

provisions of this section unless it first finds that the proposed development will not create adverse noise, visual, air quality, health, or safety impacts on abutting residential uses.

Section 530-44(f) Loading Areas: Loading Areas shall be provided as required in Section 330-50 of the Sacramento County Zoning Code. Loading areas, including space necessary for maneuvering vehicles, shall not be located in the required 75-foot setback from abutting residential or agricultural-residential land use zones and shall not extend into required landscape areas. The Commission shall not approve a development plan which includes a loading area, unless it finds that the location will not result in a significant noise impact on abutting residential uses.

GREENBACK LANE SPA

The Greenback Lane SPA includes the following standards relevant to noise impacts:

506-25(1)(k) Buffer Walls. The use of buffer walls should be avoided by innovative methods of project design utilizing greater setbacks, mounding, single-story structures with solid walls facing the arterial and use of office buildings fronting the arterial. If there is no other alternative, such as cluster development approach or frontage roads, the following standards for buffer walls shall apply:

(aa) Buffer walls shall have an average setback of 20 feet from the ultimate right-of-way and may vary in setback to a minimum of ten (10) feet. Mounds shall be used with walls that are required to obtain a height of more than five (5) feet above the grade of Greenback Lane.

(bb) Landscaping. All setback areas shall be landscaped with groundcover, shrubs, vines, and mounds such that at least 50 percent of the buffer wall shall be screened from Greenback Lane within five years. Trees shall be placed so as to cover 50 percent of the total landscaped area with a canopy within 15 years of planting. Buffer walls may not be used unless an automatic sprinkler system is installed and a maintenance program is established to provide ongoing maintenance of the wall and landscaped area.

DOWNTOWN RIO LINDA SPA

The Downtown Rio Linda SPA does not have any applicable policies related to noise or vibration.

SIGNIFICANCE CRITERIA AND METHODOLOGY

SIGNIFICANCE CRITERIA

Based on Appendix G of the State CEQA Guidelines; FTA vibration and noise standards; and noise policies and standards in the County's Municipal Code, General Plan Noise Element, and distinct area plans; implementation of the Project would result in a significant impact related to noise or vibration if it would:

- Generate a substantial temporary increase in noise levels at noise-sensitive land uses in excess of the following standards:
    - Construction noise would result in a significant impact if activities were to take place between the hours of 8:00 p.m. and 6:00 a.m. on weekdays and between the hours of 8:00 p.m. and 7:00 a.m. on Saturday and Sunday, and
    - exceed nighttime exterior noise standards of 55 dB L_{50} or 70 dB L_{max} described in the County General Plan standards (Table NOI-13).
- Generate short-term construction vibration or expose sensitive land uses to long-term operational vibration sources that exceed the FTA guidance for vibration impacts related to structural damage and human response, respectively:
    - Structural damage to non-engineered timber and masonry buildings: 0.2 PPV in/sec (Table NOI-10)
    - Human Response (Table NOI-9):
        - For frequent events (i.e., more than 70 events per day): 65 VdB,
        - For occasional events (i.e., 30-70 events): 75 VdB, or
        - For infrequent (i.e., fewer than 30 events per day): 80 VdB.
- Generate a substantial permanent increase in traffic noise levels at noise-sensitive land uses in excess of the following standards established by the County General Plan:
    - Exceed the noise standard of 65 dB L_{dn} for residential uses pursuant to General Plan Policy NO-1 (Table NOI-11) as a result of buildout of the Project; or
    - Result in a substantial increase in noise (i.e., 5+ dB where existing noise levels are less than 60 dB; 3+ dB where existing levels are 60-65 dB L_{dn} or 1.5+ dB where existing levels are greater than 65 dB L_{dn}) as defined under General Plan Policy NO-9 (Table NOI-14).
- Generate a substantial permanent increase in stationary noise at noise-sensitive uses in excess of the following standards established by the County:
    - 55 dB L_{50} or 75 dB L_{max} per General Plan Policy NO-5 (Table NOI-13)
    - County Code Section 6.68.120 Machinery, Equipment, Fans, and Air Conditioning
        - 60 dB at any point at least one foot inside the property line of the affected residential property and three to five feet above ground level;
        - 55 dB in the center of a neighboring patio three to five feet above ground level;
        - 55 dB outside of the neighboring living area window nearest the equipment location. Measurements shall be taken with the

microphone not more than three feet from the window opening but at least three feet from any other surface.

- Expose noise-sensitive land uses, including people residing or working in the area of the candidate rezone sites, to excessive airport noise levels (e.g., 60 dB CNEL) pursuant to General Plan Policy NO-2 (Table NOI-12)

Issues Not Discussed Further

Long-Term Groundborne Vibration

The Project would not result in the development of any major sources of ground vibration such as commercial railways or passenger rail transit lines. Therefore, long-term operational activities associated with future development as part of the Project are not anticipated to result in permanent or substantial levels of ground vibration. This impact is not discussed further.

Land Use Compatibility

The analysis of the existing environment's impact on a project is not required under CEQA. However, as part of the County's development standards in the Zoning Code all multi-family development within 25 feet of an arterial or major thoroughfare right-of-way (as identified by the roadway classifications in the General Plan) is required to submit an acoustical analysis to determine noise impacts to future residents (Zoning Code Table 5.8.B). The acoustical analysis must demonstrate that façade construction would be such that interior noise levels would not exceed 45 dB L_{dn} under future traffic conditions. Development on proposed candidate rezone sites located within 25 feet of an arterial or major thoroughfare right-of-way would be required to conduct and submit an acoustical analysis to demonstrate compliance with the 45 dB L_{dn} noise standard.

In addition to compliance with the County's Zoning Code, future development as part of the Project on Sites 67 through 79 would be required to adhere to land use compatibility policies included in their respective distinct area plan EIRs. Specifically, development on Site 67 in the Fair Oaks Boulevard Corridor Plan area would be required to adhere to the Fair Oaks Boulevard Corridor Plan policy that requires development within the 70 dB noise contour or greater to utilize sound resistant construction materials and methods as determined by a qualified acoustical consultant such that interior noise levels do not exceed the County standard of 45 dB L_{dn}. Similar policies in the North Watt Avenue EIR and Old Florin Town SPA EIR would require development on Sites 68 through 79 located within the 70 dB traffic noise contour or greater, to submit an acoustical analysis prepared by a qualified acoustical consultant and verified by PER substantiating that the County 45 dB L_{dn} interior noise standard is met. Therefore, future residents as part of the Project would not be impacted by traffic noise. There would be no new or substantially more severe noise compatibility impacts as part of the Project.

Pursuant to County General Plan Policy NO-2 and Policy NO-3, new residential development within the 60 dB CNEL noise contours at any airport is prohibited. There are no proposed candidate rezone sites located within two miles of Franklin Field Airport,

Sunset Skyranch Airport, or Sacramento International Airport. There are proposed candidate rezone sites located within a 2-mile radius of Sacramento Executive Airport, Mather Airport, and Rio Linda Airport, however, none are located within the 60 dB CNEL noise contour within which residential development is incompatible. Although the McClellan Field Airport 60 dB CNEL noise contour intersects with the southwestern portion of the North Watt Avenue Corridor Plan, Sites 68 through 72 within the North Watt Avenue Corridor Plan area are located approximately 0.50 mile east of the 60 dB CNEL contour. Additionally, one site (Site 5) is located within the 75-80 dB CNEL noise contour as published in the adopted McClellan ALUCP. However, these noise levels reflect McCellan Airport's former military use and are no longer applicable. The noise analysis conducted for the draft 2007 McClellan ALUCP indicates that Site 5 is in an area exposed to less than 60 dB CNEL; as such, 60 dB CNEL is the applicable noise contour for Site 5 (SACOG 2024b). No proposed candidate rezone sites are located within the 60 dB CNEL noise contour of any airport and thus, future residents as part of the Project would not be impacted by airport noise. This impact is not discussed further.

METHODOLOGY

CONSTRUCTION NOISE

To assess potential short-term construction-related noise impacts, sensitive receivers and their relative exposure were identified. Project-generated construction noise levels were determined based on methodologies, reference emission levels, and usage factors from FTA's Guide on Transit Noise and Vibration Impact Assessment methodology (FTA 2018) and FHWA's Roadway Construction Noise Model User Guide (FHWA 2006). Reference levels for noise emissions for specific equipment or activity types are well documented and the usage thereof common practice in the field of acoustics.

Noise levels were modeled using typical reference noise levels and load factors associated with construction equipment, derived from the FHWA's Roadway Construction Noise Model (Version 1.1) (FHWA 2006). To remain conservative, construction noise was modeled for construction phases that typically use the loudest equipment (e.g., site preparation). The site preparation phase typically generates the most substantial noise levels because on site equipment associated with grading, compacting, and excavation are the noisiest. Site preparation equipment and activities include backhoes, bulldozers, loaders, and excavation equipment (e.g., graders and scrapers). Building construction similarly uses louder pieces of equipment. For example, erection of large structural elements and mechanical systems could require the use of a crane for placement and assembly tasks, which may generate louder noise levels. A detailed construction equipment list is not currently available for the Project as individual development projects as part of the overall rezone are not yet designed. The construction equipment list for the Project is based on the types of construction activities associated with multifamily residential development that would occur as part of the Project (e.g., site grading, building construction). It is expected that the primary sources of noise for construction of multifamily residential development would include backhoes, dozers, and graders. Noise levels for common construction equipment and activities at a reference distance of 50 feet are shown in Table NOI-17.

Three construction noise modeling scenarios were run to capture the loudest phases of construction. To represent a conservative analysis, modeling assumed that construction equipment would be operating simultaneously and given the size of the candidate rezone site, that up to three pieces of equipment would be operating at one time at any one location on a candidate rezone site. Additionally, depending on the soil type at specific Project sites, development facilitated by the Project could require the use of pile drivers. Therefore, an impact pile driver is included in the analysis to represent a "worst case" scenario. The first scenario represents the grading phase and assumes that a grader, dozer, and excavator could be operating simultaneously on any one candidate rezone site. The second noise modeling scenario represents building construction and assumes that three pieces of construction equipment (impact pile driver, front end loader, and truck) would be operating simultaneously at any one candidate rezone site. The third noise modeling scenario represents nighttime construction activity and assumes that three pieces of construction equipment for concrete pouring (a concrete mixer truck, a concrete pump truck, and a tractor) would be operating simultaneously at any one candidate rezone site. The construction noise modeling also assumes that because construction of the Project would occur over 5 years, noise sensitive land uses to be built from the initial development of the Project could be occupied and construction of subsequent stages could occur close to these new noise sensitive land uses. Modeling assumes construction could occur 50 feet from noise sensitive land uses.

Construction Vibration

To assess potential short-term construction-related vibration impacts, sensitive receivers and their relative exposure to construction vibration were identified. Project-generated construction vibration levels were determined based on methodologies, reference emission levels, and usage factors from FTA's *Guide on Transit Noise and Vibration Impact Assessment* methodology (FTA 2018). Reference levels for vibration emissions for specific equipment types are well documented and the usage thereof common practice in the field of acoustics.

Construction activities have the potential to expose nearby buildings to levels of ground vibration that could result in structural damage and/or negative human response. These types of activities were assessed based on the types of construction equipment that would be used, the levels of ground vibration typically generated by these types of equipment, and the proximity of construction activity to existing nearby buildings. Referenced ground vibration levels for typical construction equipment are provided by the FTA Transit Noise and Vibration Impact Manual (FTA 2018). Construction vibration levels and contour distances were calculated based on reference vibration levels for construction equipment that would be used for residential development.

Operational Noise

Non-Transportation Noise

With respect to non-transportation noise sources (e.g., stationary noise sources) associated with implementation of the Project, the assessment of long-term (operational-related) impacts was based on reference noise emission levels, measured noise levels

for activities and equipment typically associated with residential operation (e.g., HVAC units), and standard attenuation rates and modeling techniques.

TRANSPORTATION NOISE

Assessment of potential long-term (operational) noise impacts resulting from increases in traffic volumes on freeways and roadways in the County due to development under the Project was conducted using calculations consistent with the FHA's Traffic Noise Model (FHWA 2004) and Project-specific traffic data provided by DKS (Appendix TRAN-1). The traffic data provided by DKS that was used to model ADT included three additional sites in the Vineyard SPA that were removed from the Project during preparation of this SEIR. Therefore, the modeled traffic noise results included in Table NOI-20 represent a conservative analysis as traffic data used for the Project represents more trips than would actually occur. Additionally, traffic noise modeling assumes full buildout at all sites proposed for rezone. To assess noise impacts, traffic noise levels under existing and existing plus Project conditions for affected roadway segments were modeled. The analysis is based on the reference noise emission levels for automobiles, medium trucks, and heavy trucks, with consideration given to vehicle volume, speed, roadway configuration, distance to the receiver, and ground attenuation factors. The modeling conducted does not account for the acoustic dampening effects of any natural or human-made shielding (e.g., vegetation, berms, walls, or buildings); and thus, modeled noise levels may be overestimated where such shielding exists.

IMPACT AND ANALYSIS

This impact and analysis section is organized by impact then, within each impact, by analysis of Project buildout as compared to the General Plan EIR, and finally by distinct area plan. Mitigation is included or updated, where applicable, from the original environmental documents prepared for the General Plan and distinct area plans. An analysis of cumulative impacts is included at the end of the section.

IMPACT NOI-1: CONSTRUCTION NOISE THAT EXCEEDS COUNTY STANDARDS

SACRAMENTO COUNTY GENERAL PLAN

GENERAL PLAN ENVIRONMENTAL IMPACT REPORT DETERMINATION

The General Plan EIR did not analyze impacts related to construction noise.

PROPOSED PROJECT IMPACT EVALUATION

The proposed candidate rezone sites are currently designated and zoned for development, and development would occur within the same footprint as analyzed in the General Plan EIR. However, the Project would allow for increased development density compared to what was proposed in the General Plan EIR. Buildout of the Project would result in a net new capacity of approximately 4,081 residential units. The proposed increase in density on candidate rezone sites could prolong noise generated during construction and result in different construction methods. For example, constructing a multifamily residential building

could take longer and use different equipment than constructing single family residences or a building with fewer units. Due to the programmatic nature of the Project, the specific timing, duration, and magnitude of construction activities for individual development allowed under the Project are currently unknown.

Because there are no specific timeframes for individual future developments under the Project, it is currently not possible to determine site-specific construction noise levels, locations, or time periods for specific construction activities. Construction activities would, in some cases, occur near existing residences and other noise-sensitive receptors and extend over the course of several weeks to months depending on the individual development type and other project- and location-specific circumstances. Construction noise associated with development facilitated by the Project would be temporary in nature and vary depending on the characteristics of the construction activities being performed. Reference noise levels for typical construction equipment required for these activities are shown in Table NOI-17.

Table NOI-17: Noise Ranges of Typical Construction Equipment

Equipment Type	Typical Noise Level (L_{eq} dB) at 50 feet
Backhoe	80
Compactor	82
Concrete Mixer	85
Concrete Pump	82
Crane, Derrick	88
Crane, Mobile	83
Dozer	85
Generator	82
Grader	85
Loader	80
Paver	85
Pile-driver (Impact)	101
Pile-driver (Sonic)	95
Pneumatic Tool	85
Roller	85
Saw	76
Scraper	85
Truck	84

Notes: L_{eq} = equivalent sound level; dB = decibel

Assumes all equipment is fitted with a properly maintained and operational noise control device, per manufacturer specifications. Noise levels listed are manufacture-specified noise levels for each piece of heavy construction equipment.

Source: FTA 2018: 176.

As shown in Table NOI-18, operation of equipment during site grading could result in noise levels of 83.8 dB L_{eq} and 88.6 dB L_{max} at 50 feet. Assuming the use of a pile driver, building construction could result in noise levels of 94.1 dB L_{eq} and 101 dB L_{max} at 50 feet.

See Appendix NOI-1 for modeling inputs and results. Pursuant to County Code Section 6.68.090, construction noise is exempt from noise standards during specified hours (i.e. between 6:00 a.m. and 8:00 p.m. Monday through Friday and between the hours of 7:00 a.m. and 8:00 p.m. on Saturday and Sunday).

Table NOI-18: Construction Noise Estimates

Construction Phase	Construction Equipment	Modeled Noise Level (dBA L_{eq}) at 50 feet	Modeled Noise Level (dBA L_{max}) at 50 feet
Grading	Grader, Dozer, Excavator	83.8	88.6
Building Construction	Impact pile driver, Front end loader, pickup truck	94.1	101
Nighttime Construction	Concrete mixer truck, concrete pump truck, tractor	82.0	86.6

Notes: dBA = A-weighted decibels; L_{eq} = Equivalent Continuous Sound Level; L_{max} = Maximum Sound Level
Source: Modeled by Ascent 2024.

Construction activities at individual candidate rezone sites would fluctuate over time and during any given day. Typically, construction activities would occur during the hours of 6:00 a.m. and 8:00 p.m. Monday through Friday and between 7:00 a.m. and 8:00 p.m. Saturday and Sunday in accordance with Section 6.68.090 of the County Code. The daytime noise levels for a typical urban environment, such as that of the candidate rezone sites, ranges from 50-70 dB (Caltrans 2013: Table 2-5). The loudest "worst case" construction activity (i.e., building construction with use of a pile driver) would result in noise levels of 94.1 dB L_{eq} at 50 feet, as shown in Table NOI-18. This activity would result in a 40+ dB increase in ambient noise levels compared to an existing ambient noise level of 50 dB. A 5-dB increase is generally perceived as a distinctly noticeable increase, and a 10-dB increase is generally perceived as a doubling of loudness (Caltrans 2013: 2-10). The increase in noise levels would be perceived as more than a doubling of existing noise levels and would result in a substantial increase in temporary noise at offsite sensitive receptors. However, this noise modeling represents the worst-case scenario for building construction noise due to the inclusion of the impact pile driver equipment. Generally, an impact pile driver would not be used during typical construction activities. Additionally, an exterior-to-interior noise reduction from standard buildings would be expected to achieve at least a 15 dB reduction (Caltrans 2013), and thus, interior noise levels at nearby structures would be substantially lower than exterior noise levels. Furthermore, a substantial increase in noise itself does not necessarily constitute a significant noise impact, as long as overall noise exposure is below an acceptable level (FTA 2018). Given that the 79 candidate rezone sites are located across the County, there could be temporary substantial increases in noise levels but construction activities would not affect any one area for extended periods of time and individual receptors' exposure to increased noise would be limited. Although the proposed increase in allowed density on candidate rezone sties could result in different construction methods and increased or prolonged construction noise as compared to development allowed under the General Plan EIR, daytime construction would occur during the hours when construction noise is exempt

from County noise standards pursuant to County Code Section 6.68.090. Therefore, daytime construction noise impacts would be not result in a new or more severe impact.

Although construction activities are anticipated to occur primarily during daytime hours, when sensitive receptors are less sensitive to increased noise levels, nighttime construction could be required and could occur for some residential construction if there are tasks that must be done continuously until completed (e.g., concrete pouring) or that require road closures. Therefore, to ensure a comprehensive evaluation of potential environmental effects, this SEIR assumes that development allowed under the Project could potentially include limited outdoor nighttime construction activity. Construction activities performed during these evening hours could result in adverse effects to occupants of nearby sensitive land uses because exterior ambient noise levels typically decrease during nighttime hours as community activities (e.g., commercial activities, vehicle traffic) decrease. In the absence of noise standards specific for nighttime construction, nighttime construction noise modeling was compared to General Plan exterior nighttime noise standards (i.e., 50 dB L_{eq} and 70 dB L_{max}).

The most likely noise intensive nighttime construction activity that could occur under future development as part of the Project would be a nighttime concrete pour. As shown in Table NOI-18, if a nighttime concrete pour were required, construction activity could reach up to 82.0 dB L_{eq} and 86.6 dB L_{max} at 50 feet. Construction noise could expose nearby noise-sensitive receptors, including locations where people normally sleep, to noise levels that exceed applicable nighttime noise standards of 50 dB L_{eq} or 70 L_{max} within 1,984 feet or 338 feet, respectively. Due to the programmatic nature of this analysis, it cannot be determined if nighttime construction noise would be needed at sites within 1,984 feet of sensitive land uses. Because these details are not known, it is not possible to conclude that future development as part of the Project would avoid generation of temporary construction noise levels that exceed County nighttime exterior noise standards. Additionally, nighttime noise levels for a typical urban environment are approximately 40 dB. Nighttime construction noise could result in a 40+ dB increase in nighttime ambient noise levels. Therefore, nighttime construction could result in a substantial increase in noise for all future development under the Project. This impact would be potentially significant.

MITIGATION MEASURES

MITIGATION MEASURE NOI-1: DEVELOP AND IMPLEMENT A NIGHTTIME CONSTRUCTION NOISE CONTROL PLAN

This mitigation measure shall apply to sites where construction would occur outside of permitted construction hours (i.e., between 8:00 p.m. and 6:00 a.m. Monday through Friday and between 8:00 p.m. and 7:00 a.m. on Saturdays and Sundays) pursuant to Section 6.68.090(e) of the County Code and within 2,000 feet of a sensitive receptor. Prior to commencement of any construction activity, the project applicant, in coordination with selected construction contractors, and a qualified acoustical professional, shall prepare a nighttime construction noise control plan based on finalized project-specific information (e.g., specific equipment profiles, construction locations). This plan shall be

submitted to the Environmental Coordinator for review and determination of adequacy. The plan shall include:

- A detailed description of the proposed nighttime construction activities;
- A list of equipment used during all nighttime construction activities;
- Projected noise levels generated during the nighttime construction activities at surrounding noise-sensitive land uses;
- The location of sensitive receptors in relation to the proposed nighttime construction activities;
- Designation of a disturbance coordinator; and,
    - The contact information (e.g., phone number) of such a person shall be posted conspicuously at one or more locations around the construction site and provided to nearby residences (i.e., those within 500 feet of construction). The disturbance coordinator shall receive all public complaints and be responsible for determining the cause of the complaint and implementing any feasible measures to alleviate the problem.
- A detailed plan to notify residents (e.g., through mailers in multiple languages) within 2,000 feet of the site of upcoming planned nighttime construction activity.
    - Residents shall be notified at least one week prior to any anticipated nighttime construction work and notification shall include the contact information of the disturbance coordinator. The applicant shall provide proof of notification to the County one week prior to the scheduled nighttime construction activities.

The following noise control measures (or other equally effective measures approved by the County) shall be included in the plan as necessary to reduce noise levels to the appropriate threshold (i.e., 50 dB L_{eq} and 70 dB L_{max}), to the extent feasible, at the nearest sensitive receptor:

- Construction scheduling and phasing shall be designed so that impact equipment (e.g., pile drivers) are not used during the hours of 8:00 p.m. and 6:00 a.m. on Monday through Friday, and between 8:00 p.m. and 7:00 a.m. on Saturday and Sunday; and,
- For construction activity that would occur within a clear line-of-sight of offsite sensitive receptors, temporary noise curtains shall be installed as close as possible to the noise-generating activity such that the curtains obstruct the direct line of sight between the noise-generating construction activity and the nearby sensitive receptors. Temporary noise curtains shall consist of durable, flexible composite material featuring a noise barrier layer bound to sound-absorptive material on one side. The noise barrier layer shall consist of rugged, impervious, material with a surface weight of at least one pound per square foot and be designed to result in a 10-dB reduction at the sensitive receptor location. Noise-reducing enclosures shall be used around stationary noise-generating equipment (e.g., compressors

and generators) if equipment would operate within a clear line-of-sight of offsite sensitive receptors.

SIGNIFICANCE AFTER MITIGATION

Implementation of Mitigation Measure NOI-1 would reduce noise during nighttime hours by requiring a temporary solid barrier around construction at candidate rezone sites and staging areas and requiring the use of enclosures, shields, and noise curtains (noise curtains typically can reduce noise by up to 10 dB [EPA 1971]). Although noise reduction would be achieved with implementation of Mitigation Measures NOI-1, it cannot be assured at this time that nighttime construction would not be needed and that, if needed, the applicable noise standards could be met.

Pursuant to CEQA Guidelines Section 15162, the proposed Project would result in a substantially more severe impact from prolonged construction noise than would occur with implementation of the General Plan EIR. The Project's contribution to impacts would be significant and overall impacts would be significant and unavoidable.

DISTINCT AREA PLANS

FAIR OAKS BOULEVARD CORRIDOR PLAN

ENVIRONMENTAL IMPACT REPORT DETERMINATION

The Fair Oaks Boulevard EIR acknowledged that the Fair Oaks Boulevard Corridor Plan area would be subject to temporary increases in noise levels due to construction activities. The EIR determined that construction activities could result in noise levels of 77 to 89 dB at a distance of 50 feet. Although the Fair Oaks Boulevard EIR identifies potential temporary increases in noise levels, the EIR concluded that noise from construction activities falls under the exemption of the Sacramento County Noise Ordinance. Therefore, the Fair Oaks Boulevard EIR concluded that construction generated noise is a nuisance rather than an environmental impact and construction noise impacts would be less than significant. Although nighttime construction noise was not addressed in the Fair Oaks Boulevard Plan EIR, it can be reasonably assumed that some development under the Fair Oaks Boulevard Corridor Plan would require nighttime construction (e.g., a nighttime concrete pour). Because the exact location, timing, duration, and noise levels of nighttime construction activities under the Fair Oaks Boulevard Corridor Plan could not have been known, it is assumed that the analysis would have concluded that nighttime construction noise impacts under the Fair Oaks Boulevard EIR would be considered significant and unavoidable.

IMPACT EVALUATION

One candidate rezone site, Site 67, is located within the East Fair Oaks District of the Fair Oaks Boulevard Corridor area. Properties located within this district may opt-in to the Corridor Plan development standards or may rely upon the underlying zoning designation and associated zoning code development standards. Given this unique circumstance, this analysis supplements the Fair Oaks Boulevard EIR and works to maintain policy and mitigation consistency for future developers should they opt-in or -out of the Fair Oaks

Boulevard Corridor Plan. Although the Fair Oaks Boulevard EIR concludes that construction noise impacts are exempt from the County Noise Ordinance, Site 67 would be subject to County General Plan standards whether the developer opts in or out of the Corridor Plan.

Site 67 is zoned as BP (Business and Professional Office) and has a General Plan designation of TOD (Transit Oriented Development). Although the proposed rezone would change the allowed land use type on Site 67 compared to what is evaluated in the Fair Oaks Boulevard EIR, development would occur within the same footprint as analyzed in the Fair Oaks Boulevard EIR. Additionally, pursuant to County Code Section 6.68.090, construction noise is exempt from noise standards during daytime hours. However, because details about site-specific construction are not currently known, it is not possible to determine construction activities, noise levels, or time periods for development on Site 67. Specifically, as stated above, development could require construction during sensitive times of the day, and it cannot be guaranteed that such activity would not exceed the County nighttime exterior noise standards at nearby sensitive receptors. As shown in Table NOI-18, if a nighttime concrete pour were required, construction activity could reach up to 82.0 dB L_{eq} and 86.6 dB L_{max} at 50 feet. The nearest sensitive receptors are residences located approximately 20 feet south of Site 67 along Delaware Avenue. At this distance, noise levels could reach up to 89.9 dB L_{eq} and 94.6 dB L_{max}. Nighttime noise levels for a typical urban environment, such as that surrounding Site 67, are approximately 40 dB (Caltrans 2013). Therefore, nighttime construction activity at Site 67 could result in a 40+ dB increase in nighttime ambient noise levels. This would be considered a substantial temporary increase in noise. Because it cannot be assured that nighttime construction associated with development of Site 67 would not be needed, and if needed, would not result in a substantial temporary increase in noise, this impact would be potentially significant.

MITIGATION MEASURES

Implement Mitigation Measure NOI-1: Implement Measures to Reduce Nighttime Construction Noise

SIGNIFICANCE AFTER MITIGATION

Implementation of Mitigation Measure NOI-1 would reduce construction noise at nearby noise-sensitive receptors by ensuring proper equipment use; locating noise-generating equipment away from sensitive land uses; requiring a temporary solid barrier around individual project sites and staging areas; and requiring the use of enclosures, shields, and noise curtains (noise curtains typically can reduce noise by up to 10 dB [EPA 1971]). Although noise reduction would be achieved with implementation of Mitigation Measures NOI-1, it cannot be assured at this time that nighttime construction would not be needed and that, if needed, the applicable noise standards could be met.

Pursuant to CEQA Guidelines Section 15162, the proposed rezone of Site 67 would result in a substantially more severe impact from prolonged construction noise than would occur with implementation of Fair Oaks Boulevard EIR. The contribution to impacts from the proposed rezone on Site 67 would be significant and overall impacts would be significant and unavoidable.

NORTH WATT AVENUE CORRIDOR PLAN

ENVIRONMENTAL IMPACT REPORT DETERMINATION

The North Watt Avenue EIR acknowledged that the North Watt Avenue Corridor Plan area would be subject to temporary increases in noise levels due to construction activities. Although the North Watt Avenue EIR identified potential temporary increases in noise levels, the EIR concluded that noise from construction activities falls under the exemption of the Sacramento County Noise Ordinance. Therefore, the North Watt Avenue EIR concluded that construction-generated noise is a nuisance rather than an environmental impact and determined that construction noise impacts would be less than significant. Although nighttime construction noise was not addressed in the North Watt Avenue EIR, it can be reasonably assumed that some development under the North Watt Avenue Corridor Plan would require nighttime construction (e.g., a nighttime concrete pour). Because the exact location, timing, duration, and noise levels of nighttime construction activities under the North Watt Avenue Corridor Plan could not have been known, it is assumed that the analysis would have concluded that nighttime construction noise impacts under the North Watt Avenue EIR would be considered significant and unavoidable.

IMPACT EVALUATION

Candidate rezone sites, Sites 68 through 72, are located within the Town Center (Site 72) and Elkhorn District (Sites 68 through 71) of the North Watt Avenue Corridor Plan area. Buildout on Sites 68 through 72 could result in a net new capacity of up to 230 residential units within the North Watt Avenue Corridor Plan area. The candidate Sites 68 through 72 are currently designated and zoned for development (existing zoning: SPA Residential Mixed Use [RMU]-1 or RMU-2 and General Plan designation: TOD), and development would occur within the same footprint as analyzed North Watt Avenue EIR. However, the proposed rezone would allow for increased density compared to what was evaluated in the North Watt Avenue EIR. Sensitive land uses near Sites 68 through 72 could be exposed to increased construction noise related to increased density proposed on the sites. For example, constructing a multifamily residential building could take longer and use different equipment than constructing single family residences or a building with fewer units. Due to the programmatic nature of the proposed rezone, the timing, duration, and magnitude of construction activities for individual development on Sites 68 through 72 is currently unknown.

The North Watt Avenue EIR did not compare the potential construction noise to published noise standards or General Plan Policy. Therefore, this SEIR includes an analysis of construction noise standards to determine if development in the North Watt Corridor Plan area would generate a substantial temporary increase in noise. As there are no detailed construction plans for residential development on Sites 68 through 72, standard construction noise scenarios were conducted for this analysis. Please see Appendix NOI-1 for modeling inputs. Residential construction could result in noise levels ranging from 83.8 dB L_{eq} and 94 dB L_{max} at 50 feet. The nearest residences to Sites 68 through 72 are located approximately 100 feet east along Watt Avenue. At this distance, daytime construction noise levels at the nearest residences could range from 77.8 dB L_{eq} to 90 dB L_{max}. Construction activities that occur within the permitted hours detailed in Section

6.68.090(e) of the County Code are exempt from County noise standards. Therefore, impacts related to daytime construction would not be greater or more severe than those which were analyzed in the North Watt Avenue EIR.

Development on Sites 68 through 72 could require nighttime construction, such as for roadway improvements or for some foundation designs that require continuous concrete pours. In some instances, such a concrete pour could take 20 or more hours, requiring work to occur during evening and nighttime hours. If a nighttime concrete pour were required, associated noise could expose nearby sensitive receptors to noise levels that exceed applicable County nighttime noise standards of 50 dB L_{eq} or 70 L_{max} within 1,984 and 338 feet, respectively. Additionally, nighttime construction noise could result in a 40+ dB increase in nighttime ambient noise levels. Therefore, nighttime construction could result in a substantial increase in noise for all future development under the Project consistent with what would have been analyzed under the North Watt Avenue EIR. Impacts would be potentially significant.

MITIGATION MEASURES

Implement Mitigation Measure NOI-1: Implement Measures to Reduce Nighttime Construction Noise

SIGNIFICANCE AFTER MITIGATION

Implementation of Mitigation Measure NOI-1 would require additional measures to reduce the potential for noise exposure at nearby sensitive receptors, including the use of exhaust mufflers, equipment enclosures, and siting equipment as far from sensitive receptors as possible. Implementation of these noise-reduction features can reduce construction noise levels by approximately 10 dBA or more. Mitigation Measure NOI-1 would require the elimination of pile driving at night, the use of noise enclosures, and noise monitoring. Implementation of Mitigation Measures NOI-1would result in a reduction in temporary noise during construction, but it cannot be guaranteed that nighttime construction noise levels would be below applicable noise standards.

Pursuant to CEQA Guidelines Section 15162, the proposed rezone of Sites 68 through 72 would result in a substantially more severe impact from prolonged construction noise than would occur with implementation of North Watt Avenue EIR. The contribution to impacts from the proposed rezone on Sites 68 through 72 would be significant and overall impacts would be significant and unavoidable.

OLD FLORIN TOWN SPA

ENVIRONMENTAL IMPACT REPORT DETERMINATION

The Old Florin Town SPA EIR acknowledged that future construction within the SPA area would temporarily increase noise levels in the vicinity of construction activities during the construction period. Specifically, the Old Florin Town SPA EIR noted that construction activities could result in noise levels of 77 to 89 dB at 50 feet. Although the Old Florin Town SPA EIR identified potential temporary increases in noise levels due to construction within the SPA area, the EIR determined that noise from construction activities falls under the exemption of the County Noise Ordinance (i.e., County Code Section 6.68.090). The EIR

concluded that construction noise impacts associated with implementation of the Old Florin Town SPA would be less than significant. Although nighttime construction noise was not addressed in the Old Florin Town SPA EIR, it can be reasonably assumed that some development under the Old Florin Town SPA would require nighttime construction (e.g., a nighttime concrete pour). Because the exact location, timing, duration, and noise levels of nighttime construction activities under the Florin Town SPA could not have been known, it is assumed that the analysis would have concluded that nighttime construction noise impacts under the Florin Town SPA EIR would be considered significant and unavoidable.

IMPACT EVALUATION

Candidate rezone sites Site 73 through 79, are located within the Old Florin Town SPA. The candidate rezone sites are currently designated and zoned for development (existing zoning: SPA Mixed-Use Residential [MUR] or Mixed-Use Commercial [MUC] and General Plan designation: MDR). Although the proposed rezone would increase allowed development density compared to what was evaluated in Old Florin Town SPA EIR, the development would occur within the same footprint as analyzed in the Old Florin Town SPA EIR. However, the proposed increase in density could result in different construction methods and prolong noise generated during construction. As there are no specific development proposals for Sites 73 to 79, the timing, duration, and magnitude of construction activities is currently unknown. The proposed rezone on Sites 73 through 79 would allow for a net increase of 274 new residential units in the Old Florin Town SPA area. Residential construction could result in noise levels ranging from 83.8 dB L_{eq} and 94 dB L_{max} at 50 feet. The nearest sensitive receptor to these sites is a residence located approximately 10 feet west of Site 79. Construction activities that occur within the permitted hours detailed in Section 6.68.090(e) of the County Code are exempt from County noise standards. Therefore, impacts related to daytime construction would not be greater or more severe than those which were analyzed in the Old Florin Town SPA EIR.

The Old Florin Town SPA EIR indicates that construction noise impacts are considered a nuisance impact, and this type of noise is exempt from the Noise Ordinance; however, the EIR did not compare potential nighttime construction noise to published noise standards or General Plan policies. Development on Sites 73 through 79 could require nighttime construction, such as for roadway improvements or for some foundation designs that require continuous concrete pours. If a nighttime concrete pour were required, associated noise could expose nearby sensitive receptors to noise levels that exceed applicable County nighttime noise standards of 50 dB L_{eq} or 70 L_{max} within 1,984 and 338 feet, respectively (see Appendix NOI-1 for modeling inputs). Because individual construction activities are currently unknown, it cannot be guaranteed that construction activity during the evening and nighttime hours would not be necessary, and if necessary, would not exceed County exterior nighttime noise standards. Additionally, nighttime construction noise could result in a 40+ dB increase in nighttime ambient noise levels. This would be considered a substantial increase in nighttime noise consistent with what would have been analyzed under the Old Florin Town SPA EIR. Therefore, this impact would be potentially significant.

MITIGATION MEASURES

Implement Mitigation Measure NOI-1: Implement Measures to Reduce Nighttime Construction Noise

SIGNIFICANCE AFTER MITIGATION

Although the Old Florin Town SPA EIR did not identify environmental impacts associated with nighttime construction noise, this analysis identified an impact and appropriate mitigation for the seven candidate rezone sites located within the Old Florin Town SPA. As a subsequent document to the Old Florin Town SPA EIR, with implementation of Mitigation Measure NOI-1 there would be a reduction in temporary noise during construction, but it cannot be guaranteed that nighttime construction noise levels would be below applicable noise standards (see the "Sacramento County General Plan" section additional applicable information).

Pursuant to State CEQA Guidelines Section 15162, the proposed rezone on Sites 73 through 79 would result in more severe impacts related to prolonged construction noise that would occur with implementation of the Old Florin Town SPA. The contribution to impacts from the proposed rezone on Sites 73 through 79 would be significant and unavoidable and overall impacts would be significant and unavoidable.

IMPACT NOI-2: GENERATE CONSTRUCTION VIBRATION

SACRAMENTO COUNTY GENERAL PLAN

GENERAL PLAN ENVIRONMENTAL IMPACT REPORT DETERMINATION

The General Plan EIR did not analyze impacts related to construction vibration.

PROPOSED PROJECT IMPACT EVALUATION

Implementation of the Project would increase allowed development density compared to what was assumed in the General Plan EIR. The proposed increase in density could result in different construction methods, as constructing a multi-unit residential building could use different equipment than constructing single family residences or a building with fewer units. However, the timing, duration, and magnitude of construction activities for individual development allowed under the Project are currently unknown.

Construction activities generate varying degrees of temporary ground vibration, depending on the specific construction equipment used and activities involved. Typical construction activities associated with the residential projects allowed under the Project would use pieces of equipment that generate low levels of ground vibration, such as dozers and pavers. These types of common construction equipment do not generate substantial levels of ground vibration that could result in structural damage, except at extremely close distances (i.e., within 15 feet). Table NOI-19 provides a list of vibration levels typically associated with pieces of construction equipment at a reference distance of 25 feet. The most ground vibration-intensive activity that could be performed during typical construction under the Project would be the use of a vibratory roller. However, in certain instances, depending on the soil type, building height and type, pile driving could be required. When evaluating construction-related vibration impacts, the activities with

the greatest potential to cause impacts (i.e., structural damage or disturbance to sensitive land uses) are the primary focus.

Table NOI-19: Typical Construction Equipment Vibration Levels

Equipment	Equipment	PPV at 25 ft, in/sec	Approximate VdB at 25 ft
Pile Driver (impact)	Upper range	1.518	112
	Typical	0.644	104
Pile Driver (sonic)	Upper range	0.734	105
	Typical	0.17	93
Vibratory Roller		0.21	94
Hoe Ram		0.089	87
Large Bulldozer		0.089	87
Loaded Trucks		0.076	86
Jackhammer		0.035	79
Small Bulldozer		0.003	58

Notes: VdB = vibration decibels; ft = feet; in/sec = inches per second; PPV = peak particle velocity
Source: FTA 2018:184.

VIBRATION DAMAGE

Based on reference vibration levels for typical construction equipment shown in Table NOI-19, pile driving generates the highest vibration levels and is therefore of greatest concern when evaluating construction-related vibration impacts. The construction of some residential buildings as part of the Project could require the use of pile drivers depending on site-specific soil type, building height, and other foundation factors. According to the FTA, impact pile driving generates ground vibration levels of 1.518 in/sec PPV at 25 feet, which would attenuate to 0.199 in/sec PPV at 97 feet. Based on the FTA-recommended procedure for applying a propagation adjustment to these reference levels, vibration levels from impact pile driving could exceed the threshold of significance of 0.20 in/sec PPV for structural damage to non-engineered timber and masonry buildings within 97 feet of pile-driving activities (see Appendix NOI-1 for modeling details). It is unknown at this time where pile-driving activities would be required and to what extent they would occur. Therefore, it is possible that construction activities using a pile driver could occur within 97 feet of a structure.

Based on the reference vibration levels for typical construction equipment included in Table NOI-19, a vibratory roller would generate the second greatest level of ground vibration. According to the FTA, vibratory rollers generate ground vibration levels of 0.210 in/sec PPV at 25 feet. Based on the recommended procedure for applying a propagation adjustment, vibration levels from the use of a vibratory roller could exceed the threshold of significance of 0.20 in/sec PPV for structural damage to non-engineered timber and masonry buildings within 26 feet of vibratory roller activities (see Appendix NOI-1 for modeling details). It is unknown at this time where use of a vibratory roller would be required and to what extent vibratory roller activity would occur. Therefore, it is possible that construction activities using a vibratory roller could occur within 26 feet of a structure.

VIBRATION ANNOYANCE

Vibration levels can result in interference or annoyance to residences or other land uses where people sleep, such as hotels, and hospitals. According to the FTA, vibration levels associated with pile driving are 112 VdB at 25 feet and 94 VdB at 25 feet for vibratory rollers (FTA 2018: 184). FTA vibration annoyance potential criteria depend on the frequency of vibration events. When vibration events occur from the same source more than 70 times per day, as would likely be the case with pile driving, they are considered "frequent events." Based on FTA's recommended procedure for applying propagation adjustments to these reference levels, vibration levels from pile driving could exceed the threshold of significance for "frequent events" within 541 feet of a sensitive land use (see Appendix NOI-1 for modeling details). Vibration levels from the use of a vibratory roller could exceed the threshold of significance for "frequent events" within 136 feet of a sensitive land use (see Appendix NOI-1 for modeling details). It is not known at this time exactly where use of a pile driver and vibratory roller would be required and to what extent construction activities would occur. Therefore, it cannot be guaranteed that use of a pile driver or vibratory roller would not occur within 541 feet or 136 feet of a sensitive receptor, respectively.

VIBRATION SUMMARY

If construction activities that involve the use of a vibratory roller or pile driver were to occur within 26 feet and 97 feet of a structure, respectively, they could exceed the FTA criteria of 0.20 in/sec PPV for damage to non-engineered timber and masonry buildings. Additionally, if the use of a vibratory roller or pile driver were to occur within 136 feet and 541 feet of a sensitive receptor, they could exceed the FTA threshold for human annoyance to frequent vibration events (i.e., 75 VdB). Although the General Plan EIR did not analyze vibration impacts, use of a vibratory roller and to a lesser extent, pile driving, are common construction activities in residential development, and it is likely that the analysis would have concluded that vibration impacts would be significant and unavoidable. Because it cannot be guaranteed that construction activities would not occur within these distances and thus, would not exceed FTA thresholds, this impact is considered potentially significant, consistent with what would have been disclosed in the General Plan EIR, had the analysis addressed this impact.

MITIGATION MEASURES

MITIGATION MEASURE NOI-2: DEVELOP AND IMPLEMENT A VIBRATION CONTROL PLAN

This mitigation measure shall apply to construction involving pile-driving activities located within 97 feet of any building to reduce the potential for structural damage, and within 541 feet of an occupied residence or building, to minimize the disturbance from pile-driving activities; or vibratory roller activities located within 26 feet of any building to reduce the potential for structural damage, and within 136 feet of an occupied residence or building, to minimize the disturbance from vibratory roller activities.

A vibration control plan shall be developed by the project applicant and their construction contractor(s) to be submitted to and approved by the Environmental Coordinator before issuance of any improvement plans or grading permits for a project involving pile-driving activities located within 97 feet of any building and within 541 feet of an occupied residence

or building, or vibratory roller activities located within 26 feet of any building or and within 136 feet of an occupied residence or building. The plan shall consider all potential vibration-inducing activities that would occur within the distance parameters described above and include various measures, setback distances, precautions, monitoring programs, and alternative methods to traditional pile-driving or other vibration intensive activities with the potential to result in structural damage or adverse impacts to sensitive receptors. The following vibration control measures (or other equally effective measures approved by the County's Environmental Coordinator) shall be included in the plan:

- To prevent structural damage minimum setback requirements for different types of ground vibration-producing activities (e.g., pile driving, vibratory roller) for the purpose of preventing damage to nearby structures shall be established based on the proposed equipment use and locations, once determined. Factors to be considered include the specific nature of the vibration producing activity (e.g., type and duration of pile driving, weight and type of construction equipment), local soil conditions, and the fragility/resiliency of the nearby structures. Established setback requirements (e.g., 100 feet) can be breached if a project-specific, site-specific analysis is conducted by a qualified geotechnical engineer or ground vibration specialist that indicates that no structural damage would occur at nearby buildings or structures.
- To prevent disturbance for sensitive land uses, minimum setback requirements for different types of ground vibration producing activities (e.g., pile driving, vibratory roller) shall be established based on the proposed activities and locations, once determined. Established setback requirements (e.g., 550 feet, 140 feet) can be breached only if a project-specific, site-specific, technically adequate ground vibration study indicates that the buildings would not be exposed to ground vibration levels in excess of 72 VdB, and ground vibration measurements performed during the construction activity confirm that the buildings are not being exposed to levels in excess of 72 VdB.
- All vibration-inducing activity within the distance parameters described above shall be monitored and documented for ground vibration noise and vibration noise levels at the nearest sensitive land use and associated recorded data submitted to Sacramento County so as not to exceed the recommended FTA standards.
- Alternatives to traditional pile driving (e.g., sonic pile driving, jetting, cast-in-place or auger cast piles, non-displacement piles, pile cushioning, torque or hydraulic piles) or alternatives to traditional vibratory equipment shall be considered and implemented where feasible to reduce vibration levels.
- Limit vibration-inducing vibratory and impact activities (e.g., pile driving, vibratory rollers, jack hammers) to the daytime hours between 6:00 a.m. and 8:00 p.m. Monday through Friday and between 8:00 a.m. and 8:00 p.m. on Saturday and Sunday.
- Operate all vibration inducing impact equipment as far away from vibration-sensitive sites as reasonably possible from nearby structures.

- Phase pile-driving and high-impact activities so as not to occur simultaneously with other construction activities, to the extent feasible. The total vibration level produced could be significantly less when each vibration source is operated at separate times.

SIGNIFICANCE AFTER MITIGATION

Implementation of Mitigation Measure NOI-2 would serve to reduce potential vibration impacts from construction activities by requiring minimum setbacks to sensitive land uses, monitoring vibration levels during construction, use of alternative equipment when appropriate, and restrictions on hours of use to avoid impacts during more sensitive times of day. Through these measures, potential impacts on sensitive land uses from pile driving and vibratory roller activity would be minimized. However, because of the programmatic nature of the Project it cannot be assured at this time that construction vibration could be reduced to levels that would not impact persons or buildings.

Pursuant to CEQA Guidelines Section 15162, the proposed Project would result in a substantially more severe impact from prolonged construction vibration than would occur with implementation of the General Plan. The Project's contribution to impacts would be significant and overall impacts would be significant and unavoidable.

DISTINCT AREA PLANS

FAIR OAKS BOULEVARD CORRIDOR PLAN

ENVIRONMENTAL IMPACT REPORT DETERMINATION

The Fair Oaks Boulevard EIR did not analyze impacts related to construction vibration.

IMPACT EVALUATION

One candidate rezone site, Site 67, is located within the East Fair Oaks Boulevard District of the Fair Oaks Boulevard Corridor Plan area. Given that there is no analysis of construction vibration in the Fair Oaks Boulevard EIR, the analysis of impacts related to construction vibration included in the General Plan Proposed Project Impact Evaluation above would apply to the candidate rezone Site 67. Existing residences are located within 136 feet and 541 feet of Site 67. Therefore, if a pile driver or vibratory roller were used at Site 67, the FTA threshold for human annoyance to frequent vibration events (i.e., 75 VdB) would be exceeded. Additionally, there are existing structures within 26 feet and 97 feet of Site 67, such as the commercial land use adjacent to the western frontage of the site. Therefore, the FTA threshold of 0.20 in/sec PPV for damage to non-engineered timber and masonry buildings could be exceeded during construction. Although the Fair Oaks Boulevard EIR did not analyze vibration impacts, pile driving and the use of a vibratory roller are common pieces of equipment used in building construction and it is likely that, given the proximity to nearby buildings, the analysis would have concluded that vibration impacts would be significant and unavoidable. This impact is potentially significant.

MITIGATION MEASURES

Implement Mitigation Measure NOI-2: Develop and Implement a Vibration Control Plan

SIGNIFICANCE AFTER MITIGATION

Implementation of Mitigation Measure NOI-2 would serve to reduce potential vibration impacts from construction activities by requiring minimum setbacks to sensitive land uses, monitoring vibration levels during construction, use of alternative equipment when appropriate, and restrictions on hours of use to avoid impacts during more sensitive times of day. Through these measures, potential impacts on sensitive land uses from pile driving and vibratory roller activity would be minimized. However, it cannot be assured at this time that construction vibration could be reduced to levels that would not impact persons or buildings.

Pursuant to CEQA Guidelines Section 15162, the proposed rezone of Site 67 would result in a substantially more severe impact from prolonged construction vibration than would occur with implementation of Fair Oaks Boulevard Corridor Plan. The contribution to impacts from the proposed rezone on Site 67 would be significant and overall impacts would be significant and unavoidable.

NORTH WATT AVENUE CORRIDOR PLAN

ENVIRONMENTAL IMPACT REPORT DETERMINATION

The North Watt Avenue Corridor Plan did not analyze impacts related to construction vibration.

IMPACT EVALUATION

Candidate rezone Sites 68 through 72 are located within the North Watt Avenue Corridor Plan area. Given that the North Watt Avenue EIR did not analyze impacts related to construction vibration, the analysis of impacts related to construction vibration included under “Sacramento County General Plan” would apply to candidate rezone sites within the North Watt Avenue Corridor Plan. See “Sacramento County General Plan” above for the applicable impact evaluation. Existing residences are located within 136 feet and 541 feet of Sites 68 through 72. Therefore, if a pile driver or vibratory roller were used at these sites, the FTA threshold for human annoyance to frequent vibration events (i.e., 75 VdB) would be exceeded. Additionally, there are structures within 26 feet and 97 feet of Sites 69 through 72, such as the commercial land use south of Site 72. Therefore, the FTA threshold of 0.20 in/sec PPV for damage to non-engineered timber and masonry buildings would be exceeded at these sites. Although the North Watt Avenue EIR did not analyze vibration impacts, a vibratory roller is a common piece of equipment used in building construction and it is likely that, given the proximity to nearby buildings, the analysis would have concluded that vibration impacts would be significant and unavoidable. This impact is potentially significant.

MITIGATION MEASURES

Implement Mitigation Measure NOI-2: Develop and Implement a Vibration Control Plan

SIGNIFICANCE AFTER MITIGATION

Implementation of Mitigation Measure NOI-2 would serve to reduce potential vibration impacts from construction activities by requiring minimum setbacks to sensitive land uses, monitoring vibration levels during construction, use of alternative equipment when

appropriate, and restrictions on hours of use to avoid impacts during more sensitive times of day. Through these measures, potential impacts on sensitive land uses from pile driving and vibratory roller activity would be minimized. However, it cannot be assured at this time that construction vibration could be reduced to levels that would not impact persons or buildings.

Pursuant to CEQA Guidelines Section 15162, the proposed rezone of Sites 68 through 72 would result in a substantially more severe impact from prolonged construction vibration than would occur with implementation of North Watt Avenue Corridor Plan. The contribution to impacts from the proposed rezone on Sites 68 through 72 would be significant and overall impacts would be significant and unavoidable.

OLD FLORIN TOWN SPA

ENVIRONMENTAL IMPACT REPORT DETERMINATION

The Old Florin Town SPA EIR did not analyze impacts related to construction vibration.

IMPACT EVALUATION

Candidate rezone Sites 73 through 79 are located within the Old Florin Town SPA. Given that the Old Florin Town SPA EIR did not analyze impacts related to construction vibration, the analysis of impacts related to construction vibration included under "Sacramento County General Plan" would apply to the candidate rezone sites within the Old Florin Town SPA. There are residences located within 136 feet and 541 feet of Sites 76 through 79. Additionally, there is a church within 136 feet of Sites 73 through 75 and Site 78. Therefore, if a pile driver or vibratory roller were used at these sites, the FTA threshold for human annoyance to frequent vibration events (i.e., 75 VdB) would be exceeded. Additionally, there are structures within 26 feet and 97 feet of all sites. Therefore, the FTA threshold of 0.20 in/sec PPV for damage to non-engineered timber and masonry buildings could be exceeded. Although the Old Florin Town SPA EIR did not analyze vibration impacts, pile driving and the use of a vibratory roller are common pieces of equipment used in building construction and it is likely that, given the proximity to nearby buildings, the analysis would have concluded that vibration impacts would be significant and unavoidable. This impact is potentially significant.

MITIGATION MEASURES

Implement Mitigation Measure NOI-2: Develop and Implement a Vibration Control Plan

SIGNIFICANCE AFTER MITIGATION

Implementation of Mitigation Measure NOI-2 would serve to reduce potential vibration impacts from construction activities by requiring minimum setbacks to sensitive land uses, monitoring vibration levels during construction, use of alternative equipment when appropriate, and restrictions on hours of use to avoid impacts during more sensitive times of day. Through these measures, potential impacts on sensitive land uses from pile driving and vibratory roller activity would be minimized. However, because of the programmatic nature of the proposed rezone it cannot be assured at this time that construction vibration could be reduced to levels that would not impact persons or buildings.

Pursuant to CEQA Guidelines Section 15162, the proposed rezone of Sites 73 through 79 would result in a substantially more severe impact from prolonged construction vibration than would occur with implementation of Old Florin Town SPA. The contribution to impacts from the proposed rezone on Sites 73 through 79 would be significant and overall impacts would be significant and unavoidable.

IMPACT NOI-3: OPERATIONAL TRAFFIC NOISE

SACRAMENTO COUNTY GENERAL PLAN

GENERAL PLAN ENVIRONMENTAL IMPACT REPORT DETERMINATION

The General Plan EIR determined that all modeled roadways would experience an increase in traffic from buildout of the General Plan, which would expose sensitive land uses to increased noise. Further, the General Plan EIR determined that, although future development would be required to include design features that ensure that indoor and outdoor noise environments are consistent with General Plan policies, it could not be guaranteed that sensitive land uses would not be exposed to noise levels that exceed existing or proposed General Plan noise standards. The General Plan EIR determined that, given the number of areas that would experience a substantial noise increase, it would not be feasible or reasonable to fund noise mitigation improvements at each affected site. Therefore, the General Plan EIR concluded that traffic noise impacts would be significant and unavoidable.

PROPOSED PROJECT IMPACT EVALUATION

The Project would result in the generation of new vehicle trips from future development on the proposed candidate rezone sites. Additional vehicle trips would result in increases in traffic-related noise levels. In accordance with General Plan Policy NO-1 (Table NOI-11), an increase in traffic noise could result in potentially significant impacts if traffic noise levels exceed the maximum allowable exterior noise level of 65 dB L_{dn} for residential land uses. Additionally, traffic noise impacts would occur if Project buildout would result in a 5+ dB increase where existing noise levels are less than 60 dB L_{dn}; a 3+ dB increase where existing noise levels are between 60 and 65 dB L_{dn}; or an increase of 1.5+ dB or greater at locations where existing exterior noise levels exceed 65 dB L_{dn}.

Traffic noise modeling was conducted for existing and existing plus Project traffic conditions using Project-specific ADT volumes for affected roadway segments. In this section, traffic noise levels are presented in tables when there are more than three roadway segments being analyzed. Table NOI-20 includes roadway noise levels for both existing and existing plus Project conditions. The noise levels in bold under the “Existing Conditions” column are roadway segments that currently exceed the County 65 dB L_{dn} noise standard. To provide a point of comparison for existing and future noise conditions, noise levels were calculated at a distance of 100 feet from the roadway centerline. Noise levels at receptors farther away from roadway noise sources, or in locations with intervening topography, vegetation, or structures, would be lower than shown in Table NOI-20. See Appendix NOI-1 for more detailed information regarding traffic noise calculations.

Table NOI-20: Predicted Existing Plus Project Traffic Noise Levels

Segment Number	Roadway	Segment	Segment	Noise Level (dB L^{dn}) at 100 feet from Roadway Centerline	Noise Level (dB L^{dn}) at 100 feet from Roadway Centerline[4]	Net Change (dB)[5]
		From	To	Existing Conditions	Existing Plus Project Conditions	
1	Antelope North Road	Antelope Road	PFE Road	59.5	59.4	-0.1
2	Antelope Road	Walerga Road	Elverta Road/Antelope Road	61.5	61.7	0.1
3	Antelope Road	Elverta Road/Antelope Road	Don Julio Blvd	65.2	65.5	0.3
4	Beech Avenue	Central Ave.	Greenback Lane	49.6	49.7	0.1
5	Chestnut Avenue	Central Ave.	Greenback Lane	56.2	56.4	0.2
6	Curved Bridge Rd	Oak Lane	Dry Creek Road	51.2	51.8	0.6
7	Dry Creek Road	Elkhorn Boulevard	Vinci Avenue	58.9	59.0	0.1
8	Edison Avenue	Bell Street	Fullton Avenue	33.5	32.3	-1.2
9	Elk Grove Florin Road	Florin Road	Gerber Road	66.1	66.1	0.0
10	Elk Grove Florin Road	Gerber Road	Calvine Road	67.4	67.4	0.0
11	Elkhorn Blvd	2nd Street	Rio Linda Blvd	65.1	65.1	0.0
12	Elsie Avenue	Stockton Blvd	Iona Way	66.1	66.3	0.3
13	Elverta Road	Cherry Brook Drive	28th Street	68.3	68.3	0.0
14	Fair Oaks Boulevard	Jacob Lane	Arden Way	67.3	67.3	0.0
15	Fair Oaks Boulevard[1]	California Avenue	Marhsall Avenue	69.2	69.2	0.0
16	Fair Oaks Boulevard	Marshall Avenue	Hollister Avenue	69.5	69.5	0.0
17	Florin Road[2]	Franklin Blvd	SR 99	69.7	69.7	0.0

Segment Number	Roadway	Segment	Segment	Noise Level (dB L^{dn}) at 100 feet from Roadway Centerline	Noise Level (dB L^{dn}) at 100 feet from Roadway Centerline[4]	Net Change (dB)[5]
		From	To	Existing Conditions	Existing Plus Project Conditions	
18	Florin Road[2]	Power Inn Road	Florin Perkins Road/French Road	65.1	65.1	0.0
19	Folsom Boulevard	Mayhew Road	Bradshaw Road	67.7	67.8	0.1
20	Franklin Boulevard	Fruitridge Road	47th Avenue	66.4	66.4	0.1
21	Franklin Boulevard	47th Avenue	Florin Road	69.1	69.1	0.0
22	Franklin Boulevard	Florin Road	Mack Road	68.2	68.2	0.0
23	Fruitridge Road	44th Street	Dewey Blvd	66.6	66.7	0.1
24	Garfield Avenue	El Camino Ave	Fair Oaks Blvd	54.4	54.5	0.2
25	Garfield Avenue	Greenback Lane	Auburn Blvd	69.3	69.5	0.1
26	Greenback Lane	I-80 interchange	Auburn Blvd	73.5	73.7	0.2
27	Greenback Lane	Kenneth Avenue	Hazel Avenue	68.5	68.6	0.0
28	Hemlock St	Madison Avenue	Myrtle Avenue	58.8	58.7	0.0
29	Madison Avenue	Harrison Street	Hillsdale Blvd	68.6	68.6	0.1
30	Manzanita Avenue	Madison Avenue	Winding Way	67.3	67.2	0.0
31	Oak Lane	Front Street	Curved Bridge Road	52.9	53.2	0.3
32	Pasadena Avenue	Norris Avenue	Creek Road	59.5	59.6	0.1
33	Power Inn Road[2]	Elder Creek Road/Glen Elder Road	Florin Road	67.6	67.8	0.2
34	Power Inn Road[2]	Florin Road	Gerber Road	68.4	68.5	0.1

Segment Number	Roadway	Segment	Segment	Noise Level (dB L^{dn}) at 100 feet from Roadway Centerline	Noise Level (dB L^{dn}) at 100 feet from Roadway Centerline[4]	Net Change (dB)[5]
		From	To	Existing Conditions	Existing Plus Project Conditions	
35	Power Inn Road	Elsie Ave/Mack Road	Meadowhaven Drive	67.1	67.1	0.0
36	Roseville Road	Antelope Road	Outlook Drive	67.9	67.9	0.0
37	Stockton Blvd	Fruitridge Road	Elder Creek Road	65.0	64.9	0.0
38	Stockton Blvd	Elder Creek Road	Florin Road	68.3	68.3	0.0
39	Stockton Blvd	Florin Road	Gerber Road	68.7	68.8	0.1
40	Stockton Blvd	Gerber Road	Mack Rd/Elise Ave	68.6	68.6	0.1
41	Stockton Blvd	Mack Rd/Elise Ave. south along SR 99 frontage		54.1	54.0	-0.1
42	Sunrise Avenue	Sunset Avenue	Winding Way	72.1	72.2	0.0
43	Walerga Road	Elverta Road	Antelope Road	68.4	68.6	0.1
44	Walerga Road	Antelope Road	Elkhorn Boulevard	70.5	70.6	0.1
45	Walerga Road	Elkhorn Boulevard	Don Julio Blvd	68.8	69.0	0.2
46	Walerga Road	Don Julio Blvd	Roseville Road	64.4	64.7	0.2
47	Watt Avenue[3]	Antelope Road	Elkhorn Boulevard	66.6	66.6	0.0
48	Watt Avenue[3]	Elkhorn Boulevard	Don Julio Blvd	66.0	66.1	0.1

Notes: dB = decibel; L_{dn} = day-night sound level

[1] Roadway segment in the Fair Oaks Boulevard Corridor area

[2] Roadway segment in the Old Florin Town SPA

[3] Roadway segment in the North Watt Corridor area

[4] The traffic data that was used to model ADT included three additional sites in the Vineyard area that are no longer included under the Project. Therefore, the modeled traffic noise results in Table NOI-20 represent a conservative analysis because the removed sites would reduce trips on area roadways.

[5] The net change may not be the exact difference between existing and existing plus project conditions due to rounding.

Measurements in bold are roadway segments that exceed the County 65 dB standard under existing conditions.

Source: Data provided by DKS Associates. Modeled by Ascent in 2024.

As shown in Table NOI-20, assuming full buildout, implementation of the Project would result in an increase in noise along 25 studied roadway segments, a decrease in noise along 3 studied roadway segments, and no change to noise levels along 20 roadway segments. Noise level increases would range from 0.1 to 0.6 dB $L_{dn.}$ There are 16 roadway segments that exceed the County residential exterior noise standard of 65 dB L_{dn} under existing conditions and would experience an increase in traffic noise with development as part of the Project. Consistent with County General Plan Policy NO-9, traffic noise level increases from the Project would be less than the allowable 1.5 dB L_{dn} for roadway segments with noise levels above 65 dB or 3+ dB increase for roadways with noise levels between 60 and 65 dB L_{dn}. Additionally, there are no modeled roadways that would increase traffic noise levels from below 65 dB L_{dn} to above 65 dB L_{dn}.

Pursuant to CEQA Guidelines Section 15162, the proposed Project would not result in a new or substantially more severe impact from new vehicle trips generated by the Project. The Project's contribution to impacts would be less than significant and overall impacts would remain significant and unavoidable, consistent with the findings of the General Plan EIR.

MITIGATION MEASURES

No additional mitigation measures to reduce the significant impacts identified in the General Plan EIR were found to be feasible.

DISTINCT AREA PLANS

FAIR OAKS BOULEVARD CORRIDOR PLAN

ENVIRONMENTAL IMPACT REPORT DETERMINATION

The Fair Oaks Boulevard EIR determined that implementation of the Corridor Plan would result in an increase in ADT volumes on affected roadway segments. The Fair Oaks Boulevard EIR used the FHWA model to determine the 60 dB, 65 dB, 70 dB, and 75 dB traffic noise contours for 10 roadway segments in the Fair Oaks Boulevard Corridor Plan area. The Fair Oaks Boulevard EIR determined that the future residential development under the Fair Oaks Boulevard Corridor Plan would occur in areas where exterior noise levels would exceed 65 dB. The Fair Oaks Boulevard EIR noted that future development would be required to use setbacks and site design to reduce noise impacts at residential development prior to the consideration of noise barriers and sound walls. The Fair Oaks Boulevard EIR determined that sound barriers would compromise the intent of the plan and would not provide effective mitigation for second story units. Therefore, given the uncertainty that noise levels could feasibly be reduced to meet County noise standards without comprising the intent of the plan, exterior noise impacts to residential uses were determined to be significant and unavoidable.

IMPACT EVALUATION

As shown in Table NOI-20, the proposed rezone of Site 67 would add residential development on roadway segment 15 in the Fair Oaks Boulevard Corridor Plan area (e.g., Fair Oaks Boulevard from California Avenue to Marshall Avenue). Existing traffic noise level along this roadway segment is 69.2 dB L_{dn}. Assuming full buildout, the proposed

rezone would result in traffic noise level of 69.2 dB L_{dn} on this roadway segment. Although the roadway segment exceeds County exterior noise levels of 65 dB, traffic noise levels along this roadway segment would remain the same at Site 67 with the proposed Project.

Pursuant to CEQA Guidelines Section 15162, the proposed rezone of Site 67 would not result in a new or substantially more severe impact from new vehicle trips generated by the Project. The contribution of development on Site 67 to traffic noise would be less than significant and overall impacts would remain significant and unavoidable, consistent with the findings of the Fair Oaks Boulevard EIR.

MITIGATION MEASURES

No feasible mitigation measures to reduce the significant impact were identified in the Fair Oaks Boulevard EIR.

NORTH WATT AVENUE CORRIDOR PLAN

ENVIRONMENTAL IMPACT REPORT DETERMINATION

The North Watt Avenue EIR determined that the existing 65 dB noise contour is approximately 400 to 600 feet from the center of most roadways within the North Watt Avenue Corridor Plan area, and thus it is anticipated that residential development would occur in areas where traffic noise levels would exceed 65 dB. The North Watt Avenue EIR noted that future development would be required to use setbacks and site design to reduce noise impacts at residential development prior to the consideration of noise barriers and sound walls. The North Watt Avenue EIR determined that the use of sound control technologies such as soundwalls could be impractical as they could conflict with the plan's intent to increase walkability by impeding pedestrian mobility through real or perceived impasses or obstacles. Given the uncertainty that exterior noise levels at residential uses could feasibly be reduced to meet noise standards without compromising the intent of the North Watt Avenue Corridor Plan, the North Watt Avenue EIR determined that sensitive land uses would be exposed to noise levels that exceed County noise standards. Impacts were determined to be significant and unavoidable.

IMPACT EVALUATION

As shown in Table NOI-20, the proposed rezone on Sites 68 through 72 would add residential development on roadway segments 47 (e.g., Watt Avenue from Antelope Road to Elkhorn Boulevard) and 48 (e.g., Watt Avenue from Elkhorn Boulevard to Don Julio Boulevard) in the North Watt Avenue Corridor Plan area. Existing traffic noise levels along these roadway segments are 66.6 and 66.0 dB L_{dn}, respectively. With full development under the proposed rezone, roadway segment 47 would not experience an increase in traffic noise, and roadway segment 48 would experience a 0.1 dB L_{dn} increase in traffic noise. Although roadway segment 47 would experience an increase in noise, the increase would not exceed the allowable incremental traffic noise increase threshold of 1.5 dB for roadway segments with existing noise levels above 65 dB L_{dn}.

Pursuant to CEQA Guidelines Section 15162, the proposed rezone of Sites 68 through 72 would not result in a new or substantially more severe impact from new vehicle trips generated by the Project. The contribution of development on Sites 68 through 72 to traffic

noise would be less than significant and overall impacts would remain significant and unavoidable, consistent with the findings of the North Watt Avenue EIR.

MITIGATION MEASURES

No feasible mitigation measures to reduce the significant impact were identified in the North Watt Avenue EIR.

OLD FLORIN TOWN SPA

ENVIRONMENTAL IMPACT REPORT DETERMINATION

The Old Florin Town SPA EIR identified that residential development under the Old Florin Town SPA would occur within the 65 dB contour of major roadways where exterior noise levels would exceed 65 dB. The Old Florin Town SPA EIR noted that future development would be required to use setbacks and site design to reduce noise impacts at residential development prior to the consideration of noise barriers and sound walls. The Old Florin Town SPA EIR determined that the use of noise barriers and soundwalls would directly conflict with the Old Florin Town SPA that is intended to create a community-based urban center. Specifically, the Old Florin Town SPA EIR established that the use of sound barriers could impede pedestrian and bicyclist mobility through real or perceived impasses or obstacles. Given the uncertainty that exterior noise levels at residential uses could feasibly be reduced to meet noise standards without compromising the intent of the plan, the Old Florin Town SPA EIR determined that sensitive land uses would be exposed to traffic noise levels that exceed noise standards established in the County noise policies. The Old Florin Town SPA EIR determined that impact would be significant and unavoidable.

IMPACT EVALUATION

As shown in Table NOI-21, the proposed rezone on Sites 73 through 79 would add additional residential development along four roadway segments (i.e., roadway segments 17, 18, 33, and 34) in the Old Florin Town SPA.

Table NOI-21: Predicted Existing Plus Proposed Rezone Traffic Noise Levels in the Old Florin Town SPA Area

Segment Number	Roadway	Segment	Segment	Noise Level (dB Ldn) at 100 feet from Roadway Centerline	Noise Level (dB Ldn) at 100 feet from Roadway Centerline	Net Change (dB)[1]
		From	To	Existing Conditions	Existing Plus Project Conditions	
17	Florin Road[2]	Franklin Blvd	SR 99	69.7	69.7	0.0
18	Florin Road[2]	Power Inn Road	Florin Perkins Road/French Road	65.1	65.1	0.0

Segment Number	Roadway	Segment	Segment	Noise Level (dB Ldn) at 100 feet from Roadway Centerline	Noise Level (dB Ldn) at 100 feet from Roadway Centerline	Net Change (dB)[1]
		From	To	Existing Conditions	Existing Plus Project Conditions	
33	Power Inn Road[2]	Elder Creek Road/Glen Elder Road	Florin Road	67.6	67.8	0.2
34	Power Inn Road[2]	Florin Road	Gerber Road	68.4	68.5	0.1

Notes: dB = decibel; L_{dn} = day-night sound level

[1] The net change may not be the exact difference between existing and existing plus project conditions due to rounding.

Measurements in bold are roadway segments that exceed the County 65 dB standard under existing conditions.

Source: Data provided by DKS Associates. Modeled by Ascent in 2024.

As shown in Table NOI-21, the studied roadway segments in the Old Florin Town SPA exceed County noise thresholds of 65 dB under existing conditions. With full buildout of the proposed future development on Sites 73 through 79, roadway segments 17 and 18 would not experience a change in traffic noise. Roadway segments 33 and 34 would experience a 0.2 and a 0.1 dB L_{dn} increase in traffic noise, respectively, from Project buildout on Sites 73 through 79. Traffic noise increases along these roadway segments would not exceed the allowable incremental traffic noise increase threshold of 1.5 dB for roadway segments with existing noise levels above 65 dB L_{dn}.

Pursuant to CEQA Guidelines Section 15162, the proposed rezone of Sites 73 through 79 would not result in a new or substantially more severe impact from new vehicle trips generated by the Project. The contribution of development on Sites 73 through 79 to traffic noise would be less than significant and overall impacts would remain significant and unavoidable, consistent with the findings of the Old Florin Town SPA EIR.

Mitigation Measures

No feasible mitigation measures to reduce the significant impact were identified in the Old Florin Town SPA EIR.

Impact NOI-4: Expose Existing Sensitive Receptors to New Stationary Noise Sources that Exceed the Applicable Noise Standards

Sacramento County General Plan

General Plan Environmental Impact Report Determination

The General Plan EIR did not analyze impacts specifically related to stationary noise sources.

PROPOSED PROJECT IMPACT EVALUATION

Noise sources associated with residential land uses include mechanical equipment such as HVAC equipment, vehicular and human activity in parking lots, outdoor activities, residential maintenance, and voices. Pursuant to County Code Section 6.68.090, noise associated with the maintenance of residential property between the hours of 6:00 a.m. and 8:00 p.m. Monday through Friday and between 7:00 a.m. and 8:00 p.m. on Saturdays and Sundays is exempt from County noise standards. Noise from vehicular and human activity in parking lots, outdoor activities, and voices would be intermittent in nature and would vary considerably depending on the specific characteristics of each residential area. Additionally, noise in residential areas is generally not of a frequency that would disturb existing sensitive receptors (e.g., residences, schools, or libraries) and would occur mainly during the daytime, when receptors are least sensitive. Therefore, this analysis focuses on noise from HVAC equipment.

The Project would include the rezone of parcels to Medium- and High-Density Residential. As defined in the General Plan Land Use Element, medium density residential development includes apartments, condominiums, and group housing; and high-density residential development includes multiple floor apartments and condominiums, and mixed-use developments (County of Sacramento 2022). Mechanical noise equipment (e.g., HVAC systems) would be the primary noise source associated with medium- and high-density residential developments. Noise levels from HVAC equipment vary depending on the unit efficiency, size, and location, but generally range from 60 to 70 dBA L_{eq} at a distance of 3 feet (Carrier 2022).

Section 6.68.120 of the Sacramento County Code includes specific regulations regarding noise levels generated by mechanical equipment. Specifically, Section 6.68.120 of the County Code states that new development that includes any mechanical equipment, pump, fan, air conditioning apparatus, stationary pumps, stationary cooling towers, stationary compressors, similar mechanical devices, or any combination thereof shall not allow noise levels from this equipment to exceed 60 dB at one foot inside the property line of the affected residential property or exceed 55 dB outside the neighboring living area window nearest the equipment location or at the center of a neighboring patio. For a more conservative analysis, HVAC units were assumed to operate at a reference level of 70 dB L_{eq} at 3 feet. At this noise level HVAC units within 10 and 17 feet of a sensitive receptor would exceed the County's noise standard for mechanical equipment at one foot inside the property line and outside the neighboring living area window and center of a neighboring patio, respectively (see Appendix NOI-1 for modeling inputs).

Because it is not known at this time where individual developments associated with the Project would be specifically located on candidate rezone sites, details regarding the location of HVAC units are not known. However, subsequent development on the candidate rezone sites would be required to comply with applicable County guidelines, standards, and specifications related to operational noise. Specifically, pursuant to General Plan Policy NO-6, non-transportation noise sources generated by the Project would be required to be reduced so as not to exceed the County interior and exterior noise level standards at existing noise-sensitive land uses in the Project vicinity. Additionally, General Plan Policy NO-15 gives the County flexibility to consider the

application of 5 dB less restrictive exterior noise standards than those included in Tables NOI-10 and NOI-12 of this SEIR in cases where it is impractical or infeasible to reduce exterior noise levels within infill projects to a state of compliance with the policies included in Tables NOI-10 and NOI-12. Adherence to these policies would ensure that noise impacts related to stationary noise sources would be reduced such that they would not exceed County standards.

Pursuant to CEQA Guidelines Section 15162, the proposed Project would not result in a substantially more severe impact from stationary noise sources than would occur with implementation of the General Plan. The Project's contribution to impacts would not be substantial and overall impacts would be less than significant.

MITIGATION MEASURES

Mitigation not required.

DISTINCT AREA PLANS

FAIR OAKS BOULEVARD CORRIDOR PLAN

ENVIRONMENTAL IMPACT REPORT DETERMINATION

The Fair Oaks Boulevard EIR determined that potential noise generation from future development under the plan could expose existing noise-sensitive land uses to new non-transportation noise sources that exceed the County's applicable noise standards. The Fair Oaks Boulevard EIR identified that General Plan Policy NO-6 requires appropriate noise mitigation measures to reduce projected noise levels to a state of compliance with Table 2 (Table NOI-13 in this SEIR). The Fair Oaks Boulevard EIR determined that the project review process would ensure that individual proposed projects comply with applicable policies and noise attenuation could be addressed in the project design phase. However, to minimize impacts, the Fair Oaks Boulevard EIR included Mitigation Measure FO-NO-3 to ensure compliance with General Plan Noise Element standards for non-transportation sources. The Fair Oaks Boulevard EIR concluded that with implementation of Mitigation Measure FO-NO-3, an additional policy to the Fair Oaks Boulevard Corridor Plan, the impact would be less than significant with mitigation incorporated.

IMPACT EVALUATION

The proposed rezone on Site 67 would allow for residential development at increased density in the Fair Oaks Boulevard Corridor Plan area. Noise sources associated with residential land uses include mechanical equipment such as HVAC equipment, residential landscaping activities, and outdoor recreational activities. Noise levels from outdoor activities such as voices would be intermittent and unamplified, and therefore, would not result in a substantial noise increase above ambient noise levels. Additionally, pursuant to County Code Section 6.68.090, noise associated with the maintenance of residential property between the hours of 6:00 a.m. and 8:00 p.m. Monday through Friday and between 7:00 a.m. and 8:00 p.m. on Saturdays and Sundays are exempt from County noise standards. Therefore, this analysis focuses on noise from HVAC equipment.

There are no sensitive receptors located within 10 or 17 feet from Site 67. However, there are commercial land uses located within 17 feet of Site 67. Pursuant to County General Plan Policy NO-6, non-transportation noise sources generated by the proposed rezone on Site 67 would be required to be reduced so as not to exceed the County interior and exterior noise level standards at existing noise-sensitive land uses in the vicinity of Site 67. Additionally, development on Site 67 would be required to adhere to Section 3A3 "Noise Standards" of the Fair Oaks Boulevard Corridor Plan which states that no use shall be operated so as to generate recurring noises that are unreasonably loud, cause injury, or create a nuisance to any person of ordinary sensitivities.

Pursuant to CEQA Guidelines Section 15162, the proposed rezone of Site 67 would not result in a new or substantially more severe impact from stationary noise sources. Stationary noise sources from future of development on Site 67 would not be substantial and overall impacts would remain less than significant with mitigation, consistent with the findings of the Fair Oaks Boulevard EIR.

MITIGATION MEASURES

Mitigation not required.

NORTH WATT AVENUE CORRIDOR PLAN

ENVIRONMENTAL IMPACT REPORT DETERMINATION

The North Watt Avenue EIR determined that potential noise generation from future development under the plan could expose existing noise-sensitive land uses to new non-transportation noise sources that exceed the County's applicable noise standards. The North Watt Avenue EIR identified General Plan Policy NO-5 that requires appropriate noise mitigation measures to reduce projected noise levels to a state of compliance with Table 2 (Table NOI-13 in this SEIR). The North Watt Avenue EIR included Mitigation Measure NS-4, as a proposed policy, to prohibit excessive community-generated noise. Impacts were determined to be less than significant with mitigation incorporated.

IMPACT EVALUATION

The proposed rezone on Sites 68 through 72 would allow for residential development at increased density in the North Watt Avenue Corridor Plan area. Noise sources associated with residential land uses include residential landscaping equipment, voices, outdoor recreational activities, and mechanical equipment such as HVAC equipment. Noise levels from voices and outdoor activities would be intermittent and unamplified, and therefore, would not result in a substantial noise increase above ambient noise levels. Additionally, pursuant to County Code Section 6.68.090, noise associated with the maintenance of residential property between the hours of 6:00 a.m. and 8:00 p.m. Monday through Friday and between 7:00 a.m. and 8:00 p.m. on Saturdays and Sundays are exempt from County noise standards. Therefore, this analysis focuses on noise from HVAC equipment.

Assuming HVAC equipment noise would be as loud as 70 dBA L_{eq} at 3 feet, sensitive receivers within 10 feet and 17 feet of HVAC systems would be exposed to noise levels that exceed County daytime noise standards of 60 dBA L_{eq} and 55 dBA L_{eq}, respectively. Because it is not known at this time where individual developments on Sites 68 through

72 would be specifically located, details regarding the location of HVAC units are not known. Subsequent development on Sites 68 through 73 would be required to comply with applicable County and North Watt Avenue Corridor Plan policies related to operational noise. For example, pursuant to General Plan Policy NO-6, non-transportation noise sources generated by the proposed rezone on Sties 68 through 72 would be required to be mitigated so as not to exceed the County interior and exterior noise level standards at existing noise-sensitive land uses in the vicinity of Sites 68 through 72. Additionally, development on Sites 68 through 72 would be required to adhere to Policy NS-4 of the North Watt Avenue Corridor Plan, which states that no use shall be operated so as to generate recurring noises that are unreasonably loud, cause injury, or create a nuisance to any person of ordinary sensitivities.

Pursuant to CEQA Guidelines Section 15162, the proposed rezone of Sites 68 through 72 would not result in a new or substantially more severe impact from stationary noise sources. Stationary noise sources from future of development on Sites 68 through 72 would not be substantial and overall impacts would remain less than significant with mitigation, consistent with the findings of the North Watt Avenue EIR.

MITIGATION MEASURES

Mitigation not required.

OLD FLORIN TOWN SPA

ENVIRONMENTAL IMPACT REPORT DETERMINATION

The Old Florin Town SPA EIR determined that potential noise generation from future development under the plan could expose existing noise-sensitive land uses to new non-transportation noise sources that exceed the County's applicable noise standards. The Old Florin Town SPA EIR identified that General Plan Policy NO-5 would require appropriate noise mitigation measures to reduce projected noise levels to a state of compliance with Table 2 (Table NOI-13 in this SEIR). The Old Florin Town SPA EIR included Mitigation Measure NO-4, as a proposed policy, which prohibits excessive community-generated noise. Impacts were determined to be less than significant with mitigation.

IMPACT EVALUATION

The proposed rezone on Sites 73 through 79 would allow for residential development at increased density in the Old Florin Town SPA. Noise sources associated with residential land uses include residential landscaping equipment, voices, outdoor recreational activities, and mechanical equipment such as HVAC equipment. Noise levels from voices and outdoor activities would be intermittent and unamplified, and therefore, would not result in a substantial noise increase above ambient noise levels. Additionally, pursuant to County Code Section 6.68.090, noise associated with the maintenance of residential property between the hours of 6:00 a.m. and 8:00 p.m. Monday through Friday and between 7:00 a.m. and 8:00 p.m. on Saturdays and Sundays are exempt from County noise standards. Therefore, this analysis focuses on noise from HVAC equipment.

Assuming HVAC equipment noise would be as loud as 70 dBA L_{eq} at 3 feet, sensitive receivers within 10 feet and 17 feet of HVAC systems would be exposed to noise levels that exceed County daytime noise standards of 60 dBA L_{eq} and 55 dBA L_{eq}, respectively. Because it is not known at this time where individual developments on Sites 73 through 79 would be located, details regarding the location of HVAC units are not known. However, subsequent development on the candidate rezone sites would be required to comply with applicable County and Old Florin Town SPA guidelines, standards, and specifications related to operational noise such as General Plan Policy NO-6. Pursuant to General Plan Policy NO-6, non-transportation noise sources generated by the proposed rezone on Sites 73 through 79 would be required to be mitigated so as not to exceed the County interior and exterior noise level standards at existing noise-sensitive land uses in the vicinity of Sites 73 through 79. Additionally, development on Sites 73 through 79 would be required to adhere to Policy NO-3 of the Old Florin Town SPA, which states that no use shall be operated so as to generate recurring noises that are unreasonably loud, cause injury, or create a nuisance to any person of ordinary sensitivities.

Pursuant to CEQA Guidelines Section 15162, the proposed rezone of Sites 73 through 79 would not result in a new or substantially more severe impact from stationary noise sources. Stationary noise sources from future of development on Sites 73 through 79 would not be substantial and overall impacts would remain less than significant with mitigation, consistent with the findings of the Old Florin Town SPA EIR.

MITIGATION MEASURES

Mitigation not required.

CUMULATIVE NOISE

CUMULATIVE SETTING

The geographic context for cumulative impacts related to noise is Sacramento County. Noise impacts are based on factors related to site-specific and project-specific characteristics and conditions, including distance to noise sources, barriers between land uses and noise sources, and other factors. Noise impacts are typically site-specific and only combine when cumulative development is in close proximity to one another.

CUMULATIVE IMPACTS EVALUATION

The cumulative setting for the General Plan and the distinct area plans are identical for noise and vibration. The cumulative setting for noise and vibration would be the County and any development surrounding the candidate rezone sites. As described above, noise impacts are site-specific and only combine when cumulative development is in close proximity to one another.

IMPACT NOI-5: THE PROJECT, IN COMBINATION WITH PAST, PRESENT, AND REASONABLY FORESEEABLE PROJECTS, COULD RESULT IN A SIGNIFICANT CUMULATIVE IMPACT WITH RESPECT TO CONSTRUCTION NOISE AND VIBRATION

Construction-related noise and vibration are typically considered localized impacts, affecting only receptors closest to construction activities. Therefore, unless construction of cumulative projects, including those proposed under the Project, occur in close proximity to each other (i.e., less than 500 feet) and at the same time, noise and vibration from individual construction projects have little chance of combining to create cumulative impacts. For these reasons, cumulative noise and vibration impacts from construction are generally less than significant. As discussed under Project Impacts NO-1 and NO-2, noise and vibration associated with the construction of new residential developments under the Project would be intermittent, temporary, and would fluctuate over the years as new residences are constructed. Mitigation Measure NOI-1 and NOI-2 are in place to generally limit the loudest construction activity (i.e., pile driving and use of a vibratory roller) to the less-sensitive times of the day and would require the implementation of construction noise- and vibration-reducing measures that would minimize construction noise and vibration, further reducing the chances of disturbing people and damaging structures. Additionally, if pile driving would be required, a vibration control plan would be prepared and implemented to refine appropriate setback distances and identify other measures to reduce vibration and identify and implement alternative methods to pile driving, if required. Therefore, when combined with past, present, and reasonably foreseeable future projects, the Project's contribution to cumulative construction noise and vibration impacts would be less than cumulatively considerable and thus not significant.

NOI-6: THE PROJECT, IN COMBINATION WITH PAST, PRESENT, AND REASONABLY FORESEEABLE PROJECTS, COULD RESULT IN A SIGNIFICANT CUMULATIVE IMPACT WITH RESPECT TO TRAFFIC NOISE

The Project would result in the generation of new vehicle trips from the development of new and/or denser residential land uses in the County. These new vehicle trips would result in traffic volume increases and subsequent increases in traffic-related noise levels on various roadway segments. Table NOI-22 shows the predicted traffic noise levels for cumulative and cumulative plus Project scenarios.

Table NOI-22: Predicted Cumulative Plus Project Traffic Noise Levels

Segment Number	Roadway	Segment	Segment	Noise Level (dB L_{dn}) at 100 feet from Roadway Centerline	Noise Level (dB L_{dn}) at 100 feet from Roadway Centerline[4]	Net Change (dB)[5]
		From	To	Cumulative Conditions	Cumulative Plus Project Conditions	
1	Antelope North Road	Antelope Road	PFE Road	60.1	60.1	0.0
2	Antelope Road	Walerga Road	Elverta Road/Antelope Road	61.8	61.9	0.1
3	Antelope Road	Elverta Road/Antelope Road	Don Julio Blvd	**67.1**	67.3	0.2
4	Beech Avenue	Central Ave.	Greenback Lane	50.3	50.3	0.0
5	Chestnut Avenue	Central Ave.	Greenback Lane	56.8	56.7	-0.1
6	Curved Bridge Rd	Oak Lane	Dry Creek Road	53.6	54.1	0.5
7	Dry Creek Road	Elkhorn Boulevard	Vinci Avenue	61.5	61.6	0.1
8	Edison Avenue	Bell Street	Fullton Avenue	35.3	36.0	0.7
9	Elk Grove Florin Road	Florin Road	Gerber Road	**69.6**	69.6	0.1
10	Elk Grove Florin Road	Gerber Road	Calvine Road	**69.3**	69.3	0.0
11	Elkhorn Blvd	2nd Street	Rio Linda Blvd	**68.8**	68.8	0.0
12	Elsie Avenue	Stockton Blvd	Iona Way	**66.6**	66.7	0.1
13	Elverta Road	Cherry Brook Drive	28th Street	**71.3**	71.3	0.0
14	Fair Oaks Boulevard	Jacob Lane	Arden Way	**67.7**	67.7	0.0
15	Fair Oaks Boulevard[1]	California Avenue	Marhsall Avenue	**69.7**	69.8	0.0
16	Fair Oaks Boulevard	Marshall Avenue	Hollister Avenue	**69.9**	70.0	0.0

Segment Number	Roadway	Segment	Segment	Noise Level (dB L_{dn}) at 100 feet from Roadway Centerline	Noise Level (dB L_{dn}) at 100 feet from Roadway Centerline[4]	Net Change (dB)[5]
		From	To	Cumulative Conditions	Cumulative Plus Project Conditions	
17	Florin Road[2]	Franklin Blvd	SR 99	**70.3**	70.3	0.0
18	Florin Road[2]	Power Inn Road	Florin Perkins Road/French Road	**67.2**	67.3	0.1
19	Folsom Boulevard	Mayhew Road	Bradshaw Road	**68.4**	68.4	0.0
20	Franklin Boulevard	Fruitridge Road	47th Avenue	**66.1**	66.1	0.0
21	Franklin Boulevard	47th Avenue	Florin Road	**69.3**	69.3	0.0
22	Franklin Boulevard	Florin Road	Mack Road	**68.2**	68.3	0.0
23	Fruitridge Road	44th Street	Dewey Blvd	**67.2**	67.2	0.0
24	Garfield Avenue	El Camino Ave	Fair Oaks Blvd	54.6	54.7	0.2
25	Garfield Avenue	Greenback Lane	Auburn Blvd	**69.5**	69.6	0.0
26	Greenback Lane	I-80 interchange	Auburn Blvd	**73.9**	73.9	0.0
27	Greenback Lane	Kenneth Avenue	Hazel Avenue	**68.9**	68.9	0.0
28	Hemlock St	Madison Avenue	Myrtle Avenue	58.9	58.9	0.0
29	Madison Avenue	Harrison Street	Hillsdale Blvd	**69.3**	69.3	0.1
30	Manzanita Avenue	Madison Avenue	Winding Way	**67.7**	67.8	0.0
31	Oak Lane	Front Street	Curved Bridge Road	53.7	54.2	0.4
32	Pasadena Avenue	Norris Avenue	Creek Road	60.0	60.0	0.0
33	Power Inn Road[2]	Elder Creek Road/Glen Elder Road	Florin Road	**68.0**	68.1	0.1
34	Power Inn Road[2]	Florin Road	Gerber Road	**68.7**	68.8	0.1

Segment Number	Roadway	Segment	Segment	Noise Level (dB L_{dn}) at 100 feet from Roadway Centerline	Noise Level (dB L_{dn}) at 100 feet from Roadway Centerline[4]	Net Change (dB)[5]
		From	To	Cumulative Conditions	Cumulative Plus Project Conditions	
35	Power Inn Road	Elsie Ave/Mack Road	Meadowhaven Drive	**68.1**	68.3	0.2
36	Roseville Road	Antelope Road	Outlook Drive	**68.9**	68.9	0.0
37	Stockton Blvd	Fruitridge Road	Elder Creek Road	64.5	64.5	0.0
38	Stockton Blvd	Elder Creek Road	Florin Road	**68.5**	68.6	0.1
39	Stockton Blvd	Florin Road	Gerber Road	**69.1**	69.2	0.1
40	Stockton Blvd	Gerber Road	Mack Rd/Elise Ave	**69.2**	69.2	0.1
41	Stockton Blvd	Mack Rd/Elise Ave. south along SR 99 frontage		55.4	55.7	0.2
42	Sunrise Avenue	Sunset Avenue	Winding Way	**72.4**	72.4	0.0
43	Walerga Road	Elverta Road	Antelope Road	**69.4**	69.5	0.0
44	Walerga Road	Antelope Road	Elkhorn Boulevard	**71.3**	71.3	0.0
45	Walerga Road	Elkhorn Boulevard	Don Julio Blvd	**70.2**	70.3	0.0
46	Walerga Road	Don Julio Blvd	Roseville Road	**66.3**	66.4	0.1
47	Watt Avenue[3]	Antelope Road	Elkhorn Boulevard	**69.1**	69.2	0.0
48	Watt Avenue[3]	Elkhorn Boulevard	Don Julio Blvd	**67.8**	67.8	0.0

Notes: dB = decibel; L_{dn} = day-night sound level; bold = roadway segments that exceed traffic noise thresholds without the Project.

[1] Roadway segment in the Fair Oaks Boulevard Corridor area

[2] Roadway segment in the Old Florin Town SPA area

[3] Roadway segment in the North Watt Corridor Plan area

[4] The traffic data that was used to model ADT included three additional sites in the vineyard area that are no longer included under the Project. Thus, the modeled traffic noise results in Table NOI-22 represent a conservative analysis because the removed sites would remove trips from area roadways.

[5] The net change may not be the exact difference between existing and existing plus Project conditions due to rounding.

Measurements in bold are roadway segments that exceed the County 65 dB standard under existing conditions.

Source: Data provided by DKS Associates. Modeled by Ascent in 2024.

As shown in Table NOI-22, several roadway segments (shown in bold) exceed traffic noise thresholds without the Project. Twelve of these roadway segments would experience an increase in traffic noise with implementation of the Project. However, none of the studied roadway segments, including those that exceed the County's 65 dB exterior noise standard under existing conditions, would result in a traffic noise level increase above 1.5 dB L_{dn}. Therefore, cumulative traffic noise from the Project would not exceed the transportation noise standards established in General Plan Policy NO-9. Additionally, roadway segments with cumulative traffic noise levels below 65 dB L_{dn} would not increase to a level above 65 dB L_{dn} because of the Project. There is no new significant effect, and the impact is not substantially more severe than the impact identified in the General Plan EIR. The Project would not contribute substantially to a cumulative impact related to traffic noise. Impacts would be less than cumulatively considerable and thus not significant**.**

NOI-7: THE PROJECT, IN COMBINATION WITH PAST, PRESENT, AND REASONABLY FORESEEABLE PROJECTS, COULD RESULT IN A SIGNIFICANT CUMULATIVE IMPACT WITH RESPECT TO STATIONARY NOISE SOURCES

Cumulative impacts related to on-site operational and stationary noise sources are site specific, dissipate with distance from the source, and typically result in cumulative impacts only when project-generated noise is located close to other off-site noise sources. The Project would result in residential land uses that include stationary noise sources such as HVAC units. Although specific locations of the new stationary equipment are unknown and cannot be known, stationary noise sources are generally limited to the vicinity of individual candidate rezone sites and would generally not combine with other stationary equipment in the overall area (i.e., offsite) to result in a cumulative effect. In other words, the noise generated by and HVAC unit on one property does not combine with noise from the HVAC unit of a nearby property to result in a cumulatively considerable increase in noise at an affected property. Therefore, the Project would not contribute substantially to a cumulative impact related to stationary noise. Impacts would be less than cumulatively considerable and thus not significant**.**

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9 PUBLIC SERVICES AND RECREATION

INTRODUCTION

This chapter discusses existing public services available in the vicinity of the Project area and analyzes the effects of implementation of the proposed Project on those services. The services evaluated in this section include fire protection, police protection, public schools, libraries, and parks and recreation.

No scoping comments related to public services and recreation were received during the notice of preparation (NOP) public review periods. Although no scoping comments were received on the Project, PER has engaged various public service and recreation departments/districts (Sacramento Metropolitan Fire District [SMFD], City of Sacramento Fire Department on behalf of Pacific Fruitridge Fire Protection District [PFFD], Sacramento County Sheriff's Department, Elk Grove Unified School District [EGUSD], and Southgate Recreation and Park District [SouthgatePD]) to discuss comments on and obtain conditions of approval for the Project. Comments and/or conditions of approval received for the Project from public service and recreation departments/districts are summarized in the Impact and Analysis section below.

EXISTING ENVIRONMENTAL PUBLIC SERVICES AND RECREATION SETTING

State CEQA Guidelines Section 15162 indicates that should a lead agency determine that substantial changes to the project or its circumstances result in a new or more significant impact compared to what was addressed in a project's previous EIR, or new information of substantial importance results in a new or more significant impact, a subsequent EIR (SEIR) should be prepared. Therefore, this document serves as a SEIR to Sacramento County's 2030 General Plan EIR (General Plan EIR), as well as to EIRs prepared for various distinct plan areas within which a portion of the rezone sites are located. Applicable distinct plan area EIRs include the Fair Oaks Boulevard Corridor Plan EIR (Fair Oaks Boulevard EIR), the North Watt Avenue Corridor Plan EIR (North Watt Avenue EIR), and the Old Florin Town Special Planning Area (SPA) EIR (Old Florin Town SPA EIR). The regional housing needs allocation (RHNA) shortfall of 2,884 lower income category units and needed buffer could not have been known at the time of the General Plan EIR certification, and the RHNA is in excess of the number of dwelling units analyzed in the General Plan EIR. The number of additional units required in various distinct plan areas was not known at the time the applicable environmental documents were certified. As required by Section 15162, this SEIR evaluates the potential for the proposed Project or changes in the circumstances to result in new or substantially more severe significant environmental impacts than what was previously analyzed under the General Plan EIR and distinct plan area EIRs. Existing public services for the General Plan EIR, Fair Oaks

Boulevard Corridor Plan EIR, North Watt Avenue Corridor Plan EIR, and Old Florin Town SPA EIR are summarized below.

General Plan Existing Public Services and Recreation Setting

Sacramento County encompasses a 775 square mile area with a population of 1,585,055 as of the April 2020 Census. Sacramento County has both urban and rural components. There are independent service districts, dependent County service districts, and County agencies that provide public and recreational services in the unincorporated Sacramento County.

Fire Protection and Emergency Services

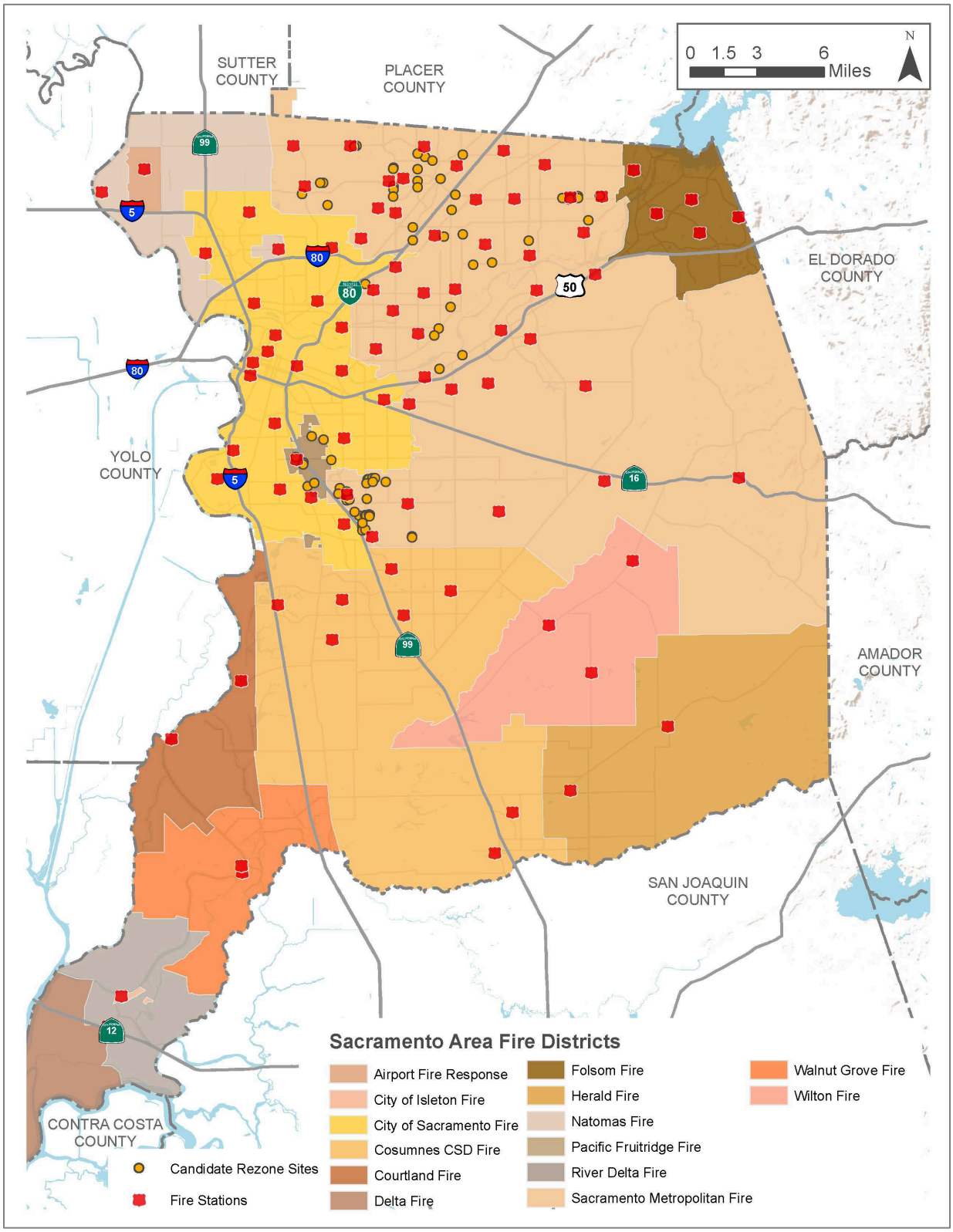
Fire protection and emergency services are provided in the County of Sacramento by the cities of Sacramento and Folsom, and 11 fire districts. The Natomas Fire Protection District is governed by the Sacramento County Board of Supervisors. The remaining districts (including the Elk Grove Community Services District) are independent special districts and are governed by elected Boards of Directors. Portions of the foothill areas are also protected by the State Division of Forestry, although it provides no structural protection. The unincorporated community of Freeport and a portion of its surrounding area are not located within any organized fire protection agency.

All fire districts in the County provide emergency medical rescue and fire protection services. Some districts also provide advanced life support via fire department ambulances, paramedic squads, and/or by the placement of firefighter/paramedics on fire engines. The largest number of calls for service that fire districts receive is for medical-related aid and only a minor portion of service calls are for fire suppression. The following 10 fire districts serve the unincorporated Sacramento County:

- SMFD
- Cosumnes Community Services District
- Delta
- Herald
- Wilton
- PFFD
- Natomas
- River Delta
- Walnut Grove
- Courtland

SMFD serves the majority of unincorporated Sacramento County. Candidate rezone sites are located within SMFD (71 candidate rezone sites) and PFFD (8 candidate rezone sites). Future development consistent with the Project could yield up to 3,917 new multi-family units within SMFD and 164 new multi-family units within the PFFD. Plate PSR-1 demonstrates the location of candidate rezone sites within the fire districts.

Plate PSR-1: Sacramento Area Fire Districts



Source: Provided by Sacramento County 2024 and adapted by Ascent 2024.

SMFD's service area covers 359 square miles and is the 7th largest fire agency in the state. SMFD is governed by a Board of Directors; each member is elected by the voters within a geographical area, or division, of SMFD's operational area. SMFD operations include fire and rescue, emergency medical, training and safety, special operations, homeland security, fire investigation, and health and wellness divisions and services.

Fire and emergency medical services are provided via a contract with the City of Sacramento for the PFFD. The contract requires the City of Sacramento to provide fire services to the Pacific Fruitridge area consistent with service standards provided to City residents. There are two fire stations located within the PFFD.

Law Enforcement Services

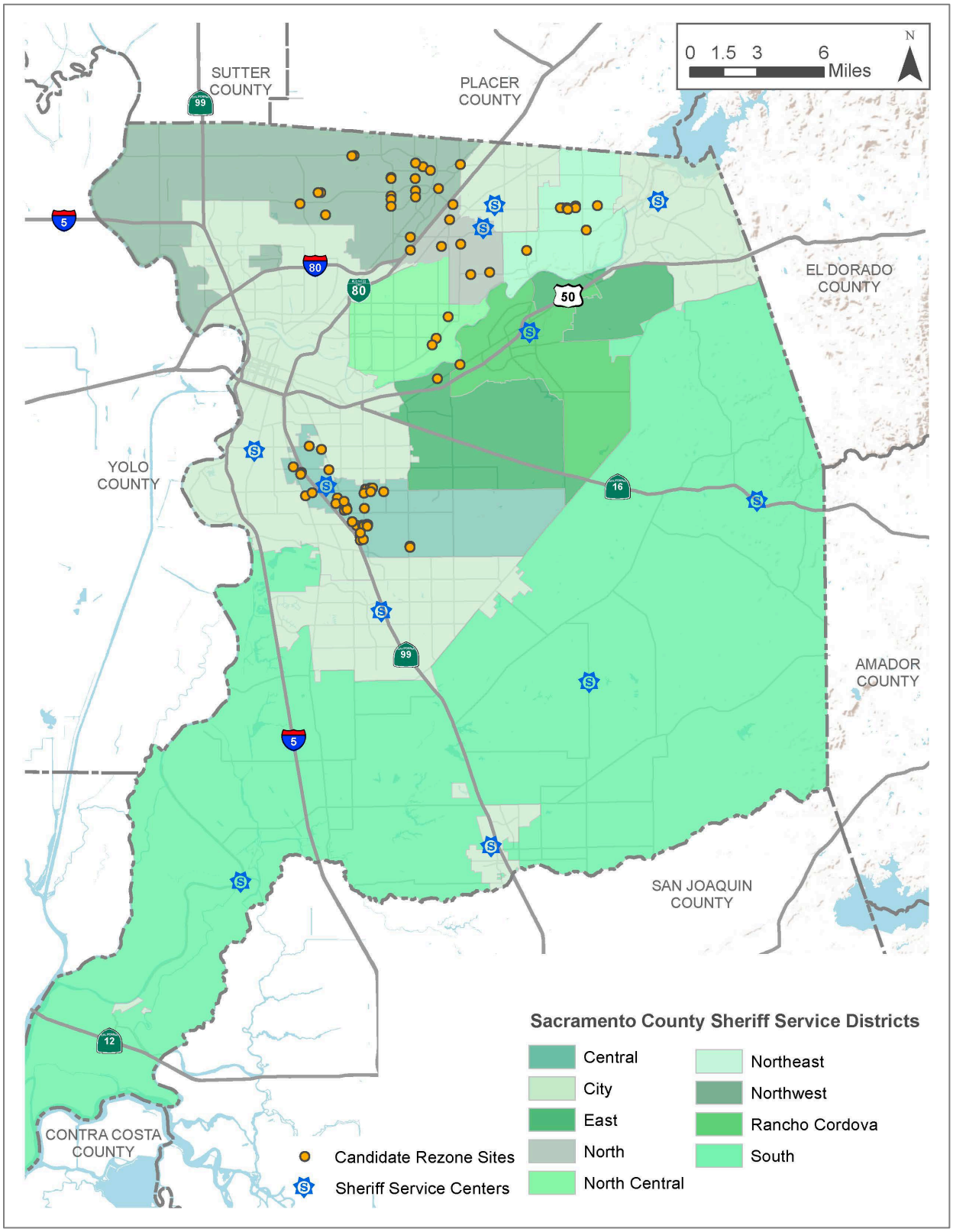
The Sacramento County Sheriff's Department provides specialized law enforcement services to both the incorporated and unincorporated areas and local police protection to the unincorporated area and the City of Rancho Cordova. Specialized law enforcement includes providing court security services, operating a system of jails for pre-trial and sentenced inmates, and operating a training complex. Local police protection includes response to calls and trouble spots, investigations, surveillance, and routine patrolling. Services are generally provided through patrol units consisting of a patrol car and deputy sheriff. The Sheriff's Department has patrol districts within the unincorporated areas and the City of Rancho Cordova.

Rancho Cordova is the only city with a contract with the Sheriff's Department for local police protection services. The Airport Division of the Sheriff's Department has a contract with the Sacramento County Airport System to provide law enforcement services to Sacramento International Airport.

The Sheriff's Department operates several facilities, including a headquarters building, main jail, the Rio Cosumnes Correctional Center (RCCC), five station houses, ten community service centers, a training academy, firearms training facility, marine enforcement detail, and an air support bureau. The main jail is located in downtown City of Sacramento and is designed to primarily house pre-trial inmates. The RCCC is located south of the City of Elk Grove and its primary function is to house male and female inmates sentenced to County Jail from the Sacramento County courts. An increasing percentage of inmates housed at RCCC are pre-sentenced inmates from the main jail. In addition, RCCC houses inmates en route to other jurisdictions, federal inmates and serves as a holding facility for inmates sentenced to state prison. RCCC is classified as a Type II facility, accepting newly arrested persons booked by law enforcement agencies in the south part of the County.

The candidate rezone sites are located within six of the nine Sheriff Department Service Districts. Table PSR-1 indicates the number of candidate rezone sites within these districts. Plate PSR-2 demonstrates the location of candidate rezone sites within the district boundaries.

Plate PSR-2: Candidate Rezone Sites in Sheriff Service Districts



Source: Provided by Sacramento County 2024 and adapted by Ascent 2024.

Table PSR-1: Sheriff Department Service District and Rezone Sites

Sheriff Service District	No. of Sites	No. of Dwelling Units
Central – District 6	37	1,797
East – District 7	2	278
North – District 2	7	209
North Central – District 4	4	88
Northeast – District 3	9	214
Northwest – District 1	20	1,495
Total	79	4,081

School Services

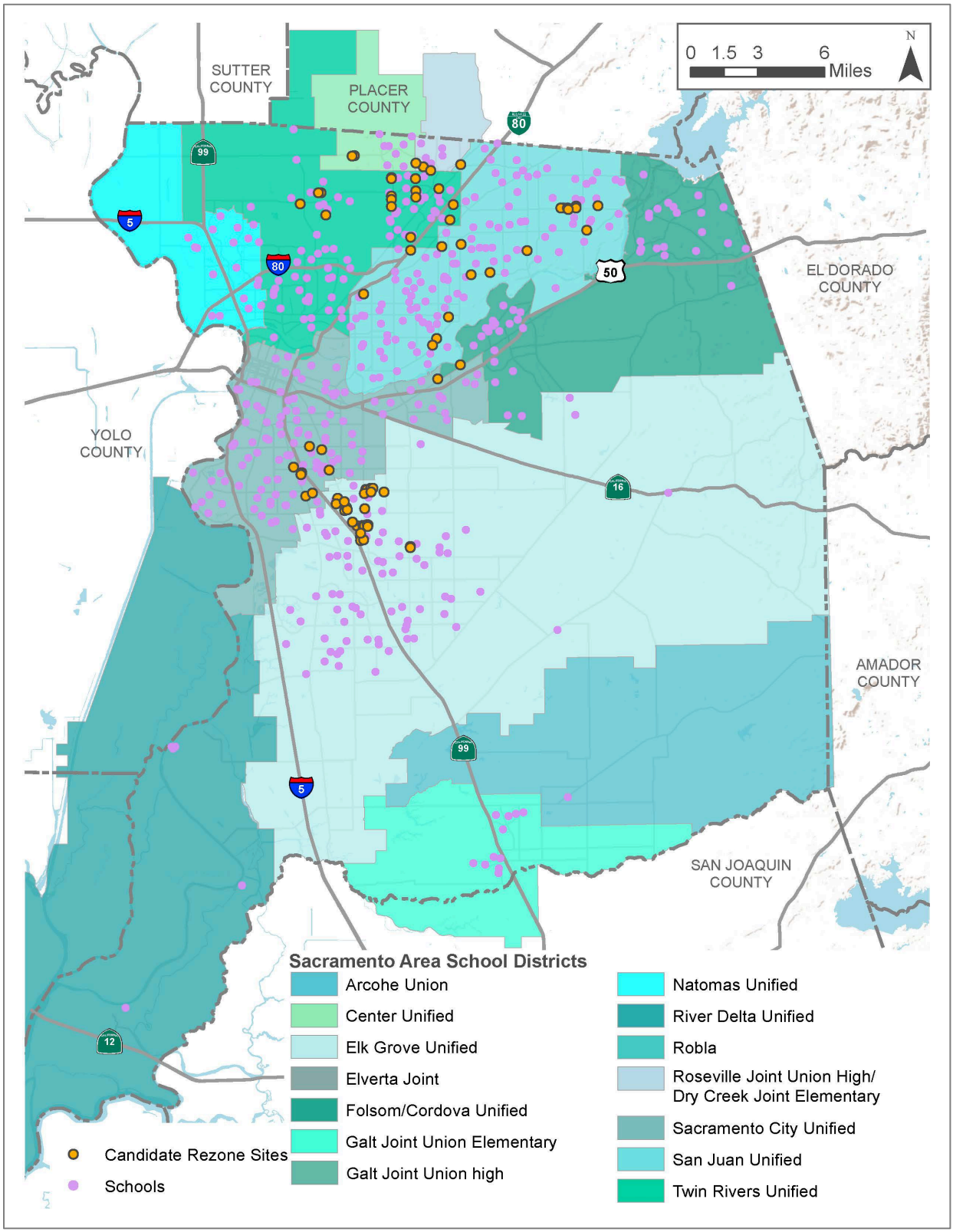
In Sacramento County, there are 15 public school districts providing K – 12 education. Those school districts are listed below:

- Archoe Union (K – 12)
- Center Joint Unified (CJUSD) (K – 12)
- Dry Creek Joint Elementary (K – 8)
- EGUSD (K – 12)
- Elverta Joint (K – 8)
- Folsom-Cordova Unified (FCUSD) (K – 12)
- Galt Joint Union (K – 8)
- Galt Joint Union High (9 – 12)
- Natomas Unified (K – 12)
- River Delta Unified (K – 12)
- Robla (K – 6)
- Roseville Joint Union High (9 – 12)
- Sacramento City Unified (SCUSD) (K – 12)
- San Juan Unified (SJUSD) (K – 12)
- Twin Rivers Unified (TRUSD) (K – 12)

Note: Dry Creek Joint Elementary and Roseville Joint Union High School Districts are both governed by the Placer County Office of Education. They have been included in the list above because these two districts have a few schools located within the boundaries of the County of Sacramento.

The candidate rezone sites are located within seven school districts. Table PSR-2 indicates the number of candidate rezone sites and associated dwelling units within each of these seven school districts. Plate PSR-3 is a map of the school district boundaries in Sacramento County and shows the general location of candidate rezone sites within school district boundaries and the nearest school.

Plate PSR-3: Candidate Rezone Sites in Sacramento Area School Districts



Source: Provided by Sacramento County 2024 and adapted by Ascent 2024.

Table PSR-2: School Districts and Rezone Sites

Public School District	No. of Sites	No. of Dwelling Units
CJUSD	2	203
EGUSD	29	1,633
FCUSD	1	49
Roseville Joint Union High / Dry Creek Joint Elementary	3	432
SCUSD	9	393
SJUSD	19	668
TRUSD	16	703
Total	79	4,081

Setting information for each of the school districts that contains candidate rezone sites is included below. This information was compiled from each of the school district's website and/or the State of California Department of Education's 2023 California School Dashboard (2023 CA School Dashboard).

CJUSD: CJUSD is a joint K-12 public school district located in northern Sacramento County and southern Placer County. CJUSD serves approximately 4,100 students at seven schools including: two high schools (Center High School and McClellan High School), one middle school (Wilson Riles Middle School), and four elementary schools (Dudley Elementary, North Country Elementary, Oak Hill Elementary, and Spinelli Elementary) (CJUSD 2024).

EGUSD: EGUSD is a K-12 public school district that covers 320 square miles and includes 68 schools: 43 elementary schools, nine middle schools, nine high schools, four alternative education schools, one charter school, a special education school, an adult school, and a (K-8) virtual academy (EGUSD 2024).

FCUSD: FCJUSD is a joint K-12 public school district that services the populations of Folsom and Rancho Cordova. FCJUSD serves approximately 21,000 students at 21 elementary schools, four middle schools, three comprehensive high schools, seven alternative schools, and one charter school (FCUSD 2024).

Roseville Joint Union High / Dry Creek Joint Elementary (RJUH/DCJE): RJUH/DCJE is made up of Roseville Joint Union High School (9-12 grade schools) partnered with Dry Creek Joint Elementary School (K-8 schools) districts. Together RJUH/DCJE has six comprehensive high schools, one independent study high school, one continuation high school, one adult school, two middle schools, six elementary schools, one TK-8 school, and one academy school (RJUH 2024 & DCJE 2024).

SCUSD: SCUSD is a K-12 public school district that was established in 1854, making it one of the oldest school districts in the West. It is also the 11th largest school district in California and has more than 75 public K-12 schools, including 15 dependent and

independent charter schools. SCUSD serves more than 40,000 students district wide (SCUSD 2024).

SJUSD: SJUSD is a TK-12 public school district established in 1960 with the merger of six school districts. SJUSD serves more than 40,000 students at 64 schools and employs more than 5,000 professionals (SJUSD 2024).

TRUSD: TRUSD is a TK-12 public school district that covers an 82 square mile area and serves almost 26,000 students. TRUSD has 52 school sites made up of 29 elementary schools, five middle schools, four comprehensive high schools, three charters at seven sites, and seven alternative schools (TRUSD 2024).

LOS RIOS COMMUNITY COLLEGE DISTRICT

The Los Rios Community College District (Los Rios District) is a two-year public college district that covers a 2,400-square-mile service area, and includes Sacramento and El Dorado counties, and parts of Yolo, Placer, and Solano counties. The Los Rios District services approximately 70,000 students annually. The colleges include American River, Cosumnes River, Folsom Lake, and Sacramento City Colleges. There are also satellite campuses located in Davis, West Sacramento, McClellan Park, El Dorado County, downtown Sacramento, Natomas, and Rancho Cordova (Los Rios District 2024).

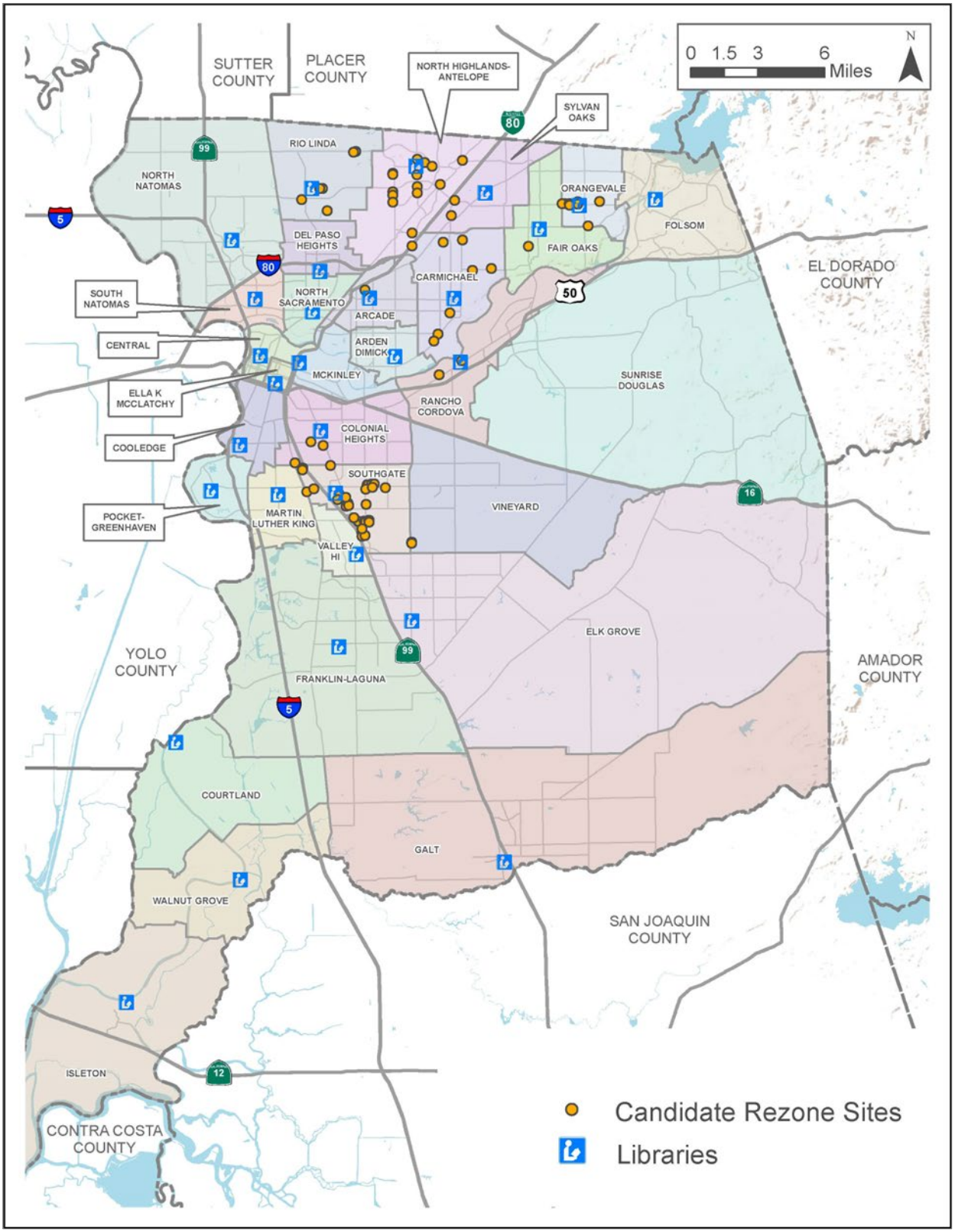
Library Services

The Sacramento Public Library system provides services to the residents of Sacramento County – it is the fourth largest library system in California. The Sacramento Public Library system is comprised of interdependent branches providing services to all residents. Branches are grouped by services, geography, and usage patterns to provide efficient and economical services to the residents of Sacramento County. In total there are 28 locations within the County of Sacramento where residents may receive library services.

The Sacramento Public Library is a joint agreement agency between the County of Sacramento and the cities of Sacramento, Citrus Heights, Elk Grove, Galt, Isleton, and Rancho Cordova (Sacramento Public Library 2007).

Candidate rezone sites are located within established unincorporated communities. Each of these communities is served by a branch of the library system. Table PSR-3 provides the number of candidate rezone sites within eleven of these library branches. See Plate PSR-4 for the location of library branches compared to candidate rezone sites.

Plate PSR-4: Candidate Rezone Sites in Library Branch Service Areas



Source: Provided by Sacramento County 2024 and adapted by Ascent 2024.

Table PSR-3: Library Branch Service Areas and Candidate Rezone Sites

Library Branch Service Area	No. of Sites	No. of Dwelling Units
Arcade	1	20
Carmichael	8	223
Colonial Heights	3	61
Fair Oaks	1	16
North Highlands-Antelope	14	1,174
Orangevale	8	198
Rancho Cordova	2	278
Rio Linda	6	321
Southgate	32	1,595
Sylvan Oaks	2	54
Vineyard	2	141
Total	79	4,081

PARKS AND RECREATION SERVICES

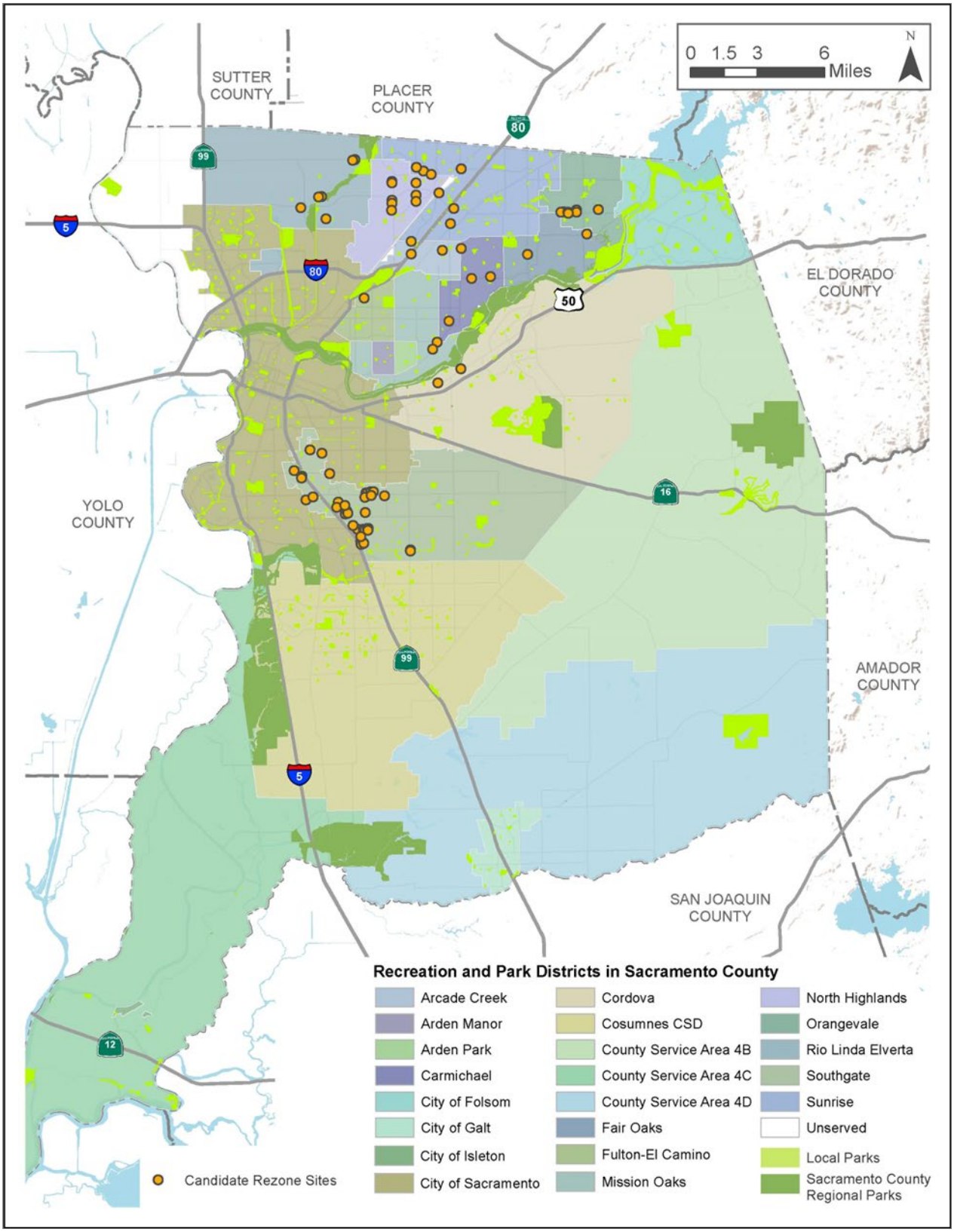
In Sacramento County, recreation services are provided by five different types of government entities: dependent park districts, independent park districts, County service areas, cities, and the County regional park system. There are 13 park districts, three County Service Areas, one Community Service District, four incorporated City parks departments, and one County regional park system that provide park services to Sacramento County.

Parks agencies provide park and recreation facilities and programs. Dependent park districts are governed by boards appointed by the Sacramento County Board of Supervisors. Independent park districts are governed by boards elected by voters in the district. Candidate rezone sites are located within 11 park districts. Table PSR-4 provides a breakdown of number of candidate rezone sites within each of the 11 park districts and Plate PSR-5 shows the candidate rezone sites locations within park district boundaries, as well as the location of local and regional parks.

Setting information for each of the recreation and park districts that contains candidate rezone sites is included below.

Arcade Creek Recreation and Park District (ACPD): ACPD encompasses five square miles located in northeastern portion of Sacramento County. ACPD includes three parks and one nature trail for a district with a population of approximately 23,000 (ACPD 2017 & ACPD 2024).

Plate PSR-5: Candidate Rezone Sites in Recreation & Park District Service Areas



Source: Provided by Sacramento County 2024 and adapted by Ascent 2024.

Table PSR-4: Recreation and Park Districts and Candidate Rezone Sites

Recreation and Park District	No. of Sites	No. of Dwelling Units
Arcade Creek	3	64
Carmichael	4	149
Cordova	2	278
Fair Oaks	2	51
Fulton/El Camino	1	20
Mission Oaks	2	22
North Highlands	8	320
Orangevale	7	163
Rio Linda Elverta	6	321
Southgate	37	1,797
Sunrise	7	896
Total	79	4,081

Carmichael Recreation and Park District (CAPD): CAPD is located in the northeastern portion of Sacramento County. CAPD serves approximately 52,000 residents and features 13 park sites; 11 fully developed parks, a 36-acre community center at the former La Sierra High School, a botanical garden that is nearly 50 years old, and a 17-acre nature area called Schweitzer Grove (CAPD 2024).

Cordova Recreation and Park District (COPD): COPD serves the City of Rancho Cordova and unincorporated communities in Sacramento County. COPD operates 43 parks across 600 acres (COPD 2024).

Fair Oaks Recreation and Park District (FOPD): FOPD encompasses an 11 square mile area and provides park services to an estimated 35,000 residents. FOPD owns, operates and maintains 10 parks and eight park facilities (FOPD 2024).

Fulton/El Camino Recreation and Park District (FECPD): FECPD serves a portion of the Arden Arcade community located around Fulton and El Camino. Currently the district comprises 80 acres of developed parkland and two undeveloped acres. There are seven parks within the FECPD (FECPD 2024).

Mission Oaks Recreation and Park District (MOPD): MOPD has developed and maintains 11 parks, totaling 88.75 acres. MOPD also maintains four school parks (Greer, Del Paso Manor, Cowan and Sierra Oaks) and County-owned Hazelwood Greens, a stormwater detention facility of about 2 acres. In total MOPD provides approximately 105 acres of parkland for the service area (MOPD 2024).

North Highlands Recreation and Park District (NHPD): NHPD is located in the North Highlands community and serves a population of about 49,327. NHPD contains 13 parks to serve the North Highlands community (NHPD 2024).

Orangevale Recreation and Park District (OPD): OPD is an independent park district that serves the unincorporated community of Orangevale. OPD includes nine parks and four natural areas comprised of 162 acres. OPD also maintains and operates numerous facilities including the Orangevale Community Center and pool facility (OPD 2024a, 2024b).

Rio Linda Elverta Recreation and Park District (RLEPD): RLEPD serves the unincorporated community of Rio Linda and Elverta. The District has just over 45 acres of active parks with an additional approximately 14 acres of opportunity and undeveloped park sites. RLEPD facilities include neighborhood parks, community parks, regional parks, community center and depot, and other opportunity and undeveloped park sites (RLEPD 2024).

SouthgatePD: SouthgatePD provides park services to over 120,000 people in the southeast area of Sacramento County. SouthgatePD encompasses 52 square miles and includes 47 parks, six community centers, two aquatic facilities, a golf course and many parkways and landscape corridors (SouthgatePD 2024).

Sunrise Recreation and Park District (SPD): SPD provides park services to three communities within Sacramento County: Antelope, Citrus Heights, and Foothill Farms. SPD's facilities include 34 developed parks, three new parks under construction, eight undeveloped open space areas, two aquatic facilities, one historic home and gardens, and one golf course (SPD 2024).

Fair Oaks Boulevard Corridor Plan Existing Public Services and Recreation Setting

The Fair Oaks Boulevard Corridor Plan area (Fair Oaks Boulevard Corridor area) is provided public services and recreational facilities by a sub-set of the service providers discussed above for the entire Sacramento County area. This section focuses on the public service and recreational facility setting specific to the Fair Oaks Boulevard Corridor area. There is one candidate rezone site (Site 67) located within the Fair Oaks Boulevard Corridor area.

Fire Protection and Emergency Services

Fire protection and emergency services are provided by SMFD for the Fair Oaks Boulevard Corridor area. See the Fire Protection and Emergency Services section in the Existing Environmental Setting above for the General Plan area for applicable information regarding SMFD.

Law Enforcement Services

The Fair Oaks Boulevard Corridor area is provided law enforcement services by the Sacramento County Sheriff's Department. See the Law Enforcement Services section in the Existing Environmental Setting above for the General Plan area for applicable information regarding the Sheriff's Department.

School Services

The school district providing public school services for the Fair Oaks Boulevard Corridor area is SJUSD. See the School Services section in the Existing Environmental Setting above for the General Plan area for applicable information regarding SJUSD.

Library Services

Library services are provided by the Sacramento Public Library system. The Fair Oaks Boulevard Corridor area is within the Carmichael Library Service Area. The Carmichael Library is located at 5605 Marconi Avenue within the Main Street subdistrict of the Fair Oaks Boulevard Corridor Plan. See the Library Services section in the Existing Environmental Setting above for the General Plan area for additional information on the library system.

Parks and Recreation Services

The Fair Oaks Boulevard Corridor area is located within two park districts – ACPD and CAPD. See the Parks and Recreation Services section in the Existing Environmental Setting above for the General Plan area for applicable information regarding ACPD and CAPD.

North Watt Avenue Corridor Plan Existing Public Services and Recreation Setting

The North Watt Avenue Corridor Plan area (North Watt Avenue Corridor area) is provided public services and recreational facilities by a sub-set of the service providers discussed above for the entire Sacramento County area. This section focuses on the public service and recreational facility setting specific to the North Watt Avenue Corridor area. There are five candidate rezone sites (Site 68-72) located within the North Watt Avenue Corridor area.

Fire Protection and Emergency Services

Fire protection and emergency services are provided by SMFD for North Watt Avenue Corridor area. See the Fire Protection and Emergency Services section in the Existing Environmental Setting above for the General Plan area for applicable information regarding SMFD.

Law Enforcement Services

The North Watt Avenue Corridor area is provided law enforcement services by the Sacramento County Sheriff's Department. See the Law Enforcement Services section in the Existing Environmental Setting above for the General Plan area for applicable information regarding the Sheriff's Department.

School Services

The school districts providing public school services for the North Watt Avenue Corridor area are the SJUSD and the TRUSD. See the School Services section in the Existing Environmental Setting above for the General Plan area for applicable information regarding SJUSD and TRUSD.

Library Services

Library services are provided by the Sacramento Public Library system. The North Watt Avenue Corridor Plan is located within the North Highlands Library Service Area. The North Highlands Library is located at 4235 Antelope Road approximately 1 mile northeast of the North Watt Avenue Corridor area. See the Library Services section in the Existing Environmental Setting above for the General Plan area for additional information on the library system.

Parks and Recreation Services

The North Watt Avenue Corridor area is located within the NHPD service area. See the Parks and Recreation Services section in the Existing Environmental Setting above for the General Plan area for applicable information regarding NHPD.

Old Florin Town SPA Existing Public Services and Recreation Setting

The Old Florin Town SPA area is provided public services and recreational facilities by a sub-set of the service providers discussed above for the entire Sacramento County area. This section focuses on the public service and recreational facility setting specific to the Old Florin Town SPA. There are seven candidate rezone sites (Site 73-79) located within the Old Florin Town SPA.

Fire Protection and Emergency Services

Fire protection and emergency services are provided by SMFD for Old Florin Town SPA area. See the Fire Protection and Emergency Services section in the Existing Environmental Setting above for the General Plan area for applicable information regarding SMFD.

Law Enforcement Services

The Old Florin Town SPA is provided law enforcement services by the Sacramento County Sheriff's Department. See the Law Enforcement Services section in the Existing Environmental Setting above for the General Plan area for applicable information regarding the Sheriff's Department.

School Services

The school district providing public school services for the Old Florin Town SPA is EGUSD. See the School Services section in the Existing Environmental Setting above for the General Plan area for applicable information regarding EGUSD.

Library Services

Library services are provided by the Sacramento Public Library system. The Old Florin Town SPA is located within the Southgate Library Service Area. The Southgate Library is located at 6132 66th Avenue approximately 1.3 miles southwest from the Old Florin

Town SPA area. See the Library Services section in the Existing Environmental Setting above for the General Plan area for additional information on the library system.

Parks and Recreation Services

The Old Florin Town SPA area is located within the SouthgatePD service area. See the Parks and Recreation Services section in the Existing Environmental Setting above for the General Plan area for applicable information regarding SouthgatePD.

Existing Public Services and Recreation Regulatory Setting

Federal

No federal plans, policies, regulations, or laws are applicable to the provision of public services and recreation for the Project.

State

California Occupational Safety and Health Administration

In accordance with the California Code of Regulations, Title 8, Sections 1270 "Fire Prevention" and 6773 "Fire Protection and Fire Fighting Equipment," the California Occupational Safety and Health Administration has established minimum standards for fire suppression and emergency medical services. The standards include guidelines on the handling of highly combustible materials, fire hose sizing requirements, restrictions on the use of compressed air, access roads, and the testing, maintenance, and use of all firefighting and emergency medical equipment.

California Fire Code

The California Fire Code (CFC) is contained within CCR Title 24. The CFC establishes requirements for development design to safeguard public health, safety and general welfare from the hazards of fire. This includes standards on building design, materials, fire flow, and other suppression provisions. The CFC also regulates the use, handling, and storage requirements for hazardous materials at fixed facilities. The CFC and the California Building Code use a hazard classification system to determine what protective measures are required to protect life and provide fire safety. These measures may include applying construction standards, requiring separation between structures and property lines, and using specialized equipment. To ensure that these safety measures are met, the CFC employs a permit system based on hazard classification. The CFC is updated every 3 years.

California Health and Safety Code

State fire regulations are set forth in Sections 13000 et seq. of the California Health and Safety Code, which includes regulations for building standards (as set forth in the California Building Code); fire protection and notification systems; fire protection devices,

such as extinguishers and smoke alarms; high-rise building and childcare facility standards; and fire-suppression training.

Uniform Fire Code (Title 24, Part 9)

The 2022 Uniform Fire Code (Fire Code) (California Code of Regulations, Title 24, Part 9), effective January 1, 2023, contains regulations relating to construction, maintenance, and use of buildings. Topics addressed in the Fire Code include fire department access, fire hydrants, automatic sprinkler systems, fire alarm systems, fire and explosion hazards safety, hazardous materials storage and use, provisions intended to protect and assist fire responders, industrial processes, and many other general and specialized fire-safety requirements for new and existing buildings and the surrounding premises. The Fire Code also contains specialized technical regulations related to fire and life safety.

Leroy F. Greene School Facilities Act

The Leroy F. Greene School Facilities Act (Chapter 407, Statutes of 1998) places limitations on cities and counties with respect to mitigation requirements for school facilities. It permits school districts to levy fees, based on justification studies, for the purposes of funding construction of school facilities, subject to established limits. The act further states that payment of these fees by a development project is considered adequate to reduce impacts of that project on schools to a less-than-significant level for the purposes of CEQA review and compliance.

School districts that can establish a need by completing an annually updated fee justification study are authorized to collect school impact fees on new residential and commercial/industrial development in accordance with Education Code Section 17620 and Government Code Section 65995. The development school impact fees are intended to provide the local school district's 50 percent share of the cost of new school construction.

All seven school districts containing candidate rezone sites have established mitigation fees for residential development in unincorporated Sacramento County. These mitigation fees are levied through developer impact fees at the time of building permit issuance or via bond measure and a Mello-Roos tax on all new residential units. While the fee and tax methodologies vary between the seven districts, each of the fees and taxes were established based on individual justification studies and are updated annually.

Quimby Act

The goal of the 1975 Quimby Act (California Government Code Section 66477) was to require developers to help mitigate the impacts of property improvements by requiring them to set aside land, donate conservation easements, or pay fees for park improvements. The Quimby Act gave authority for passage of land dedication ordinances only to cities and counties, thus requiring special districts to work with cities and/or counties to receive parkland dedication and/or in-lieu fees. The fees must be paid and land conveyed directly to the local public agencies that provide parks and recreation services community-wide. Revenues generated through the Quimby Act cannot be used for the operation and maintenance of park facilities.

Originally, the Quimby Act was designed to ensure "adequate" open space acreage in jurisdictions adopting Quimby Act standards (e.g., 3 to 5 acres per 1,000 residents). In some California communities, the acreage fee was very high where property values were high, and many local governments did not differentiate on their Quimby fees between infill projects and greenbelt developments. In 1982, the Quimby Act was substantially amended via AB 1600. The amendments further defined acceptable uses of or restrictions on Quimby funds, provided acreage/population standards and formulas for determining the exaction, and indicated that the exactions must be closely tied (nexus) to a project's impacts as identified through traffic studies required by CEQA. AB 1600 requires agencies to show a reasonable relationship between the public need for the recreation facility or parkland and the type of development project on which the fee is imposed. Cities or counties with a high ratio of parkland to inhabitants can set a standard of 5 acres per 1,000 residents for new development; those with a lower ratio can only require the provision of up to 3 acres of parkland per 1,000 residents. The calculation of this parkland-to-population ratio is based on a comparison of the population count of the last federal census to the amount of city- or county-owned parkland.

Public Resources Code Section 21151.2

Public Resources Code (PRC) Section 21151.2 requires school district governing boards to give the relevant planning commission a written notice in writing of the proposed acquisition before acquiring title to property for a new school site or for an addition to an existing school site. The planning commission is responsible for investigating the proposed site and providing it, and any related recommendations, to the governing board.

Government Code Section 65402

California Government Code Section 65402 requires a school district, prior to acquiring real property, to submit the location, purpose, and extent of such acquisition to the Planning Agency having jurisdiction for a determination as to conformity with the general plan.

Government Code Section 53094

A school district, with a two-thirds vote, may render a city zoning ordinance inapplicable to classroom facilities, except when the proposed use of the property by the school district is for non-classroom facilities. Before a school district can override a local zoning ordinance, it must first comply with expanded coordination and communication requirements. The district also must comply with pre-existing CEQA requirements regarding school site review before overriding local zoning.

Local

Sacramento County General Plan

The *Sacramento County 2030 General Plan* (General Plan) Public Facilities Element was adopted in December 1993 and most recently amended in December 2019. The following General Plan policies related to public facilities are applicable to the Project:

FIRE PROTECTION FACILITIES EXPANSION

PF-61. Mitigation fees may be established by the Board of Supervisors or Fire Districts for the purpose of funding adequate fire protection and emergency medical response facilities provided they find that such fees are critical and necessary to meet the facility funding needs of the fire district and that existing methods of financing are inadequate.

PF-63. Mitigation fees established by County ordinance or Fire District shall, together with other reasonably assured sources of funding identified in the fire district's financing plan, be sufficient to implement the adopted financing plan.

PF-64. No building permit for new residential or commercial construction shall be issued when there is a Board of Supervisors certified fire district financing plan for any applicable fire district, which provides for mitigation fees, until the applicant has contributed all required mitigation fees.

EXPAND LAW ENFORCEMENT SERVICES

PF-50. Plan and develop law enforcement programs with a perspective toward reducing as well as controlling crime.

PF-51. Plan and develop law enforcement facilities in keeping with overall needs and the distribution of growth.

PF-52. Use education and crime prevention as integral parts of the practice of law enforcement.

CAPITAL FACILITIES FUNDING FOR LIBRARIES

PF-42. Share capital costs of library construction and renovation for existing residents through bond financing or other appropriate measures and by new residents and workers through fees on new development.

PF-44. Create financing districts or special taxes within existing library service areas to assist in financing library renovation and expansion needs and require new development to annex to the financing district.

POLICIES FOR PROVISION OF PARKS AND RECREATION FACILITIES

PF-120. The County will work cooperatively with the local recreation and park districts to help assure that the provision of additional parks and recreation facilities keeps pace with urban growth within the County.

PF-123. At a minimum, new residential developments approved by the County shall provide sites for local parks for their prospective residents consistent with the Quimby Act and the land dedication standards for each local recreation and park district adopted by Sacramento County in Chapter 22.40 of the Sacramento County Code. These requirements may be satisfied by land dedication, payment of fees in lieu of dedication, or on-site improvements per the provisions of Chapter 22.40, which will be regularly updated to reflect changing

demography. These include the baseline standard of three acres of land for parks per 1,000 residents or in cases where existing parklands within a park district exceed three acres per 1,000 population, that higher ratio shall be the standard for new developments up to a maximum of five acres of land for parks per 1,000 residents based on calculations specified in SCC Chapter 22.40.

PF-124. Consistent with its infill development standards and mixed use Commercial Corridor plans, the County in consultation with the local recreation and park districts shall encourage new infill and Corridor development projects to provide small plazas, pocket parks, civic spaces, and other gathering places that are available to the public to help encourage pedestrian activity, meet recreational needs and service standards consistent with Smart Growth principles.

PF-125. The County shall promote the provision of on-site recreational amenities and gathering places that are available to the public by large scale development projects and may consider providing incentives such as density bonuses or increases in building coverage for that purpose.

POLICIES SUPPORTING PARK OPERATIONS AND MAINTENANCE

PF-127. Require new residential developments to participate in park O & M financing mechanisms where established by local park districts or the County.

SACRAMENTO COUNTY CODE

Title 22 of the Sacramento County Code provides direction on calculating park acreage requirements for residential developments. Depending on the jurisdiction, residential developments are required to provided dedicated land for park construction or pay in lieu fees.

SACRAMENTO COUNTY ZONING CODE

There are no Sacramento County Zoning Code regulations applicable to the provision of public services and recreation for the Project.

SACRAMENTO COUNTY DESIGN GUIDELINES

There are no provisions, policies, guidelines, or standards of the Sacramento County Design Guidelines applicable to the provision of public services and recreation for the Project.

DISTINCT AREA PLANS

The County contains many distinct area planning efforts and associated documents. The distinct area planning efforts provide community-specific regulations that supplement the County Zoning Code. Some of the candidate rezone sites are located within distinct area plans such as Special Planning Areas (SPAs), Specific Plans, Comprehensive Plans, Community Plans, Corridor Plans, and Neighborhood Preservation Areas (NPAs). These distinct area plans are created when the countywide zoning regulations do not adequately address local concerns (Sacramento County 2023). As shown in Chapter 2, “Project Description,” 13 sites are located in distinct area plans.

Relevant public services and recreation policies or mitigation included in the area planning efforts are summarized below. Where appropriate, mitigation is carried through or updated from these plans and associated environmental documents.

FAIR OAKS BOULEVARD CORRIDOR PLAN

There are no provisions, policies, guidelines, or standards of the Fair Oaks Boulevard Corridor Plan applicable to the provision of public services and recreation for the Project.

NORTH WATT AVENUE CORRIDOR PLAN

There are no provisions, policies, guidelines, or standards of the North Watt Corridor Plan applicable to the provision of public services and recreation for the Project.

OLD FLORIN TOWN SPECIAL PLANNING AREA

There are no provisions, policies, guidelines, or standards of the Old Florin Town Special Planning Area applicable to the provision of public services and recreation for the Project.

OTHER DISTINCT AREA PLANS

In addition to the distinct planning areas above there are rezone sites included in the Stockton Boulevard NPA, Victory Avenue NPA, Greenback Lane SPA, and Downtown Rio Linda SPA. There are no policies applicable to the provision of public services and recreation for the Project within these other distinct plan areas.

SIGNIFICANCE CRITERIA AND METHODOLOGY

SIGNIFICANCE CRITERIA

A public services and recreation impact is considered significant if implementation of the project would do any of the following:

- Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:
    - fire,
    - police protection,
    - schools,
    - parks, and
    - other public facilities;

- increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated; and/or

- include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment.

METHODOLOGY

Evaluation of potential public service and recreation impacts are based on applicable County standards, policies, and a review of documents pertaining to the Project, including the General Plan EIR and distinct area plan EIRs. Impacts on public services and recreation that would result from the Project were identified by comparing existing service capacity and facilities against future, new, or renovated facilities, the construction of which could have physical effects on the environment.

IMPACT AND ANALYSIS

This impact and analysis section is organized by impact-area, then by analysis of project buildout as compared to the General Plan EIR, and finally by distinct plan area. Mitigation is included or updated, where applicable, from the original environmental documents prepared for the General Plan and distinct area plans.

IMPACT PSR-1: REQUIRE CONSTRUCTION OF NEW FIRE PROTECTION FACILITIES

SACRAMENTO COUNTY GENERAL PLAN

GENERAL PLAN ENVIRONMENTAL IMPACT REPORT DETERMINATION

The General Plan EIR concluded that buildout of the development assumed in the General Plan would increase demand for fire and emergency services. Specifically, the EIR called out an increase in demand for services related to buildout of residential infill and development within designated Commercial Corridors. Relatedly, the General Plan EIR acknowledged that growth would require construction of new fire protection facilities depending on operational needs and other factors as development occurs over the life of the General Plan.

The General Plan EIR indicated that the General Plan Policies PF-66 through PF-69 (which have been revised in the 2030 General Plan as Policies PF-61, PF-63, and PF-64) would allow the Sacramento County Board of Supervisors to establish mitigation fees for the purpose of funding adequate fire protection and emergency medical response facilities, provided that such fees are critical and necessary to meet the facility funding needs of the fire district. Additionally, General Plan policies require that new buildings and neighborhoods meet the requirements of the California Fire Code and access to fire hydrants to reduce the

need for fire protection services. The General Plan EIR concluded that with application of General Plan policy, adequate fire services would be available to serve potential growth.

Additionally, the General Plan EIR indicated that the location and environmental impact of new fire and emergency facilities was unknown at the time and site-specific impacts would be identified and appropriately mitigated pursuant to General Plan policies and other regulations as part of the subsequent CEQA document that will be required for each new facility project. The General Plan EIR indicated that the construction and operation of new facilities could result in the following impacts typical of new construction: air quality (related both to construction and operation), biological resources, traffic and circulation, erosion and grading, water quality, drainage, noise (sirens and traffic) and public utility services demand (electric, water, and wastewater). Less typical, but still possible, are impacts related to cultural resources, aesthetics, agricultural resources, and hazardous materials. Within the Commercial Corridors and infill areas infrastructure is already in place; construction will consist of minor extension of infrastructure, and possibly existing facility expansion or renovation. The General Plan EIR concluded that construction of these facilities will not result in any additional environmental impacts that have not already been disclosed within the relevant topical chapters of the EIR. Therefore, construction would not result in any additional substantial impacts.

No mitigation measures related to fire and emergency service facilities was necessary and the General Plan EIR concluded that impacts associated with fire protection and emergency services would be less than significant.

PROPOSED PROJECT IMPACT EVALUATION

Candidate rezone sites are located within infill and distinct planning areas of Sacramento County that have existing fire protection and emergency services. The majority-share of the candidate rezone sites (71 sites) are located within the SMFD service area and the remaining sites (8 sites) are located within the PFFD, which has contract services with the City of Sacramento Fire Department for services. A buffer analysis determined that 34 percent of candidate sites are located within a half-mile radius from an existing fire station, 78 percent are within one mile from a fire station, and 100 percent of sites are within 2 miles from a fire station.

Both agencies have reviewed the proposed Project and both SMFD and City of Sacramento Fire Department, on behalf of PFFD, have provided comments and conditions of approval, where appropriate. SMFD has indicated that under existing conditions, the majority of the station response zones where candidate rezone sites occur are already impacted by excessive call volume.

As disclosed in the General Plan EIR, buildout consistent with the General Plan and the proposed Project would increase demand for fire protection and emergency services but not to a degree that would cause substantial adverse impacts. This is because the General Plan contains policies that allow the Sacramento County Board of Supervisors to establish mitigation fees for the purpose of funding adequate fire protection and emergency medical response facilities, provided that such fees are critical and necessary to meet the facility funding needs of the fire district. Furthermore, building permits for

development as part of the Project would not be issued until an applicant has contributed all required mitigation fees when there is a Sacramento County Board of Supervisors-certified fire district financing plan for any applicable fire district. Since adoption of the General Plan Update, SMFD has established a capital facilities and development impact fee for all development.

Additionally, while there is no development proposed with this rezone project, future development would be subject to General Plan policies that require that new buildings and neighborhoods to meet the requirements of the California Fire Code, including but not limited to fire/emergency access requirements, installation of sprinkler system, and installation of fire hydrants to reduce the need for fire protection and emergency services. SMFD and PFFD have identified conditions of approval applicable to future residential development on the candidate rezone sites, specifically pertaining to the provision of adequate fire access (i.e., requirements for fire access roadways, aerial apparatus access, etc.). Compliance with these conditions would ensure the design of future residential development on the candidate rezone sites would not impede onsite fire protection and emergency service response.

As indicated above, environmental impacts related to construction of new facilities was analyzed with the General Plan EIR and the proposed Project would not substantially change the findings of the General Plan EIR related to physical environmental impacts from construction of fire facilities. Pursuant to CEQA Guidelines Section 15162, the proposed Project would not result in new substantial adverse physical impacts associated with the provision of new or physically altered fire and emergency services and/or facilities, in order to maintain acceptable service ratios, response times, or performance objectives than would occur with implementation of the General Plan. The Project's contribution to impacts from rezoning the candidate rezone sites would not be substantial and overall impacts remain less than significant.

MITIGATION MEASURES

Mitigation not required.

DISTINCT AREA PLANS

FAIR OAKS BOULEVARD CORRIDOR PLAN

ENVIRONMENTAL IMPACT REPORT DETERMINATION

The Fair Oaks Boulevard Corridor Plan EIR indicated that SMFD staff had been consulted regarding the Plan and minimal comments and conditions were received. Comments consisted of street width specifications, fire hydrant requirements, and reserved the right to require additional design requirements as specified by the SMFD. The Fair Oaks Boulevard Corridor Plan EIR concluded that the Corridor Plan would not result in substantial adverse physical impacts associated with the provision of fire and emergency services and did not require mitigation to reduce impacts. Impacts were determined to be less than significant.

IMPACT EVALUATION

There is one candidate rezone site (Site 67) located within the Fair Oaks Boulevard Corridor area. The proposed rezone of Site 67 from the Business Professional Office (BP) subzone to the RD-30 subzone would result in a net increase of residential capacity of 12 units. While there would be a minor increase in residential capacity along the corridor, the proposed Project would reduce demand associated with business professional services. The addition of 12 units would not significantly change acceptable service ratios, response times, or performance objectives within the applicable station response area. Additionally, any development on Site 67 would be required to meet the requirements of the California Fire Code, including but not limited to fire/emergency access requirements, installation of sprinkler systems, and installation of fire hydrants as well as payment of any impact fees prior to the issuance of building permits. SMFD has identified conditions of approval applicable to future residential development on Site 67, specifically pertaining to the provision of adequate fire access (i.e., requirements for fire access roadways, aerial apparatus access, etc.). Compliance with these conditions would ensure the design of future residential development on Site 67 would not impede on-site fire protection and emergency service response.

Pursuant to CEQA Guidelines Section 15162, the rezone of Site 67 would not result new substantial adverse physical impacts associated with the provision of new or physically altered fire and emergency services and/or facilities, in order to maintain acceptable service ratios, response times, or performance objectives than would occur with implementation of the Fair Oaks Boulevard Corridor Plan. The Project's contribution to impacts from rezoning Site 67 would not be substantial and overall impacts remain less than significant.

MITIGATION MEASURES

Mitigation not required.

NORTH WATT AVENUE CORRIDOR PLAN

ENVIRONMENTAL IMPACT REPORT DETERMINATION

The North Watt Avenue Corridor Plan EIR indicated that SMFD staff had been consulted but did not submit comments or conditions of approval. The North Watt Avenue Corridor Plan EIR concluded that development or redevelopment projects consistent with the Corridor Plan, would be subject to the requirements of the California Fire Code and design requirements of SMFD. The North Watt Avenue Corridor Plan EIR concluded that the Corridor Plan would not result in substantial adverse physical impacts associated with the provision of fire and emergency services and did not require mitigation to reduce impacts. Impacts were determined to be less than significant.

IMPACT EVALUATION

There are five candidate rezone sites (Sites 68 through 72) located within the North Watt Avenue Corridor area. Sites 68, 69, and 72 would be rezoned from the Residential Mixed-Use 1 (RMU-1) subzone to the RD-40 subzone and Sites 70 and 71 would be rezoned from the Residential Mixed-Use 2 (RMU-2) and RMU-1 subzones, respectively, to the

RD-30 subzone in the North Watt Avenue Corridor Plan. Collectively, this would result in a net increase of 230 units in the North Watt Avenue Corridor area.

In comparison to the total buildout studied in the North Watt Avenue Corridor Plan EIR, which includes 7,200 residential units, 1,170,000 square feet of new commercial-retail uses, and 714,700 square feet of new office uses, the potential increase of 230 residential units would not significantly impact acceptable service ratios, response times, or performance objectives within the applicable station response area. Additionally, any development on Sites 68 through 72 would be required to meet the requirements of the California Fire Code, including but not limited to fire/emergency access requirements, installation of sprinkler systems, and installation of fire hydrants as well as payment of any impact fees prior to the issuance of building permits. SMFD has identified conditions of approval applicable to future residential development on Sites 68 through 72, specifically pertaining to the provision of adequate fire access (i.e., requirements for fire access roadways, aerial apparatus access, etc.). Compliance with these conditions would ensure the design of future residential development on Sites 68 through 72 would not impede onsite fire protection and emergency service response.

Pursuant to CEQA Guidelines Section 15162, the rezone of Sites 68 through 72 would not result new substantial adverse physical impacts associated with the provision of new or physically altered fire and emergency services and/or facilities, in order to maintain acceptable service ratios, response times, or performance objectives than would occur with implementation of the North Watt Avenue Corridor Plan. The Project's contribution to impacts from rezoning Sites 68 through 72 would not be substantial and overall impacts remain less than significant.

MITIGATION MEASURES

Mitigation not required.

OLD FLORIN TOWN SPA

ENVIRONMENTAL IMPACT REPORT DETERMINATION

The Old Florin Town SPA EIR indicated that SMFD staff had been consulted on the Plan and minimal comments and conditions were received. Comments consisted of street width specifications, fire hydrant requirements, and reserved the right to require additional design requirements as specified by the SMFD. The Old Florin Town SPA EIR concluded that the Old Florin Town SPA would not result in substantial adverse physical impacts associated with the provision of fire and emergency services and did not require mitigation to reduce impacts. Impacts were determined to be less than significant.

IMPACT EVALUATION

There are seven candidate rezone sites (Sites 73 through 79) located within the Old Florin Town SPA. Sites 73 through 76 and 79 would be rezoned from the Mixed Use Residential (MUR) subzone to the RD-30 subzone, Site 77 would be rezoned from the MUR/Mixed Use Commercial (MUC) subzone to the RD-30 subzone, and Site 78 would be rezoned from the MUR subzone to the RD-40 subzone in the Old Florin Town SPA. Collectively, this would result in a net increase of 274 units in the Old Florin Town SPA.

While development on Sites 73 through 79 under the Project would increase the residential capacity within the Old Florin Town SPA, there is no development proposed at this time and it is uncertain to what intensity the rest of the SPA would develop. Therefore, it is a worst-case to assume that there would be an additional 274 residential units realistically added to Old Florin Town SPA. However, in comparison to the total buildout studied in the Old Florin Town SPA EIR, which includes 1,126 residential units, 391,500 square feet of new commercial-retail uses, and 1,888 new general industrial employees, the potential increase of 274 residential units would not significantly impact acceptable service ratios, response times, or performance objectives within the applicable station response area.

Additionally, any development on Sites 73 through 79 would be required to meet the requirements of the California Fire Code, including but not limited to fire/emergency access requirements, installation of sprinkler systems, and installation of fire hydrants as well as payment of any impact fees prior to the issuance of building permits. SMFD has identified conditions of approval applicable to future residential development on Sites 73 through 79, specifically pertaining to the provision of adequate fire access (i.e., requirements for fire access roadways, aerial apparatus access, etc.). Compliance with these conditions would ensure the design of future residential development on Sites 73 through 79 would not impede onsite fire protection and emergency service response.

Pursuant to CEQA Guidelines Section 15162, the rezone of Sites 73 through 79 would not result new substantial adverse physical impacts associated with the provision of new or physically altered fire and emergency services and/or facilities, in order to maintain acceptable service ratios, response times, or performance objectives than would occur with implementation of the Old Florin Town SPA. The Project's contribution to impacts from rezoning Sites 73 through 79 would not be substantial and overall impacts remain less than significant.

MITIGATION MEASURES

Mitigation not required.

IMPACT PSR-2: REQUIRE CONSTRUCTION OF NEW POLICE PROTECTION FACILITIES

SACRAMENTO COUNTY GENERAL PLAN

GENERAL PLAN ENVIRONMENTAL IMPACT REPORT DETERMINATION

The General Plan EIR concluded that growth considered under the General Plan project would require additional law enforcement personnel and facilities. Specifically, the General Plan EIR called out an increase in demand for services related to buildout of residential infill and development within designated Commercial Corridors. The General Plan EIR indicated that the General Plan contains policies for the planning and development of law enforcement facilities, such as law enforcement programs (educational and crime preventative programs), design of neighborhoods and regulating security measures through the Zoning Code, Uniform Building Code and Land

Development Ordinances. Further the General Plan EIR noted that construction of new facilities would result in environmental impacts, but these impacts would occur within areas that were analyzed throughout the General Plan EIR.

Mitigation measures related to law enforcement protection were not deemed necessary and the General Plan EIR concluded that impacts associated with law enforcement services would be less than significant.

PROPOSED PROJECT IMPACT EVALUATION

The Project would result in a potential maximum net increase of 4,081 new housing units. The candidate rezone sites would be provided law enforcement protection services by the Sacramento County Sheriff's Department. Specifically, candidate rezone sites are located within six of the nine Sheriff Department Service Districts with the majority of sites located within the Central District 6 (37 sites/1,797 dwelling units) and Northwest District 1 (20 sites/1,495 dwelling units) service areas (see Table PSR-1 above).

Future development allowed under Project could result in a population increase of approximately 11,264 residents (assuming 2.76 residents per dwelling unit [U.S 2020 Census]) in the County. The increased population would require approximately 11.3 additional law enforcement staff to meet the 1 officer per 1,000 person staffing goal as identified in the General Plan EIR.

Sheriff's Department staff (James Hicks) reviewed the proposed candidate rezone sites and noted that absent specific development proposed on the sites, comments and conditions related to ingress/egress, visibility, and other concerns cannot be adequately identified at this time. The Sheriff's Department intends to provide conditions and/or advisories when a specific development project is proposed on the candidate rezone sites. (Email Correspondence dated January 18, 2024)

As described above, future development under the Project could require up to 11.3 additional law enforcement officers and related services over the life of the General Plan and Housing Element. Growth would occur incrementally and may not be realized during the life of the General Plan. The General Plan contains policies (PF-50 through PF-52) for the planning and development of law enforcement services, such as law enforcement educational and crime prevention programs and law enforcement facilities development consistent with growth. These policies would ensure that law enforcement could adequately serve new growth anticipated under the Project. Impacts are not substantially greater than what was analyzed in the General Plan EIR and no new mitigation is required.

Pursuant to CEQA Guidelines Section 15162, the proposed Project would not result in new substantial adverse physical impacts associated with the provision of new or physically altered police protection services and/or facilities, in order to maintain acceptable service ratios, response times, or performance objectives than would occur with implementation of the General Plan. The Project's contribution to impacts from rezoning the candidate rezone sites would not be substantial and overall impacts remain less than significant.

MITIGATION MEASURES

Mitigation not required.

DISTINCT AREA PLANS

FAIR OAKS BOULEVARD CORRIDOR PLAN

ENVIRONMENTAL IMPACT REPORT DETERMINATION

The Fair Oaks Boulevard Corridor Plan EIR indicated that Sheriff's Department staff had been consulted regarding the Corridor Plan and provided comments and advisories pertaining to how future development within the corridor should be designed. Specifically, the Sheriff's Department indicated that projects in the Fair Oaks Boulevard Corridor should incorporate concepts of the "Crime Prevention Through Environmental Design" to reduce safety impacts. Additionally, the Sheriff's Department reserved the right to require additional requirements on future projects as specified by the Sheriff's Department. It was determined that buildout of the Corridor Plan would not result in substantial impacts related to the provision of law enforcement services or staffing ratios. The Fair Oaks Boulevard Corridor EIR did not require mitigation to reduce impacts and concluded that the Corridor Plan would not result in substantial adverse physical impacts associated with the provision of law enforcement services. Impacts were determined to be less than significant.

IMPACT EVALUATION

The Project would result in the rezone of one candidate site (Site 67) with a potential maximum net increase of 12 units within the Fair Oaks Boulevard Corridor area. The 12-unit increase in the Corridor Plan area represents a 0.29 percent share of the total Project maximum net increase in residential units of 4,081 new housing units and would increase the residential capacity within the Fair Oaks Boulevard Corridor Plan from 5,310 units to 5,322 units (about 0.26 percent increase). The 12-unit increase could result in approximately 33 additional residents (assuming 2.76 residents per dwelling unit [U.S 2020 Census]) in the Fair Oaks Corridor Plan. This minor increase in population would require approximately 0.03 additional law enforcement staff to meet the 1 officer per 1,000 person staffing goal as identified in the General Plan EIR (Note: this is the share specific to the Fair Oaks Boulevard Corridor area and it is included within the totals listed above for the General Plan analysis).

Candidate rezone Site 67 is located within the North District 2 service area of the Sheriff's Department. Sheriff's Department staff (James Hicks) reviewed the proposed candidate rezone sites and noted that absent specific development proposed with this rezone project, comments and conditions related to ingress/egress, visibility, and other concerns cannot be adequately identified at this time. The Sheriff's Department intends to provide conditions and/or advisories when a specific development project is proposed on Site 67.

As described above, depending on the buildout of the Fair Oaks Boulevard Corridor Plan and the candidate rezone Site 67, the Project could require up to 0.03 additional law enforcement officers and related services over the life of the Fair Oaks Boulevard Corridor Plan. The potential population growth identified in the Fair Oaks Corridor Plan from

development allowed under the Project on Site 67 would be minimal and all policies of the General Plan would still be implemented to reduce impacts to services and future projects will be subject to security measures in the Zoning Code, Uniform Building Code, and Land Development Ordinances.

Pursuant to CEQA Guidelines Section 15162, the rezone of Site 67 would not result new substantial adverse physical impacts associated with the provision of new or physically altered police services and/or facilities, in order to maintain acceptable service ratios, response times, or performance objectives than would occur with implementation of the Fair Oaks Boulevard Corridor Plan. The Project's contribution to impacts from rezoning Site 67 would not be substantial and overall impacts remain less than significant.

MITIGATION MEASURES

Mitigation not required.

NORTH WATT AVENUE CORRIDOR PLAN

ENVIRONMENTAL IMPACT REPORT DETERMINATION

The North Watt Avenue Corridor Plan EIR indicated that buildout of the corridor could result in a net increase of 7,200 residential units and an additional 19.4 additional Sheriff's Deputies to serve the population anticipated as part of the North Watt Avenue Corridor Plan. The Sheriff's Department staff was consulted regarding the North Watt Avenue Corridor Plan but did not provide comments or conditions. The North Watt Corridor Plan EIR concluded that required personnel and equipment would be funded through a combination of tax revenue and other sources, including impact fees (consistent with General Plan policy). Additionally, the North Watt Avenue EIR noted that development/redevelopment within the corridor would be subject to design requirements specified by the Sheriff's Department. Sheriff's Department review would occur at design review, grading plan and/or building permit submittal for individual projects in the North Watt Avenue Corridor area. The North Watt Avenue EIR did not require mitigation to reduce impacts and concluded that the Corridor Plan would not result in substantial adverse physical impacts associated with the provision of law enforcement services. Impacts were determined to be less than significant.

IMPACT EVALUATION

The Project would result in the rezone of five candidate sites (Sites 68 through 72) with a potential maximum net increase of 230 units within the North Watt Avenue Corridor area. The 230 unit increase in the North Watt Avenue Corridor area represents a 5.63 percent share of the total Project maximum net increase in residential units of 4,081 new housing units and would increase the residential capacity within North Watt Avenue Corridor Plan from 7,200 units to 7,430 units (about 3 percent increase). The 230-unit increase could result in approximately 635 additional residents (assuming 2.76 residents per dwelling unit [U.S 2020 Census]) in the North Watt Avenue Corridor area. This increase in population would require approximately 0.63 additional law enforcement staff to meet the 1 officer per 1,000 person staffing goal as identified in the General Plan EIR (Note: this is

the share specific to the North Watt Avenue Corridor area and it is included within the totals listed above for the General Plan analysis).

Candidate rezone Sites 68 through 72 are located within the Northwest District 1 service area of the Sheriff's Department. Sheriff's Department staff (James Hicks) reviewed the proposed candidate rezone sites and noted that absent specific development proposed on Sites 68 through 72, comments and conditions related to ingress/egress, visibility, and other concerns cannot be adequately identified at this time. The Sheriff's Department intends to provide conditions and/or advisories when a specific development project is proposed on Sites 68 through 72.

As described above, depending on the buildout of the North Watt Avenue Corridor Plan and the candidate rezone on Sites 68 through 72, the Project could require up to 0.63 additional law enforcement officers and related services over the life of the North Watt Avenue Corridor Plan. The buildout of the entire North Watt Avenue Corridor Plan would require 19.4 additional officers and with development allowed on candidate rezone Sites 68 through 72 as part of the Project the total additional officers needed would be 20.03 officers. As concluded in the North Watt Avenue EIR, required personnel and equipment would be funded through a combination of tax revenue and other sources, including impact fees. Additionally, the North Watt Avenue EIR noted that development/ redevelopment within the corridor would be subject to design requirements specified by the Sheriff's Department. Sheriff's Department review would occur at design review, grading plan and/or building permit submittal for individual projects. No new mitigation is required specific to the North Watt Avenue Corridor Plan.

Pursuant to CEQA Guidelines Section 15162, the rezone of Sites 68 through 72 would not result new substantial adverse physical impacts associated with the provision of new or physically altered police services and/or facilities, in order to maintain acceptable service ratios, response times, or performance objectives than would occur with implementation of the North Watt Avenue Corridor Plan. The Project's contribution to impacts from rezoning Sites 68 through 72 would not be substantial and overall impacts remain less than significant.

MITIGATION MEASURES

Mitigation not required.

OLD FLORIN TOWN SPA

ENVIRONMENTAL IMPACT REPORT DETERMINATION

The Old Florin Town SPA EIR indicated that build-out of the Old Florin Town SPA could result in a net increase of 1,126 residential units. The Sheriff's Department staff was consulted regarding the Old Florin Town SPA but did not provide comments or conditions for development in the Old Florin Town SPA. The Old Florin Town EIR noted that development/redevelopment within the Old Florin Town SPA would be subject to design requirements specified by the Sheriff's Department. Sheriff's Department review would occur at design review, grading plan and/or building permit submittal for individual projects in the Old Florin Town SPA. The Old Florin Town EIR concluded that the Old Florin Town

SPA would not result in substantial adverse physical impacts associated with the provision of law enforcement services. Impacts were determined to be less than significant.

IMPACT EVALUATION

The Project would result in the rezone of seven candidate sites (Sites 73 through 79) with a potential maximum net increase of 274 units within Old Florin Town SPA. The 274 unit increase in the Old Florin Town SPA represents a 6.71 percent share of the total Project maximum net increase in residential units of 4,081 new housing units and would increase the residential capacity within Old Florin Town SPA from 1,126 units to 1,400 units (about 24 percent increase). The 274-unit increase could result in approximately 756 additional residents (assuming 2.76 residents per dwelling unit [U.S 2020 Census]) in the Old Florin Town SPA. This increase in population would require approximately 0.76 additional law enforcement officers to meet the 1 officer per 1,000 person staffing goal as identified in the General Plan EIR (Note: this is the share specific to the Old Florin Town SPA area and it is included within the totals listed above for the General Plan analysis).

Candidate rezone Sites 73 through 79 are located within the Central District 6 service area of the Sheriff's Department. Sheriff's Department staff (James Hicks) reviewed the proposed candidate rezone sites and noted that absent specific development proposed on Sites 73 through 79, comments and conditions related to ingress/egress, visibility, and other concerns cannot be adequately identified at this time. The Sheriff's Department intends to provide conditions and/or advisories when a specific development project is proposed on Sites 73 through 79.

As described above, depending on the buildout of the Old Florin Town SPA and the candidate rezone Sites 73 through 79, the Project could require up to 0.76 additional law enforcement officers and related services over the life of the Old Florin Town SPA. Although not specifically calculated in the Old Florin Town SPA EIR, utilizing the same person per household assumption (2.76) and the same officer to population ratio (1 officer per 1,000 population), without the Project, build-out of the Old Florin Town SPA would require 3.11 additional officers and with buildout of candidate rezone Sites 73 through 79 the total additional officers needed to serve the Old Florin Town SPA would be 3.87 officers. Required personnel and equipment would be funded through a combination of tax revenue and other sources, including impact fees. Additionally, the Old Florin Town SPA EIR noted that development/redevelopment within the corridor would be subject to design requirements specified by the Sheriff's Department. Sheriff's Department review would occur at design review, grading plan and/or building permit submittal for individual projects. No new mitigation is required specific to the Old Florin Town SPA.

Pursuant to CEQA Guidelines Section 15162, the rezone of Sites 73 through 79 would not result new substantial adverse physical impacts associated with the provision of new or physically altered police services and/or facilities, in order to maintain acceptable service ratios, response times, or performance objectives than would occur with implementation of the Old Florin Town SPA. The Project's contribution to impacts from rezoning Sites 73 through 79 would not be substantial and overall impacts remain less than significant.

MITIGATION MEASURES

Mitigation not required.

IMPACT PSR-3: REQUIRE CONSTRUCTION OF NEW SCHOOLS

SACRAMENTO COUNTY GENERAL PLAN

GENERAL PLAN ENVIRONMENTAL IMPACT REPORT DETERMINATION

The General Plan EIR concluded that growth considered under the General Plan would increase student population and require new school facilities. Specifically, the General Plan EIR called out an increase in student population at existing schools related to buildout of residential infill and development; however, established case law, Goleta Union School District v. The Regents of the University of California (36 Cal-App. 4th 1121, 1995), indicates that school overcrowding, standing alone, is not a change in the physical conditions, and cannot be treated as an impact on the environment.

The General Plan EIR noted that construction of new facilities would result in environmental impacts, but those impacts would occur within topical areas analyzed throughout the General Plan EIR. General Plan policies requiring provision of land for schools, in addition to developer fees under SB 50 and school facilities mitigation under the California Government Code, would provide adequate funding and support to ensure that sufficient school facilities are provided. No mitigation was added and the General Plan EIR concluded that impacts to public school facilities would be less than significant.

PROPOSED PROJECT IMPACT EVALUATION

The proposed Project would result in the potential for 4,081 new residential units located within the following seven school districts within Sacramento County (See Table PSR-2 above for number of candidate rezone sites/unit total within each affected district):

- CJUSD
- EGUSD
- FCJUSD
- RJUH/DCJE
- SCUSD
- SJUSD
- TRUSD

To estimate the potential student population increase for each of the seven school districts as a result of the Project, student generation rates, otherwise known as “yield factors,” are utilized. Yield factors are the average number of students that are generated by each housing unit and school districts use these estimates to plan for student enrollment and to adjust developer impact fees accordingly. Table PSR -5 shows the yield factor and net total potential student population increase per school district as a result of

the Project. It should be noted that some school districts have a different yield rate for single family and multifamily residential units while others have one yield rate that covers all different types of residential. Where available, the multifamily residential yield rate was used to estimate net students generated in Table PSR-5.

Table PSR-5: Net Student Population Increase by School District

Public School District	No. of Dwelling Units	Yield Rate	Students Generated[a]
CJUSD	203	0.471	96
EGUSD	1,633	0.4458	728
FCUSD	49	0.65	32
RJUH/DCJE	432	0.615b	266
SCUSD	393	0.26	103
SJUSD	668	0.3563	238
TRUSD	703	0.475	334
Total	4,081	--	1,797

a) Rounded up to next whole number

b) RJUH = 0.072 (grades 9-12); DCJE = 0.543 (grades TK-8)

Sources:

CJUSD: School Fee Justification Study for Residential & Commercial/Industrial Development, March 2020

EGUSD: School Facilities Needs Analysis, May 2023

FCUSD: Developer Fee Justification Study, April 2022

RJUH: Developer Fee Justification Study, May 2016

DCJE: School Facilities Master Plan, February 2023

SCUSD: Developer Fee Justification Report, March 2012

SJUSD: 2020 Developer Fee Justification Study, March 2021

TRUSD: School Facility Fee Justification Report for Residential, Commercial & Industrial Development Projects, April 2016.

Table PSR-5 indicates that all of the school districts will see a net increase in student population with the Project. All except one school district will have less than 340 new students with a range of new students by district of 32-334 net new students. EGUSD has the highest increase in potential student population with a net potential increase of 728 students. School Districts were notified of the proposed Project with release of the NOP. County staff met with staff from EGUSD to discuss potential development impact fees/Mello-Roos tax that could apply to future development associated with the Project. District staff, Pham Saechao, confirmed that candidate rezone sites that are the subject of “rezone-only” applications would not be assessed for Mello-Roos tax increases until such time there is a subdivision of land or site-specific development application. Staff have not received comments or conditions from any of the school districts where candidate rezone sites are located.

While the school districts will see a net increase in student population, this will occur gradually as sites are developed and may take longer than the life of the housing element to fully develop. As noted, future development associated with the Project would require financing plans or participation in existing plans that include funding mechanisms for schools. Financial impacts to school districts for facilities are mitigated under California Government Code Sections 65995(h) and 65996(b). Section 65995(h) states that the

payment or satisfaction of a fee, charge, or other requirement levied or imposed pursuant to Section 17620 of the Education Code is deemed to be full and complete mitigation of the impacts for the planning, use, development, or the provisions of adequate school facilities. Section 65996(b) finds that these provisions provide full and complete school facilities mitigation. Compliance with existing regulations would ensure that the project would not significantly affect the ability of school districts to provide adequate school services. No added mitigation is required.

Pursuant to CEQA Guidelines Section 15162, the proposed Project would not result in new substantial adverse physical impacts associated with the provision of new or physically altered school services and/or facilities than would occur with implementation of the General Plan. The Project's contribution to impacts from rezoning the candidate rezone sites would not be substantial and overall impacts remain less than significant.

MITIGATION MEASURES

Mitigation not required.

DISTINCT AREA PLANS

FAIR OAKS BOULEVARD CORRIDOR PLAN

ENVIRONMENTAL IMPACT REPORT DETERMINATION

The Fair Oaks Boulevard Corridor Plan EIR noted that the Corridor Plan is entirely within the boundaries of the SJUSD. The SJUSD did not provide comments related to adverse impacts to school populations or financing but instead provided general project comments addressing signage, traffic signals, fencing and parking locations for future projects near school facilities. The Fair Oaks Boulevard Corridor Plan EIR concluded that there would likely be increases in student population, but the extent of increases was unknown. Finally, the Fair Oaks Boulevard Corridor Plan EIR provided the same conclusions regarding financial impacts as discussed in the General Plan EIR. Specifically, compliance with existing regulations would ensure that development in the Fair Oaks Boulevard Corridor area would not significantly affect the ability of the SJUSD to provide adequate school services. No mitigation was required, and the Fair Oaks Boulevard Corridor Plan EIR concluded that impacts related to school services would be less than significant.

IMPACT EVALUATION

The Project would result in the rezone of one candidate site (Site 67) with a potential maximum net increase of 12 residential units within the Fair Oaks Boulevard Corridor area. This minor increase in residential units within the SJUSD area may result in some additional student population within the district but because there is no development proposed with the Project, exact increases in student populations because of the Project is unknown at this time. Utilizing the student generation yield rate for SJUSD listed in Table PSR-5, above (0.3563), the potential net increase in student population from the proposed project would be 4.28 students. Given the relatively small amount of new residential units that may result from development on Site 67 allowed under the Project, impacts to SJUSD would be minimal. However, development proposed on Site 67 would

be required to pay school impact fees. As noted above, payment of levied or imposed fees pursuant to the California Government Code Section 65996(b) is considered full and complete school facilities mitigation.

Pursuant to CEQA Guidelines Section 15162, the rezone of Site 67 would not result new substantial adverse physical impacts associated with the provision of new or physically altered school services and/or facilities than would occur with implementation of the Fair Oaks Boulevard Corridor Plan. The Project's contribution to impacts from rezoning Site 67 would not be substantial and overall impacts remain less than significant.

MITIGATION MEASURES

Mitigation not required.

NORTH WATT AVENUE CORRIDOR PLAN

ENVIRONMENTAL IMPACT REPORT DETERMINATION

The North Watt Avenue Corridor Plan EIR noted that the North Watt Avenue Corridor Plan is within the boundaries of the SJUSD and the TRUSD. Neither School District provided comments related to adverse impacts to school populations or financing. The North Watt Avenue Corridor Plan EIR concluded that there would likely be increases in student population as a result of development in the North Watt Avenue Corridor area, but the extent of increases was unknown. Finally, the North Watt Avenue Corridor Plan EIR provided the same conclusions regarding financial impacts as discussed in the General Plan EIR. Specifically, compliance with existing regulations would ensure that development in the North Watt Avenue Corridor area would not significantly affect the ability of the SJUSD and TRUSD to provide adequate school services. No mitigation was required, and the North Watt Avenue Corridor Plan EIR concluded that impacts related to school services would be less than significant.

IMPACT EVALUATION

The Project would result in the rezone of five candidate sites (Sites 68 through 72) with a potential maximum net increase of 230 residential units within the North Watt Avenue Corridor area. Sites 68 through 72 are located in TRUSD and the increase in residential units would result in additional student population. Though it would be speculative to determine precise net increases in student populations as a result of the Project on Sites 68 through 72, the student generation rate utilized by the school districts for development impact fee purposes is a good proxy to determine a potential net increase. Per the generation rate listed in Table PSR-5 for the TRUSD, development on Sites 68 through 72 consistent with the Project could result in a net increase in student populations of 110 students. All new development in the North Watt Avenue Corridor area would be required to pay school impact fees. As noted above, payment of levied or imposed fees pursuant to the California Government Code Section 65996(b) is considered full and complete school facilities mitigation.

Pursuant to CEQA Guidelines Section 15162, the rezone of Sites 68 through 72 would not result new substantial adverse physical impacts associated with the provision of new or physically altered school services and/or facilities than would occur with

implementation of the North Watt Avenue Corridor Plan. The Project's contribution to impacts from rezoning Sites 68 through 72 would not be substantial and overall impacts remain less than significant.

MITIGATION MEASURES

Mitigation not required.

OLD FLORIN TOWN SPA

ENVIRONMENTAL IMPACT REPORT DETERMINATION

The Old Florin Town SPA EIR noted that the Old Florin Town SPA is within the boundaries of EGUSD. The School District did not provide comments related to adverse impacts to school populations or financing. The Old Florin Town EIR concluded that there would likely be increases in student population, but the extent of increases was unknown. Finally, the Old Florin Town EIR provided the same conclusions regarding financial impacts as discussed in the General Plan EIR. Specifically, compliance with existing regulations would ensure that development allowed under the Old Florin Town SPA would not significantly affect the ability of the EGUSD to provide adequate school services. No mitigation was required, and the Old Florin Town EIR concluded that impacts related to school services would be less than significant.

IMPACT EVALUATION

The Project would result in the rezone of seven candidate sites (Sites 73 through 79) with a potential maximum net increase of 274 residential units within the Old Florin Town SPA. Sites 73 through 79 are located in EGUSD and the increase in residential units would result in additional student population. Though it would be speculative to determine precise net increases in student populations as a result of the Project on Sites 73 through 79, the student generation rate utilized by the school districts for development impact fee purposes is a good proxy to determine a potential net increase. Per the generation rate listed in Table PSR-5 for the EGUSD, development on Sites 73 through 79 consistent with the Project could result in a net increase in student populations of 123 students. All new development on Sites 73 through 79 would be required to pay school impact fees. As noted above, payment of levied or imposed fees pursuant to the California Government Code Section 65996(b) is considered full and complete school facilities mitigation.

Pursuant to CEQA Guidelines Section 15162, the rezone of Sites 73 through 79 would not result new substantial adverse physical impacts associated with the provision of new or physically altered school services and/or facilities than would occur with implementation of the Old Florin Town SPA. The Project's contribution to impacts from rezoning Sites 73 through 79 would not be substantial and overall impacts remain less than significant.

MITIGATION MEASURES

Mitigation not required.

IMPACT PSR-4: REQUIRE CONSTRUCTION OF LIBRARY FACILITIES

SACRAMENTO COUNTY GENERAL PLAN

GENERAL PLAN ENVIRONMENTAL IMPACT REPORT DETERMINATION

The General Plan EIR concluded that approval and development of New Growth Areas would require additional libraries and facilities. The General Plan contains funding mechanisms for new libraries and both the General Plan policies and the General Plan EIR reference the Sacramento Public Library Facility Master Plan, which provides for levels of service and funding for the entire library system. For residential infill and commercial corridor growth considered within the General Plan, the General Plan EIR concluded no new libraries would be required; however, some expansion of existing facilities could be required. The General Plan EIR concluded impacts would be less than significant.

PROPOSED PROJECT IMPACT EVALUATION

The proposed Project would result in the potential for up to 4,081 new residential units located within the infill and commercial corridor areas considered in the General Plan. As shown in Table PSR-3, above, candidate rezone sites are located in 11 library service areas and each of those service areas contains an existing or planned library facility. The *Sacramento Public Library Authority Facility Master Plan 2007 – 2025* (Library Master Plan) considered growth and associated operations for both City and County owned/operated facilities and in 2021 an update specific to County facilities was adopted entitled *Sacramento County Library Facilities Master Plan* (County Library Plan Update). These plans detail the needs for each branch facility and funding required to maintain the robust library system. Table PSR-6 outlines the recommendations of the applicable Library Plan for each of the affected library facilities. All candidate rezone sites are located within County owned/operated branch systems except for three sites located within Colonial Heights service area, which is owned/operated by the City of Sacramento.

No development is proposed or authorized with the proposed project; therefore, the extent of impacts to library branches is unknown; however, according to the General Plan EIR, Library Master Plan and County Library Plan Update, no new libraries are needed within the infill or commercial corridor areas where candidate rezone sites occur, but a new library is required in the Vineyard growth area. For infill/commercial corridor branch locations, development of rezone sites may change levels of service slightly, thereby necessitating some expansion/renovation/maintenance of existing facilities already contemplated in the two library plans. The development of two candidate rezone sites within the Vineyard service area would not result in the need for a new library nor would the development on these candidate rezone sites substantially impact plans for this facility. As noted in the General Plan EIR, funding for expansion or renovation of existing facilities and construction of new facilities is addressed in the Library Master Plan and County Library Plan Update. Funding mechanisms include but are not limited to: individual development projects paying impact fees at the time of development, grant funding, or funding from the County General Fund.

Table PSR-6: Affected Library Facility Recommendations

Library Branch Facility	No. of Sites	Library Plan Recommendation
Arcade	1	Minor Renovation and Expansion
Carmichael	8	Minor Renovation
Colonial Heights	3	Renovate and Expansion
Fair Oaks	1	Major Renovation or Partnership[a]
North Highlands-Antelope	14	Minor Renovation and Maintenance
Orangevale	8	Maintenance
Rancho Cordova	2	Major Renovation and Expansion
Rio Linda	6	Minor Renovation, Expansion, Partnership[b]
Southgate	32	Minor Renovation
Sylvan Oaks	2	Minor Renovation and Expansion
Vineyard	2	Build New, Public-Private Partnership (P3[c]), Lease

Sources: Sacramento Public Library Authority Facility Master Plan 2007 – 2025

Sacramento County Library Facilities Master Plan (2021)

a: Potential partnership with the Fair Oaks Recreation and Park District

b: Potential partnership with the RLEPD for outdoor programming space

c: P3 or a lease-leaseback, where a developer-built facility on County owned land is leased back to the County. Partnerships with Southgate PD for programming is also considered.

Pursuant to CEQA Guidelines Section 15162, the proposed Project would not result in new substantial adverse physical impacts associated with the provision of new or physically altered library services and/or facilities than would occur with implementation of the General Plan. The Project's contribution to impacts from rezoning the candidate rezone sites would not be substantial and overall impacts remain less than significant.

MITIGATION MEASURES

Mitigation not required.

DISTINCT AREA PLANS

FAIR OAKS BOULEVARD CORRIDOR PLAN

ENVIRONMENTAL IMPACT REPORT DETERMINATION

Library facilities are mentioned in the Fair Oaks Corridor Plan EIR in the context of land use permissions for library uses; however, there is no discussion or impact conclusion related to impacts on library facilities from buildout of the Fair Oaks Corridor Plan.

IMPACT EVALUATION

The Fair Oaks Boulevard Corridor Plan is located within the Carmichael Library Service Area. The Carmichael Library is located at 5605 Marconi Avenue within the Main Street subdistrict of the Fair Oaks Boulevard Corridor Plan. It should be noted that individuals may choose to go to other library facilities within the public library system; however, for the purpose of this analysis, it is assumed that all growth within the Fair Oaks Boulevard

Corridor Plan from the proposed Project on Site 67 would result in increased use at the Carmichael Library.

According to the County Library Plan Update, which considered potential growth as outlined in the General Plan EIR and adopted commercial corridor plans, the Carmichael Library does not need to expand, and operations are efficient to serve existing and planned population. Minor renovations to the building will be required over the life of the Master Plan. The rezone of one candidate site (Site 67) with a potential maximum net increase of 12 residential units within the Fair Oaks Boulevard Corridor area, would not significantly impact operations at the Carmichael Library such that new library facilities will be needed. As discussed above, future individual development on Site 67 would pay impact fees at the time of development for expansion/renovations of library services and facilities. No mitigation is required.

Pursuant to CEQA Guidelines Section 15162, the rezone of Site 67 would not result new substantial adverse physical impacts associated with the provision of new or physically altered library services and/or facilities than would occur with implementation of the Fair Oaks Boulevard Corridor Plan. The Project's contribution to impacts from rezoning Site 67 would not be substantial and overall impacts remain less than significant.

MITIGATION MEASURES

Mitigation not required.

NORTH WATT AVENUE CORRIDOR PLAN

ENVIRONMENTAL IMPACT REPORT DETERMINATION

Library facilities are mentioned in the North Watt Avenue Corridor Plan EIR in the context of land use permissions for library uses; however, there is no discussion or impact conclusion related to impacts on library facilities.

IMPACT EVALUATION

The North Watt Avenue Corridor Plan is located within the North Highlands Library Service Area. The North Highlands Library is located at 4235 Antelope Road approximately 1 mile northeast of the North Watt Avenue Corridor area. It should be noted that individuals may choose to go to other library facilities within the public library system; however, for the purpose of this analysis, it is assumed that all growth within the North Watt Avenue Corridor Plan on Sites 68 through 72 would result in increased use at the North Highlands Library.

According to the County Library Plan Update, which considered potential growth as outlined in the General Plan and adopted commercial corridor plans, the North Highlands Library does not need to expand, and operations are efficient to serve existing and planned population. Minor renovations and maintenance to the building will be required over the life of the Master Plan. The rezone of five candidate sites (Sites 68 through 72) with a potential maximum net increase of 230 residential units within the North Watt Avenue Corridor area, would not significantly impact operations at the North Highlands Library such that new library facilities would be needed. As discussed above, future

development on Sites 68 through 72 allowed under the Project would pay impact fees at the time of development for expansion/renovations of library services and facilities. No mitigation is required.

Pursuant to CEQA Guidelines Section 15162, the rezone of Sites 68 through 72 would not result new substantial adverse physical impacts associated with the provision of new or physically altered library services and/or facilities than would occur with implementation of the North Watt Avenue Corridor Plan. The Project's contribution to impacts from rezoning Sites 68 through 72 would not be substantial and overall impacts remain less than significant.

MITIGATION MEASURES

Mitigation not required.

OLD FLORIN TOWN SPA

ENVIRONMENTAL IMPACT REPORT DETERMINATION

Library facilities are mentioned in the Old Florin Town SPA in the context of land use permissions for library uses; however, there is no discussion or impact conclusion related to impacts on library facilities.

IMPACT EVALUATION

The Old Florin Town SPA is located within the Southgate Library Service Area. The Southgate Library is located at 6132 66th Avenue approximately 1.3 miles southwest from the Old Florin Town SPA area. It should be noted that individuals may choose to go to other library facilities within the public library system; however, for the purpose of this analysis, it is assumed that all growth within the Old Florin Town SPA on Sites 73 through 79 would result in increased use at the Southgate Library.

According to the County Library Plan Update, which considered potential growth as outlined in the General Plan and adopted commercial corridor plans, the Southgate Library does not need to expand, and operations are efficient to serve existing and planned population. Minor renovations and maintenance to the building would be required over the life of the Master Plan. The rezone of seven candidate sites (Sites 73 through 79) with a potential maximum net increase of 274 residential units within the Old Florin Town SPA area, would not significantly impact operations at the Southgate Library such that new library facilities would be needed. As discussed above, future development on Sites 73 through 79 allowed under the Project would pay impact fees at the time of development for expansion/renovations of library services and facilities. No mitigation is required.

Pursuant to CEQA Guidelines Section 15162, the rezone of Sites 73 through 79 would not result new substantial adverse physical impacts associated with the provision of new or physically altered library services and/or facilities than would occur with implementation of the Old Florin Town SPA. The Project's contribution to impacts from rezoning Sites 73 through 79 would not be substantial and overall impacts remain less than significant.

MITIGATION MEASURES

Mitigation not required.

IMPACT PSR-5: REQUIRE CONSTRUCTION OF PARKS AND RECREATION FACILITIES

SACRAMENTO COUNTY GENERAL PLAN

GENERAL PLAN ENVIRONMENTAL IMPACT REPORT DETERMINATION

The General Plan EIR concluded that growth considered under the General Plan would require new or improved park facilities to serve new development. As required by the Quimby Act and General Plan policies, park land dedication and/or in lieu fees are required to develop and maintain County parks. General Plan Policy PF-124 requires new subdivisions to provide sufficient acreage of parks to meet the long-range needs of the community. In commercial corridors and residential infill areas, the General Plan EIR specified that upgrades to existing park facilities may be required, and the construction of these facilities may result in environmental impacts. However, the General Plan EIR addressed those potential environmental impacts throughout the topical analyses contained in the General Plan EIR. No pertinent mitigation was required to reduce environmental impacts and the General Plan EIR concluded that impacts to parks and recreation facilities is less than significant.

PROPOSED PROJECT IMPACT EVALUATION

The proposed Project would result in the potential for 4,081 new residential units located within the following 11 recreation and park districts within Sacramento County (see Table PSR-4, above, for number of candidate rezone sites/unit total within each affected district):

- ACPD
- CAPD
- COPD
- FOPD
- FECPD
- MOPD
- NHPD
- OPD
- RLEPD
- SouthgatePD
- Sunrise

All 11 recreation and park districts were notified of the proposed Project with the NOP.

Staff from the SouthgatePD attended the NOP public scoping meeting and inquired about the potential Project impacts to the district. Subsequently, PER staff met with SouthgatePD to determine district specific data needs for each of the candidate rezone sites located within SouthgatePD. PER received general comments from the district on each of the sites located within SouthgatePD and the park district submitted formal comments and applicable conditions of approval for subsequent projects developed pursuant to the Project. SouthgatePD identified conditions of approval applicable to future residential development on the candidate rezone sites within their jurisdiction, specifically pertaining to parkland dedication and/or payment of in-lieu fees pursuant to Quimby Act requirements and consent to be included in financing districts for the purposes of funding to pay for costs to repair, maintain, improve, and monitor SouthgatePD facilities in perpetuity. Additionally, conditions stipulating future review of development on certain candidate rezone sites that are in proximity to SouthgatePD-owned lands or facilities are noted. Staff have not received comments or conditions from any of the other affected park districts.

Future development associated with the Project would increase demand for parks and recreation facilities in the County. Existing parks may need to be updated to meet the additional demand resulting from the Project. As required by the Quimby Act and General Plan Policy PF-123, development associated with the Project would be required to pay park land dedication and/or in lieu fees to develop and maintain parks. The exact park land dedication or in lieu fees paid for development under the Project is uncertain at this time and will be dependent upon each park district and the specifics of the future development proposed. For example, some park districts may give park credits associated with open space or recreational facilities often included in multifamily apartment projects because it is assumed that residents will utilize these nearby recreational resources rather than always travel further to offsite parks. However, as stated, each park district would utilize different factors or adopted rates or measures to determine the ultimate parkland requirements. To provide a general idea of how many acres of parkland dedication (or fees to offset those acres of parkland), Table PSR-7 provides a worst-case net increase in total parkland dedication requirements if every park district required each development to meet the 5 acres of parkland per 1,000 residents. Table PSR-7 also assumes the maximum net population increase as a result of the project.

Table PSR-7: Maximum Parkland Dedication with Project

Recreation and Park District	No. of Dwelling Units	Net Population Increase	Acres of Park
Arcade Creek	64	176.6	0.88
Carmichael	149	411.24	2.06
Cordova	278	767.28	3.84
Fair Oaks	51	140.76	0.70
Fulton/El Camino	20	55.2	0.28
Mission Oaks	22	60.72	0.30
North Highlands	320	883.2	4.42
Orangevale	163	449.88	2.25
Rio Linda Elverta	321	885.96	4.43

Recreation and Park District	No. of Dwelling Units	Net Population Increase	Acres of Park
Southgate	1,797	4,959.72	24.80
Sunrise	896	2,472.96	12.37
Total	4,081	11,263.5	56.03

a) Based on 2.76 persons per household (U.S. Census 2020)

b) 5 acres of parkland per 1,000 people

Table PSR-7 shows the total maximum parkland required of the project to maintain a 5 acres of parkland per 1,000 residents parkland ratio. As noted above, the exact calculation of required parkland dedication or in lieu fees will vary dependent on the future development amenities and size as well as existing park facilities. Compliance with the Quimby Act and General Plan would ensure that existing parks would be maintained to meet the demand from the project and any additional parkland needed would be dedicated.

Pursuant to CEQA Guidelines Section 15162, the proposed Project would not result in new substantial adverse physical impacts associated with the provision of new or physically altered park and recreation services and/or facilities than would occur with implementation of the General Plan. The Project's contribution to impacts from rezoning the candidate rezone sites would not be substantial and overall impacts remain less than significant.

MITIGATION MEASURES

Mitigation not required.

DISTINCT AREA PLANS

FAIR OAKS BOULEVARD CORRIDOR PLAN

ENVIRONMENTAL IMPACT REPORT DETERMINATION

The Fair Oaks Corridor Plan EIR indicated that the plan area is located within the ACPD and CAPDs and encompasses Carmichael Park that covers 38± acres of the Fair Oaks Boulevard Corridor area. The Park Districts reviewed the proposed Fair Oaks Boulevard Corridor Plan but did not provide comments or recommended conditions of approval. As with the General Plan EIR, the Fair Oaks Boulevard Corridor Plan EIR determined that park land dedication and/or in lieu fees as required by the Quimby Act and General Plan policies would ensure impacts related to additional parkland needs are properly mitigated. The Fair Oaks Corridor Plan EIR concluded that mitigation was not required and impacts to park and recreation facilities were determined to be less than significant.

IMPACT EVALUATION

The Fair Oaks Boulevard Corridor is located within the ACPD and CAPDs. The rezone of one candidate site (Site 67) with a potential maximum net increase of 12 residential units, or 33 additional residents (assuming 2.76 residents per dwelling unit [U.S 2020 Census]) within the Fair Oaks Boulevard Corridor area, would not significantly impact operations of either park district over what was already planned for the entire Fair Oaks Boulevard Corridor Plan.

Site 67 is located within the CAPD and at the time of future development associated with the Project, the developer would be required to pay park land dedication and/or in lieu fees to develop and maintain parks within the district. Per Table PSR-7, above, the 33 additional residents would have a maximum obligation of 0.17 acres of parkland dedication or in lieu fees.

Therefore, consistent with the conclusions of the Fair Oaks Boulevard Corridor Plan EIR, compliance with the Quimby Act and General Plan would ensure that the existing parks would be maintained to meet the demand from future development on Site 67 as allowed under the Project. Pursuant to CEQA Guidelines Section 15162, the rezone of Site 67 would not result new substantial adverse physical impacts associated with the provision of new or physically altered park and recreation services and/or facilities than would occur with implementation of the Fair Oaks Boulevard Corridor Plan. The Project's contribution to impacts from rezoning Site 67 would not be substantial and overall impacts remain less than significant.

MITIGATION MEASURES

Mitigation not required.

NORTH WATT AVENUE CORRIDOR PLAN

ENVIRONMENTAL IMPACT REPORT DETERMINATION

The North Watt Avenue Corridor Plan EIR indicated that the plan area is located within the NHPD. The NHPD reviewed the proposed North Watt Avenue Corridor Plan and provided comments on potential impacts from the land uses proposed in the North Watt Avenue Corridor Plan. NHPD determined that no additional new parks were required within the North Watt Avenue Corridor area. The bulk of the NHPD comments were related to creek corridors that could be planned for open space amenities such as bike and pedestrian trails. Finally, the NHPD noted that the district would accept fees in lieu of parkland dedication based on 5 acres of parkland per 1,000 population.

As with the General Plan EIR, the North Watt Avenue Corridor Plan EIR determined that park land dedication and/or in lieu fees as required by the Quimby Act and General Plan policies will ensure impacts related to additional parkland needs are properly mitigated. The North Watt Avenue Corridor Plan EIR concluded that mitigation was not required and impacts to park and recreation facilities were determined to be less than significant.

IMPACT EVALUATION

The North Watt Avenue Corridor continues to be provided with park and recreation services by the NHPD. The rezone of five candidate sites (Sites 68 through 72) with a potential maximum net increase of 230 residential units, or 635 additional residents (assuming 2.76 residents per dwelling unit [U.S 2020 Census]) within the North Watt Avenue Corridor area, would increase the population that will utilize park facilities. Per Table PSR-7, above, the net increase of 635 additional residents would require a maximum of 3.18 acres of parkland dedication or in lieu fees. As discussed in the North Watt Avenue Corridor Plan EIR, NHPD indicated previously that they would accept in lieu fees instead of parkland dedication. Ultimately, compliance with the Quimby Act and

General Plan would ensure that existing parks would be maintained to meet the demand from the Project and/or if any additional parkland dedication is required by NHPD.

At the time of future development associated with the Project on Sites 68 through 72, the developers would be required to dedicate parkland and/or pay in lieu fees to develop and maintain parks to the satisfaction of NHPD. Therefore, consistent with the conclusions of the North Watt Avenue Corridor Plan EIR, compliance with the Quimby Act and General Plan would ensure adequate park resources to meet the demand of the Project. Pursuant to CEQA Guidelines Section 15162, the rezone of Sites 68 through 72 would not result new substantial adverse physical impacts associated with the provision of new or physically altered park and recreation services and/or facilities than would occur with implementation of the North Watt Avenue Corridor Plan. The Project's contribution to impacts from rezoning Sites 68 through 72 would not be substantial and overall impacts remain less than significant.

MITIGATION MEASURES

Mitigation not required.

OLD FLORIN TOWN SPA

ENVIRONMENTAL IMPACT REPORT DETERMINATION

The Old Florin Town SPA EIR indicated that the plan area is located within the SouthgatePD. SouthgatePD reviewed the proposed Old Florin Town SPA and provided extensive comments, requests, and recommendations on the proposed Old Florin Town SPA. Comments included requests and recommendations regarding required park services, the Florin Creek Open Space and Trail, the Alta-Florin Road "Parkway" Proposal, SPA streetscapes, SPA development standards and design guidelines, and generalized comments based on air quality, noise, and traffic and circulation.

SouthgatePD determined that additional parkland would be required with the population increases assumed within the Old Florin Town SPA. An estimate of about 12 acres of additional parkland would be required based on SouthgatePD's standard 5 acres of parkland per 1,000 population. As with the General Plan EIR, the Old Florin Town SPA EIR determined that park land dedication and/or in lieu fees as required by the Quimby Act and General Plan policies would ensure impacts related to additional parkland needs are properly mitigated.

The Old Florin Town SPA EIR concluded that mitigation was not required and impacts to park and recreation facilities were determined to be less than significant.

IMPACT EVALUATION

The Old Florin Town SPA continues to be provided with park and recreation services by SouthgatePD. The rezone of seven candidate sites (Sites 73 through 79) with a potential maximum net increase of 274 residential units, or 756 additional residents (assuming 2.76 residents per dwelling unit [U.S 2020 Census]) within the Old Florin Town SPA area, would increase the population that will utilize park facilities. Per Table PSR-7, above, the net increase of 756 additional residents would require a maximum of 3.78 acres of

parkland dedication or in lieu fees. Ultimately, compliance with the Quimby Act and General Plan would ensure that existing parks would be maintained to meet the demand from the project and/or if any additional parkland dedication is required by SouthgatePD.

SouthgatePD has reviewed the proposed rezone of candidate Sites 73 through 79 as well as all other candidate rezone sites within their district. A summary of SouthgatePD's comments and recommendations is discussed above. Additionally, conditions stipulating future review of development on certain candidate rezone sites that are in proximity to SouthgatePD-owned lands or facilities are also noted.

At the time of future development associated with the Project on Sites 73 through 79, the developers would be required to dedicate parkland and/or pay in lieu fees to develop and maintain parks to the satisfaction of SouthgatePD. Therefore, consistent with the conclusions of the Old Florin Town SPA EIR, compliance with the Quimby Act and General Plan would ensure adequate park resources to meet the demand of the Project. Pursuant to CEQA Guidelines Section 15162, the rezone of Sites 73 through 79 would not result new substantial adverse physical impacts associated with the provision of new or physically altered park and recreation services and/or facilities than would occur with implementation of the Old Florin Town SPA. The Project's contribution to impacts from rezoning Sites 73 through 79 would not be substantial and overall impacts remain less than significant.

MITIGATION MEASURES

Mitigation not required.

CUMULATIVE PUBLIC SERVICES AND RECREATION

This chapter describes the Existing Environmental Setting, Regulatory Context, and Impacts and Mitigation Measures for public services and recreation at the General Plan level and for individual corridor plans. Since the proposed Project is a subsequent to the General Plan EIR, some of the impacts to public services and recreation are cumulative by nature. Where appropriate the cumulative setting and impact analysis is updated below for cumulative impacts to fire and emergency services, law enforcement services, school services, library services, and parks and recreation services.

CUMULATIVE SETTING

CUMULATIVE SETTING FOR FIRE PROTECTION AND EMERGENCY SERVICES & FACILITIES

GENERAL PLAN

The cumulative setting for fire protection and emergency services are the service areas of SMFD and PFFD. The applicable cumulative setting is included in the Existing Environmental Setting section for the General Plan above.

FAIR OAKS BOULEVARD CORRIDOR PLAN, NORTH WATT AVENUE CORRIDOR PLAN, AND OLD FLORIN TOWN SPA

The cumulative setting for fire protection and emergency services for all three plan areas is the service area of SMFD as described for the entire General Plan area. The

applicable setting is included in the Existing Environmental Setting section for the General Plan above.

CUMULATIVE SETTING FOR POLICE PROTECTION SERVICES & FACILITIES

GENERAL PLAN

The cumulative setting for police protection services is the service area of the Sheriff's Department. The service area and applicable setting for the Sheriff's Department is included in the Existing Environmental Setting section for above.

FAIR OAKS BOULEVARD CORRIDOR PLAN, NORTH WATT AVENUE CORRIDOR PLAN, AND OLD FLORIN TOWN SPA

The cumulative setting for police protection services for all three plan areas is the service area of the Sheriff's Department as described for the entire General Plan area. The applicable setting is included in the Existing Environmental Setting section for the General Plan above.

CUMULATIVE SETTING FOR SCHOOLS SERVICES AND FACILITIES

GENERAL PLAN

The cumulative setting for school services for the General Plan is the cumulative service area for all the school districts that service the General Plan area. The service areas and applicable setting for each of the school districts is included in the Existing Environmental Setting section above.

FAIR OAKS BOULEVARD CORRIDOR PLAN, NORTH WATT AVENUE CORRIDOR PLAN, AND OLD FLORIN TOWN SPA

The cumulative setting for school services is the school district boundaries that each of the three plans is located within. Fair Oaks Boulevard Corridor Plan is within the SJUSD; the North Watt Avenue Corridor Plan is located within the SJUSD and the TRUSD; and the Old Florin town SPA is located within the EGUSD. The applicable cumulative setting is included in the Existing Environmental Setting section for the plan areas above.

CUMULATIVE SETTING FOR LIBRARY SERVICES AND FACILITIES

GENERAL PLAN

The cumulative setting for library services for the General Plan is the Sacramento Public Library system. The comprehensive Sacramento Public Library system is described in the Existing Environmental Setting section above.

FAIR OAKS BOULEVARD CORRIDOR PLAN, NORTH WATT AVENUE CORRIDOR PLAN, AND OLD FLORIN TOWN SPA

The cumulative setting for library services for each of the three plan areas is the Sacramento Public Library system. All three plan areas are located within library service areas that have library branch facilities; however, while most people choose to utilize their local library branch, residents of the plan areas may choose to utilize any of the public

libraries within the comprehensive Sacramento Public Library system. The applicable cumulative setting for library services is included in the Existing Environmental Setting section for the General Plan above.

CUMULATIVE SETTING FOR PARK AND RECREATION SERVICES AND FACILITIES

GENERAL PLAN

The cumulative setting for park and recreation services for the General Plan is the local park districts described in the Existing Environmental Setting section above.

FAIR OAKS BOULEVARD CORRIDOR PLAN, NORTH WATT AVENUE CORRIDOR PLAN, AND OLD FLORIN TOWN SPA

The cumulative setting for park and recreation services for each of the three plan areas is the boundaries of the park district servicing the plan area. The applicable cumulative setting for park and recreation services is included in the Existing Environmental Setting section for each of the plan areas above.

CUMULATIVE IMPACTS EVALUATION

IMPACT PSR -6: THE PROJECT, IN COMBINATION WITH PAST, PRESENT, AND REASONABLY FORESEEABLE PROJECTS, COULD RESULT IN A SIGNIFICANT CUMULATIVE IMPACT WITH RESPECT TO FIRE PROTECTION AND EMERGENCY SERVICES

GENERAL PLAN

As discussed above in Impact PSR-1, impacts to fire protection and emergency services from the proposed Project are consistent with what was disclosed in the General Plan EIR. All future development projects (cumulative development) located in SMFD or PFFD service areas would be subject to payment of applicable fire impact fees. These fees are used to fund anticipated capital improvement needs identified by the respective fire departments. In addition, development within the candidate rezone sites, as well as other future development throughout Sacramento County within SMFD or PFFD, would be required to comply with all applicable regulations imposed by SMFD, PFFD, and the California Fire Code. Environmental impacts related to construction of new facilities was already taken into account with the General Plan EIR.

Therefore, with payment of applicable fire impact fees and compliance with fire regulations, the future development on candidate rezone sites, in combination with future development occurring under buildout of the General Plan, would not be anticipated to result in new or substantially worsened impacts to fire protection and emergency service providers over what was already disclosed in the General Plan EIR and herein. Consistent with impacts discussed above, cumulative impacts related to fire protection services are less than significant.

FAIR OAKS BOULEVARD CORRIDOR PLAN, NORTH WATT AVENUE CORRIDOR PLAN, AND OLD FLORIN TOWN SPA

Cumulative fire protection and emergency services impacts within these three distinct area plans are identical to the cumulative impacts discussed above for the General Plan. All three distinct area plans are located within SMFD's service area; therefore cumulative buildout of the plan areas would not impact PFFD.

Therefore, with payment of SMFD's fire impact fees and compliance with fire regulations, the future development on candidate rezone sites within SMFD service area, in combination with future development occurring under buildout of the General Plan, would not be anticipated to result in new or substantially worsened impacts to fire protection and emergency services provided by SMFD. Consistent with impacts discussed above, cumulative impacts related to fire protection services would be less than significant.

IMPACT PSR-7: THE PROJECT, IN COMBINATION WITH PAST, PRESENT, AND REASONABLY FORESEEABLE PROJECTS, COULD RESULT IN A SIGNIFICANT CUMULATIVE IMPACT WITH RESPECT TO LAW ENFORCEMENT SERVICES AND FACILITIES

GENERAL PLAN

As discussed above in Impact PSR-2, impacts to law enforcement services from the proposed project are consistent with what was disclosed in the General Plan EIR. Cumulative development of candidate rezone sites would add approximately 11,264 residents within the Sheriff's Department service area. The increased population would require approximately 11.3 additional law enforcement staff to meet the 1 officer per 1,000 person staffing goal as identified in the General Plan EIR. In comparison to the total number of units added under the General Plan and associated increase in assumed population (see Table PD-4 in the Project Description chapter for General Plan assumptions), the additional law enforcement staff required due to the Project is not cumulatively substantial.

Additionally, the future development on candidate rezone sites, in combination with future development occurring under buildout of the General Plan, is required to comply with public safety policies and measures in the General Plan, Zoning Code, Uniform Building Code, and Land Development Ordinances. Compliance would ensure that law enforcement could adequately serve new growth anticipated in the cumulative scenario. Therefore, consistent with impacts discussed above, cumulative impacts related to law enforcement services are less than significant.

FAIR OAKS BOULEVARD CORRIDOR PLAN, NORTH WATT AVENUE CORRIDOR PLAN, AND OLD FLORIN TOWN SPA

These distinct area plans are all located within the boundaries of the General Plan and are provided law enforcement services by the Sacramento County Sheriff's Department; therefore, their cumulative law enforcement services impacts are taken into account in the cumulative discussion for the General Plan above. Consistent with impacts discussed above, cumulative impacts within these three distinct area plans related to law enforcement services are less than significant.

IMPACT PSR-8: THE PROJECT, IN COMBINATION WITH PAST, PRESENT, AND REASONABLY FORESEEABLE PROJECTS, COULD RESULT IN A SIGNIFICANT CUMULATIVE IMPACT WITH RESPECT TO SCHOOLS

GENERAL PLAN

As discussed above in Impact PSR-3, cumulative buildout of the General Plan could result in overcrowding at schools in the area. However, each individual development would be required to pay SB 50 school impact fees, which would contribute to the facilitation of school expansions in order to serve the needs of the area. Furthermore, according to SB 50, payment of the necessary school impact fees for the projects would be considered full and satisfactory CEQA mitigation. Proposition 1A/SB 50 prohibits local agencies from using the inadequacy of school facilities as a basis for denying or conditioning approvals of any "[…] legislative or adjudicative act […] involving […] the planning, use, or development of real property" (Government Code 65996(b)). Therefore, the future development on candidate rezone sites, in combination with future development occurring under buildout of the General Plan, would result in a less than significant cumulative impact related to the need for new, or improvements to existing, school facilities.

FAIR OAKS BOULEVARD CORRIDOR PLAN, NORTH WATT AVENUE CORRIDOR PLAN, AND OLD FLORIN TOWN SPA

These distinct area plans are all located within the school districts that are discussed within the context of the General Plan and associated impact discussions herein. Like the discussion above, individual development of candidate rezone sites within the distinct area plans, together with the cumulative development of the Project and the General Plan, will be required to pay SB 50 school impact fees. Consistent with impacts discussed above, cumulative impacts within these three distinct area plans related to school services are less than significant.

IMPACT PSR -9: THE PROJECT, IN COMBINATION WITH PAST, PRESENT, AND REASONABLY FORESEEABLE PROJECTS, COULD RESULT IN A SIGNIFICANT CUMULATIVE IMPACT WITH RESPECT TO LIBRARIES

GENERAL PLAN

As discussed above in Impact PSR-4, cumulative buildout of the General Plan would require additional libraries and facilities. The proposed Project could result in the addition of 4,081 new dwelling units within the Sacramento Public Library system. Cumulative growth in the Public Library System includes the Sacramento County General Plan growth and growth in respective cities. Library facilities, needed upgrades, and funding mechanisms are detailed in the Library Master Plan and the County Library Plan Update. Candidate rezone sites are located within 11 library branch service areas and singular impacts to the affected branches were considered less than significant. The addition of the new dwelling units proposed under the Project is not a substantial cumulative change in consideration of the greater Sacramento Public Library system. Development projects, consistent with the Project and those in the cumulative library system, will be required to pay applicable development impact fees for library facilities.

Therefore, the future development on candidate rezone sites, in combination with future development occurring under buildout of the General Plan and in the library system, would result in a less than significant cumulative impact related to the need for new, or improvements to existing, library facilities.

FAIR OAKS BOULEVARD CORRIDOR PLAN, NORTH WATT AVENUE CORRIDOR PLAN, AND OLD FLORIN TOWN SPA

Singular impacts to library services for each of the distinct area plans are included in Impact PSR-4. Singular impacts focus the library branch and facility directly impacted by the respective distinct area plan. However, as noted above, future residents of the area plans may utilize any library facility within the greater Sacramento Public Library system. Therefore, the cumulative impact discussed above for the General Plan applies to the distinct area plans. As noted above, future development on candidate rezone sites, in combination with future development occurring under buildout of the General Plan and in the library system, would result in a less than significant cumulative impact related to the need for new, or improvements to existing, library facilities.

IMPACT PSR-10: THE PROJECT, IN COMBINATION WITH PAST, PRESENT, AND REASONABLY FORESEEABLE PROJECTS, COULD RESULT IN A SIGNIFICANT CUMULATIVE IMPACT WITH RESPECT TO PARKS AND RECREATION SERVICES AND FACILITIES

GENERAL PLAN

As discussed above in Impact PSR-5, cumulative buildout of the General Plan would require additional park and recreation services and facilities. As required by the Quimby Act and General Plan policies, new development associated with the Project, and all development within the County, would be required to pay park land dedication and/or in lieu fees to develop and maintain parks. Therefore, consistent with impacts discussed above, cumulative impacts related to park and recreation services are less than significant.

FAIR OAKS BOULEVARD CORRIDOR PLAN, NORTH WATT AVENUE CORRIDOR PLAN, AND OLD FLORIN TOWN SPA

Singular impacts to affected park and recreation districts for each of the distinct area plans are included in Impact PSR-5. Cumulative impacts are the impacts of the Project, both within and outside of the distinct area plan, and cumulative growth considered under the General Plan for each park district. This impact is a subset of the cumulative impact to park and recreation facilities discussed above; however, the impact conclusion is the same. As required by the Quimby Act and General Plan policies, new development associated with the Project, and all development within the respective park districts, would be required to pay park land dedication and/or in lieu fees to develop and maintain parks. Therefore, consistent with impacts discussed above, cumulative impacts related to park and recreation services are less than significant.

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10 TRANSPORTATION

INTRODUCTION

This chapter describes the applicable federal, state, and local transportation regulations and policies; discusses the existing roadway network and transportation facilities in the vicinity of the Project area; and analyzes the potential transportation impacts associated with implementation of the Project. Mitigation measures that would reduce impacts, where applicable, are also discussed. The vehicle miles traveled (VMT) analysis within this chapter is based on the analysis and findings of the *Sacramento County Residential Rezones VMT Analysis Memo* (VMT Memo) prepared for the Project (DKS Associates 2024), which evaluates the effects of the Project based on the County of Sacramento (County) CEQA significance thresholds contained within the County's General Plan and Transportation Analysis Guidelines (TAG). The VMT Memo is included as Appendix TRAN-1 of this SEIR and incorporated herein.

Pursuant to Senate Bill (SB) 743, Public Resources Code (PRC) Section 21099, and California Code of Regulations (CCR) Section 15064.3(a), generally, VMT is the most appropriate measure of transportation impacts and a project's effect on automobile delay shall no longer constitute a significant impact under CEQA. Therefore, the transportation analysis herein evaluates impacts using VMT and does not include level of service (LOS) analysis.

No scoping comments were received regarding transportation in response to the notice of preparations (NOPs). The NOPs and comments received in response to the NOP are provided in Appendix INTRO-1.

EXISTING TRANSPORTATION ENVIRONMENTAL SETTING

State CEQA Guidelines Section 15162 indicates that should a lead agency determine that substantial changes to the project or its circumstances result in a new or more significant impact compared to what was addressed in a project's previous EIR, or new information of substantial importance results in a new or more significant impact, a subsequent EIR (SEIR) should be prepared. Therefore, this document serves as a SEIR to Sacramento County's 2030 General Plan EIR (General Plan EIR), as well as to EIRs prepared for various distinct area plans within which a portion of the candidate rezone sites are located. Applicable distinct area plan EIRs include the Fair Oaks Boulevard Corridor Plan EIR (Fair Oaks Boulevard EIR), the North Watt Avenue Corridor Plan EIR (North Watt Avenue EIR), and the Old Florin Town Special Planning Area (SPA) EIR (Old Florin Town SPA EIR). The regional housing needs allocation (RHNA) shortfall of 2,884 lower income category units and needed buffer could not have been known at the time of the General Plan EIR certification, and the RHNA is in excess of the number of dwelling units analyzed in the General Plan EIR. The number of additional units required in the distinct area plans was not known at the time the applicable environmental documents

were certified. As required by Section 15162, this SEIR evaluates the potential for the proposed Project or changes in the circumstances to result in new or substantially more severe significant environmental impact than previously analyzed under the General Plan EIR and distinct area plan EIRs. Existing transportation settings for the unincorporated County, Fair Oaks Boulevard Corridor Plan area, North Watt Avenue Corridor Plan area, and Old Florin Town SPA are summarized below.

General Plan Existing Transportation Setting

Roadway System

County roadways are classified as freeways, thoroughfares, arterials, collectors, and local streets. A description of each as described in the County General Plan is provided below:

- **Freeways** are multilane divided highways with a minimum of two lanes for the exclusive use of traffic in each direction and full control of access without traffic interruption. Freeways provide for high-speed through-traffic movement on continuous routes. Freeways connect points within the County and link the County to other parts of the state. The following major freeways traverse the unincorporated county: Interstate 5 (I-5), Interstate 80 (I-80), State Route (SR) 99, SR-16, and United States (U.S.) 50.
- **Thoroughfares** provide for mobility within the County, carrying through traffic on continuous routes and providing transportation links between major residential, employment, commercial, and retail areas.
- **Arterials** provide for a link between thoroughfares with their limited access and through movement capacity and collectors which have greater access and serve local streets. Arterials can also provide for mobility and direct access within commercial and retail corridors through two-way left-turn lanes.
- **Collectors** provide for mobility within communities and connect local roads to thoroughfares and arterials.
- **Local streets** provide direct access to abutting property and connect with other local roads and collectors. Local streets are typically developed as two-lane undivided roadways (County of Sacramento 2022a: 7-8)

Transit System

Sacramento Regional Transit (SacRT) operates over 82 bus routes (fixed-route, microtransit and dial-a-ride), 43 miles of light rail serving 53 light rail stations, and Americans with Disability Act (ADA) paratransit services within a 440-square-mile service area throughout Sacramento County. Buses generally operate daily between the hours of 5:00 a.m. and 11:00 p.m. with headways of approximately 12 to 60 minutes depending on the route. Prior to the pandemic, SacRT annual ridership was approximately 23 million passengers (SacRT 2023).

Existing Bicycle and Pedestrian System

The bicycle network serving the County consists of the following bicycle facility classifications (County of Sacramento 2022b: 50):

- **Shared-Use Paths (Class I):** Dedicated paths for walking and bicycling completely separate from the roadway.
- **Bicycle Lanes (Class II):** Striped lanes for bicyclists. Bicycle lanes can also include striped "buffer" areas between the bicycle and travel lane or between the bike lane and parked cars (sometimes both).
- **Buffered Bicycle Lane (Class IIB):** Bicycle lanes that include a striped "buffer" area either between the bicycle lane and the travel lane or between the bicycle lane and parked cars (sometimes in both locations).
- **Bicycle Routes (Class III)** Signed routes for bicyclists on low-speed, low-volume streets where roadway space is shared with motorists.
- **Bicycle Boulevard (Class IIIB):** Routes on low-speed, low-volume streets where roadway space is shared with people driving, enhanced with traffic calming features or other treatments to prioritize the comfort of people biking. Treatments will be specific to each corridor and determined based on local community input and planning and engineering judgment.
- **Separated Bikeway (Class IV):** On-street bicycle facilities with a physical barrier between the bicycle lane and motor vehicle lane(s). Barriers can include bollards, curbs, elevation, or parking. These facilities may be bidirectional or unidirectional.

As of 2022, the unincorporated County's bicycle system was comprised of approximately 304 miles of bicycle facilities including approximately 64 miles of shared-use paths, 224 miles of bicycle lanes, 2 miles of buffered bicycle lanes, and 14 miles of bicycle routes. The County's Active Transportation Plan recommends 108 miles of upgraded bicycle facilities and 1,110 miles of new dedicated bicycle corridors for a total of 1,522 miles of recommendations across unincorporated Sacramento County (County of Sacramento 2022b: 104).

Fair Oaks Boulevard Corridor Plan Area Existing Transportation Setting

Roadway System

The Fair Oaks Boulevard Corridor Plan area is located along two major roadways in Sacramento County. Fair Oaks Boulevard and Manzanita Avenue bisect the Fair Oaks Boulevard Corridor Plan area and provide access to Site 67 from the north, east, and south. A description of Fair Oaks Boulevard and Manzanita Avenue within the Fair Oaks Boulevard Corridor area is provided below:

FAIR OAKS BOULEVARD:

- is four-lanes wide with a center two-way left turn lane and an Arterial designation in the County General Plan south of Marconi Avenue,
- is four-lanes wide with a center two-way left turn lane and a Thoroughfare designation in the County General Plan between Marconi Avenue and Engle Road,
- is a divided six-lane roadway with a Thoroughfare designation in the County General Plan between Engle Road and Manzanita Avenue, and
- is four-lanes wide with a center two-way left turn lane and an Arterial designation in the County General Plan between Manzanita Avenue and Marshall Avenue.

MANZANITA AVENUE:

- is four-lanes wide with a center two-way left turn lane and an Arterial designation in the County General Plan between Verde Cruz Way and Lincoln Avenue,
- is a divided four-lane roadway with an Arterial designation in the County General Plan between Lincoln Avenue and Cypress Avenue, and
- is a divided five-lane roadway (two northbound lanes and three southbound lanes) with a Thoroughfare designation in the County General Plan between Cypress Avenue and Fair Oaks Boulevard.

There are several smaller roadways that extend into the Fair Oaks Boulevard Corridor Plan area from the adjacent communities that surround Site 67. Listed below are the general location and access routes to the various districts that make up the Fair Oaks Boulevard Corridor Plan area.

The Manzanita District can be seen as divided into four quadrants with Manzanita Avenue and Winding Way crossing at its middle and providing the primary access routes into the district. In addition, Hackberry Lane and Locust Avenue provide access to the southwestern portion of this district. The East Fair Oaks Boulevard District is generally divided into three sections with Fair Oaks Boulevard and Manzanita Avenue dividing up the district and providing the primary access. Other roadways that provide access to this district are Cypress Avenue to the northwest, Engle Road to the southwest and California and Marshall Avenues to the east. Site 67 is located in the East Fair Oaks Boulevard District. The Main Street District straddles Fair Oaks Boulevard that serves as the primary access roadway to this district. Other roadways providing access to this portion of the Fair Oaks Boulevard Corridor area include Grant Avenue to the northwest, Landis and Stanley Avenues as well as Palm Drive to the east, and Marconi, Robertson and North Avenues to the west. The South Gateway District also straddles Fair Oaks Boulevard which is the major access route to this district. Kenneth and El Camino Avenues to the west and as well as Oak, Van Alstine, and Kenneth Avenues to the east also provide access to this district.

TRANSIT SYSTEM

The following five SacRT bus routes serve the Fair Oaks Boulevard Corridor Plan area: route 22, 23, 25, 10 and 9. Additionally, bus routes 82 and 104 serve the areas adjacent to the Fair Oaks Boulevard Corridor Plan area.

Existing Bicycle and Pedestrian System

Existing bicycle facilities and sidewalks are present throughout the Fair Oaks Boulevard Corridor Plan area, although some of the bike lanes and sidewalks are discontinuous in nature. Currently, Class II bike lanes located within the Corridor Plan area are located along Manzanita Avenue, Cypress Avenue, Stanley Avenue, Marconi Avenue, Van Alstine Avenue and California Avenue. There are no bicycle facilities present along Fair Oaks Boulevard adjacent to Site 67; however, the nearest Class II bike lanes west of Site 67 are on California Avenue and Manzanita Avenue.

Other Class II bike lanes that are within ½ mile of the distinct planning area and have bike lane/route connectivity to Site 67 are on Marshall Avenue, Fair Oaks Boulevard, Jan Drive and Crestview Drive. These bike lanes connect to a number of other bike lanes that run throughout the community. In addition to the Class II bike lanes the distinct planning area has connectivity to Garfield Avenue and Sheffield Drive which contain Class III bike routes. The Class III bike route on Sheffield Drive, in turn, has connectivity to the American River Bike Trail; a Class I bike path. It should be noted that, in addition to the aforementioned bike facilities, a number of other roadways in the distinct planning area, including large sections of Fair Oaks Boulevard, include Class II bike lanes.

North Watt Avenue Corridor Plan Area Existing Transportation Setting

Roadway System

The North Watt Avenue Corridor area is located along Watt Avenue. Watt Avenue connects future communities in Placer County (Placer Vineyards and Riolo Vineyards) with Sacramento County communities of Vineyards, Antelope, North Highlands, Arden Arcade, and Elk Grove. Watt Avenue also crosses three major east-west highways: I-80, Business I-80, and U.S. 50. In addition to Watt Avenue, smaller roadways extend into the North Watt Avenue Corridor area from the adjacent communities that surround the distinct planning area. The general location and access routes to the various districts that make up the North Watt Avenue Corridor area are included below:

Elkhorn District: The Elkhorn District is bordered by Antelope Road to the north and I street to the south. Elkhorn Boulevard bisects the Elkhorn District and its intersection with Watt Avenue. Elkhorn Boulevard and Antelope Road are major east-west roadways within the North Watt Avenue Corridor. Several small residential streets terminate onto Watt Avenue and provide access to the Corridor from established neighborhoods located east of Watt Avenue. Sites 68 through 71 are located within the Elkhorn District.

Town Center District: The primary access point for the Town Center District is from Watt Avenue. The Town Center District is bordered by Peacekeeper Way to the south and I street to the north. Other roadways that provide access to Town Center District are Freedom Park Drive, Palm Drive, and James Street. The Town Center District can be accessed by adjacent neighborhoods to the east via small residential streets. Site 72 is located within the Town Center District.

Triangle Gateway District: The Triangle Gateway District straddles Watt Avenue that serves as the primary access roadway to the area. Roseville Road also provides access to the Triangle Gateway District. Other roadways within the Triangle Gateway District are Myrtle Avenue, Winona Way, Orange Grove Avenue, and various small courts.

Transit System

The following two SacRT bus routes serve the North Watt Avenue Corridor area: route 19 and 26. Bus routes 84 and 93 serve the areas south and east of the North Watt Avenue Corridor area.

Existing Bicycle and Pedestrian System

Existing bicycle facilities and sidewalks are found throughout the North Watt Avenue Corridor area, although some bike lanes and sidewalks are discontinuous. Class II bike lanes are located along Antelope Road, Watt Avenue (discontinuous), and Elkhorn Boulevard. Other Class II bike lanes that are within ½ mile of the North Watt Avenue Corridor area and have bike lane/route connectivity to Sites 68 through 72 are on Roseville Road, Airbase Road, and Larchmont Drive. Additionally, the North Watt Avenue Corridor connects to Don Julio Boulevard and Hillsdale Boulevard which contain Class III bike routes. There are no Class I bike paths in the immediate vicinity of the North Watt Avenue Corridor; however there is a Class I bike path at the I-80 pedestrian and bicycle over-crossing between Madison Avenue and Elkhorn Boulevard.

Old Florin Town SPA Existing Transportation Setting

Roadway System

The main roadways that provide access to the Old Florin Town SPA are Power Inn Road, Florin-Perkins Road/French Road, and Florin Road. Power Inn Road generally makes up the western boundary of the Old Florin Town SPA while Florin-Perkins Road/French Road makes up the eastern boundary of the Old Florin Town SPA. Florin Road is the main bisecting roadway, running east-west, which provides all internal access to the Old Florin Town SPA. Vehicular access to and from Florin Road to other areas within the SPA are from a number of small residential streets, such as: Edith Street, Simon Street, Tokay Avenue, Reese Road, McCurdy Lane, and Pritchard Road.

Florin Road is a four-lane roadway. In general, street improvements such as curb, gutter, and sidewalks are not present along the Old Florin Town SPA portion of Florin Road.

Transit System

Florin Road within the Old Florin Town SPA does not currently accommodate any fixed route transit services. SacRT bus routes 61 and 68 serve the areas west of the Old Florin Town SPA.

Existing Bicycle and Pedestrian System

There are no existing bicycle lanes within the Old Florin Town SPA along Florin Road. Pedestrian facilities are limited along Florin Road.

EXISTING TRANSPORTATION REGULATORY SETTING

FEDERAL

14 CFR PART 77 – SAFE, EFFICIENT USE, AND PRESERVATION OF THE NAVIGABLE AIRSPACE

The Federal Aviation Administration (FAA) provides regulations controlling land use in airport vicinities. Code of Federal Regulations, Title 14, Part 77 establishes the requirements to provide notice to the FAA of certain proposed construction of structures or alteration of existing structures. Part 77 also establishes standards used to determine obstructions to air navigation and navigational and communication facilities, the process for aeronautical studies to determine potential effects on navigable space, and the process to petition the FAA for discretionary review of determinations related to construction or alteration. These regulations require that any proposed new construction or expansion of existing structures that would penetrate any of the FAA Part 77 based "imaginary" horizontal and sloping navigational surfaces for airports would be deemed incompatible unless specifically determined otherwise by the FAA. Projects that plan construction or alterations that may affect navigable airspace are required to file notice with the FAA.

STATE

CALIFORNIA DEPARTMENT OF TRANSPORTATION

The California Department of Transportation (Caltrans) is the state agency responsible for the design, construction, maintenance, and operation of the California State Highway System, as well as the segments of the Interstate Highway System that lie within California. Caltrans requires a transportation permit for any transport of heavy construction equipment or materials that necessitate the use of oversized vehicles on state highways.

SENATE BILL 743

SB 743, passed in 2013, required the Governor's Office of Planning and Research (OPR) to develop new State CEQA guidelines that address traffic metrics under CEQA. As stated in the legislation, upon adoption of the new guidelines, "automobile delay, as described solely by level of service or similar measures of vehicular capacity or traffic congestion shall not be considered a significant impact on the environment pursuant to this division, except in locations specifically identified in the guidelines, if any."

OPR published its proposal for the comprehensive updates to the State CEQA Guidelines in November 2017 which included proposed updates related to analyzing transportation impacts pursuant to Senate Bill 743. These updates indicated that VMT would be the primary metric used to identify transportation impacts. In December of 2018, OPR published the most recent version of the Technical Advisory on Evaluating Transportation Impacts in CEQA (OPR 2018) which provides guidance for VMT analysis.

In December of 2018, OPR and the State Natural Resources Agency submitted the updated CEQA Guidelines to the Office of Administrative Law for final approval to implement SB 743. The Office of Administrative Law subsequently approved the updated State CEQA Guidelines and, as of July 1, 2020, implementation of CCR Section 15064.3 of the updated CEQA Guidelines applies statewide.

California Fire Code

The 2022 California Fire Code, which is codified as Part 9 of the Title 24 of the California Code of Regulations (CCR), incorporates by adoption the 2021 International Fire Code and contains regulations related to construction, maintenance, access, and use of buildings. Topics addressed in the California Fire Code include design standards for fire apparatus access (e.g., turning radii, minimum widths), standards for emergency access during construction, provisions intended to protect and assist fire responders, and several other general and specialized fire-safety requirements for new and existing buildings and the surrounding premises. The California Fire Code contains specialized technical regulations related to fire and life safety. The California Building Standards Code, including the California Fire Code, is revised and published every 3 years by the California Building Standards Commission.

Regional

Sacramento Area Council of Governments

The Sacramento Area Council of Governments (SACOG) is an association that includes the Counties of El Dorado, Placer, Sacramento, Sutter, Yolo, and Yuba. As a metropolitan transportation organization, SACOG is required to prepare a long-range transportation plan (the metropolitan transportation plan) for all modes of transportation, including public transit, automobile, bicycle, and pedestrians, every four years for the six-county area. In addition to preparing the region's long-range transportation plan, SACOG assists in planning for transit, bicycle networks, clean air, and airport land uses.

Metropolitan Transportation Plan/Sustainable Communities Strategy

SACOG is responsible for preparing and updating the Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS) and the corresponding Metropolitan Transportation Improvement Program (MTIP) for the six-county Sacramento region. The purpose of the MTP/SCS is to establish regional access and identify mobility goals; identify present and future transportation needs, deficiencies, and constraints within the transportation system; analyze potential solutions; estimate available funding; and propose investments. On November 18, 2019, the SACOG Board of Directors adopted the 2020 update to the MTP/SCS. The next update to the MTP/SCS is scheduled for 2025.

The MTIP is a short-term listing of surface transportation projects that receive federal funds, are subject to a federally required action, or are regionally significant. SACOG adopted the 2023-2026 MTIP in September 2022. The 2023-2026 MTIP covers four years of programming: federal fiscal years 2023-2026. The Project listing in the MTIP provides

a detailed description for each individual project in the 2023-2026 MTIP, including those in Sacramento County.

Regional Bicycle, Pedestrian, and Trails Master Plan

SACOG approved the *Regional Bicycle, Pedestrian, and Trails Master Plan* in April 2015. The plan envisions a complete transportation system that supports healthy living and active communities where bicycling and walking are viable and popular travel choices in a comprehensive, safe, and convenient network (SACOG 2015). *The Regional Bicycle, Pedestrian, and Trails Master Plan* is intended to guide the long-term decisions for the Bicycle and Pedestrian Funding Program. The projects included in the plan are regionally significant projects that require at least partial regional funding. This plan is not fiscally constrained, so it contains at least 20 years' worth of projects.

Sacramento Region Trail Network Action Plan

The *Sacramento Region Trail Network Action Plan* was adopted by SACOG in July 2022 (SACOG 2022). It establishes a vision for walking, biking, and rolling throughout the region by planning for a network of trails that reaches key destinations and closes existing gaps. The *Sacramento Region Trail Network Action Plan* establishes the baseline environment, identifies a proposed network of facilities, and sets forth goals for the trail network.

Sacramento Regional Transit District Strategic Plan

SacRT's Strategic Plan outlines the highest priority projects that the agency will work on over the 2021-2025 fiscal years. The plan includes SacRT's mission, vision, and values; annual goals; specific work plan tactics; and introduces a comprehensive performance scorecard system that will be used to monitor organizational and division performance on a quarterly basis (Sacramento Regional Transit District 2020).

Local

Sacramento County General Plan

The Circulation Element of the Sacramento County General Plan provides the framework for County decisions concerning the countywide transportation system, which includes various transportation modes and related facilities (County of Sacramento 2022a). The Circulation Element identifies measures to establish and support an integrated and balanced multi-modal transportation system. The following Circulation Element policies are applicable to the Project:

CI-1. Provide complete streets to provide safe and efficient access to a diversity of travel modes for all urban, suburban and rural land uses within Sacramento County except within certain established neighborhoods where particular amenities (such as sidewalks) are not desired. Within rural areas of the County, a complete street may be accommodated through roadway shoulders of sufficient width or other means to accommodate all modes of travel.

CI-2. Promote continued mobility for individuals whose access to automobile transportation is limited by age, illness, income, desire, or disability.

CI-3. Travel modes shall be interconnected to form an integrated, coordinated and balanced multi-modal transportation system, planned and developed consistent with the land uses to be served.

CI-4. Provide multiple transportation choices to link housing, recreational, employment, commercial, educational, and social services.

CI-5. Land use and transportation and development should be cohesive, mutually supportive, and complement the objective of reducing per capita vehicle miles travelled (VMT). The standards shown in Table CI-1 (presented as Table TRAN-1, below) shall be used as thresholds of significance for all projects subject to CEQA. Where the VMT level standards of Table CI-1 (presented as Table TRAN-1, below), are predicted to be exceeded, all feasible mitigation measures shall be included to reduce projected VMT levels.

Table TRAN-1: Significance Thresholds for CEQA Transportation Analysis for Development Projects

Project Type[1]	VMT Significance Criteria
Residential	Project VMT per capita exceeds 85 percent of the regional average VMT per capita
Office/Business Professional	Project VMT per employee exceeds 85 percent of the regional average VMT per employee
Industrial	Project VMT per employee exceeds the regional average VMT per employee
Regional Retail	Net increase in regional VMT
Regional Public Facilities/Services	Net increase in regional VMT
Redevelopment	Projects that result in a decrease to existing regional total VMT are presumed to have a less-than-significant VMT impact; otherwise, apply the relevant threshold based on the proposed land use (treating existing use as vacant)
Mixed Use	Apply the relevant threshold to each land use component individually
Phase	Apply the relevant threshold to each phase independently
Land Development with Roadway Component	For locally-serving roadways, the significance determination is based on the land use component. For regional roadways, apply thresholds of significance for transportation projects

[1] As defined in the Sacramento County TAG, Appendix A

CI-6. Provide support for community-based corridor planning processes on existing roadways with excess vehicle capacity within built communities to optimize the

public right-of-way by utilizing the excess width for other modes of travel or public amenities such as bike lanes, landscaping, walkways, parking, or medians.

CI-8. Maintain and rehabilitate the roadway system to maximize safety, mobility, and cost efficiency.

CI-10. Land development projects shall be responsible to provide improvements which address the project's adverse effects on local and regional roadways.

CI-12. To preserve public safety and local quality of life on collector and local roadways, land development projects shall incorporate appropriate treatments of the Neighborhood Traffic Management Program.

CI-23. Consider the transit needs of senior, disabled, low-income, and transit-dependent persons in making recommendations regarding transit services.

CI-29. The County shall work with transit service providers to establish and implement development guidelines to maximize the ability of new development and redevelopment to support planned transit services. New development and redevelopment shall have an orientation to travel patterns that are conducive to transit service. This will include concentration of development in centers and along linear corridors such that trip origins and destinations are concentrated near transit services.

CI-30. The County shall collaborate with transit service providers to promote the phased implementation of transit services to all growth areas as development occurs.

CI-32. Develop a comprehensive, safe, convenient and accessible bicycle and pedestrian system that serves and connects the County's employment, commercial, recreational, educational, social services, housing and other transportation modes.

CI-34. Construct and maintain bikeways and multi-use trails to minimize conflicts between bicyclists, pedestrians, and motorists.

CI-35. The applicant/developer of land development projects shall be responsible to install bicycle and pedestrian facilities in accordance with Sacramento County Improvement Standards and may be responsible to participate in the fair share funding of regional multi-use trails identified in the Sacramento County Active Transportation Plan.

CI-38. Design and construct pedestrian facilities to ensure that such facilities are accessible to all users.

CI-40. Whenever possible, the applicant/developer of new and infill development projects shall be conditioned to fund, implement, operate and/or participate in

transportation systems management (TSM) programs to manage travel demand associated with the project.

CI-43. The County shall promote transit-supportive programs in new development, including employer-based trip-reduction programs (employer incentives to use transit or nonmotorized modes), "guaranteed ride home" for commute trips, and car-share or bikeshare programs.

Sacramento County Active Transportation Plan

The 2022 Active Transportation Plan for unincorporated Sacramento County is the guiding document for achieving the County's goal to build a balanced transportation system that supports and encourages active modes of travel. The Active Transportation Plan analyzes existing conditions and provides policy, program, and infrastructure recommendations to improve active transportation within the unincorporated County (County of Sacramento 2022b). Note that the 2022 Active Transportation Plan replaced the Sacramento County Pedestrian Master Plan (2017) and the Sacramento County Bicycle Master Plan (2011) and are therefore not mentioned herein.

Sacramento County Zoning Code

Provisions for multi-family development within the County are within the Zoning Code. The following Sacramento County Zoning Code standards relate to bicycle parking:

5.9.9.A. Bicycle Parking Facility Classifications

Bicycle parking facilities and terms used in this Section are defined as follows:

- **Class I Bicycle Facility.** Includes the following: a) an enclosed box with a lockable storage compartment, or bicycle locker, accessible only to the bicycle owner/operator; or b) a locked room in a structure designated for storing and securing bicycles.
- **Class II Bicycle Facility.** A stationary bicycle rack designed to secure the frame and both wheels of the bicycle, where the bicyclist supplies only the locking device.
- **Class III Bicycle Facility.** A stationary bicycle rack, typically with a cement slab and vertical metal bar, where the bicyclist supplies a padlock and chain or cable to secure the bicycle to the stationary object.
- **Short-Term Parking.** Easily accessible bicycle spaces provided for the convenience of shoppers, customers, and other visitors, visiting for a short duration of less than two (2) hours. Short-term bicycle parking should be in proximity to the main entrance of a building, within 100 feet and visible to pedestrian and bicyclists; or located in a common bicycle parking facility along a pedestrian access route.
- **Long Term Parking.** Bicycle parking in a secure and weather-protected place to serve employees, students, residents, commuters, and others who generally stay on the site for several hours. Long-term parking does not have to be provided on-site, but should be within a reasonable distance, no greater than 400 feet from the site, to encourage bicycle use. Bicycle parking must be provided in racks or lockers.

5.9.9.B. MINIMUM BICYCLE PARKING REQUIREMENTS [AMENDED 07-16-2020]

Bicycle parking spaces shall be provided in compliance with the minimum requirements in Table 5.29 and the standards in Section 5.9.9.C (adapted to only include multi-family requirements in Table TRAN-2 below).

Table TRAN-2: Bicycle Parking Facility Requirements

Use	Bicycle Spaces		Bicycle Parking Facility Class	
	Long-Term	Short-Term	Long-Term	Short-Term
Multiple Family	For multifamily housing, a minimum of one (1) bicycle parking space per unit shall be provided on-site, with guest bicycle parking spaces provided at one (1) space per 10 units on-site.		Class I or Class II racks shall be located close to and with direct access to multifamily building entries. Bicycle parking for guests shall be clustered in common areas for easy convenience.	

Note: Where the application of the above table results in the requirement for a fraction of a bicycle parking space, such a space need not be provided unless the fraction exceeds 50 percent.

Source: County of Sacramento 2015, Table 5.29 of County Zoning Code (adapted to only include requirements for multi-family uses).

5.9.9.C. DESIGN STANDARDS

Bicycle parking facilities shall be installed in a manner which allows adequate spacing for access to the bicycle and the locking device when the facilities are occupied. Each bicycle parking space shall be at least two (2) feet wide by six (6) feet long, with a five (5) foot maneuvering space behind the bicycle. The facilities shall be located on a hard, dust free surface, preferably asphalt or concrete slab and/or may also be mounted on a flat wall surface, with appropriate maneuvering space behind the bicycle.

COUNTYWIDE DESIGN GUIDELINES

The Countywide Design Guidelines apply to the unincorporated County and include design strategies that support the County in creating a built environment that is healthy, sustainable, livable, and promotes active transportation choices (County of Sacramento 2022c). The following design standards and guidelines are applicable to the Project:

3.0 MULTIFAMILY DEVELOPMENT

3.2.1 NEIGHBORHOOD COMPATIBILITY

- Provide connections between new projects and adjacent neighborhood streets and pedestrian and bicycle paths. Connecting streets should be designed to discourage overloading traffic on existing streets, and support walking and bicycling. Provide for future connections to currently underdeveloped properties.

- Promote access to new development by providing multiple points of entry and exit. Separate entry/exit access should be provided for pedestrians to promote safety and avoid auto/pedestrian conflicts.

- Create slower, pedestrian-oriented residential streets within the project site and its surrounding neighborhood through traffic calming measures such as traffic circles, chokers, reduced speed limits and narrower streets, to the greatest extent possible.

- Design connectivity with adjacent developments via internal drives and biking or walking trails.
- Allow pedestrian movement to and along sidewalks to be clear and unobstructed. Use of separated sidewalks is encouraged.
- Design pedestrian paths, access points and signage to be clearly visible during the day and well-lit after dark.

3.2.6 CIRCULATION

- Organize the circulation system of larger multifamily projects (80 units or more) as a simple hierarchy of streets, driveways, landscaping, parking areas and alleys with at least two points of access to public streets where feasible.
- Encourage well-connected pedestrian routes within the project site and to the surrounding neighborhood, with an emphasis on relationships to open space networks.
- Provide access for persons with disabilities and consider the age of residents when designing facilities.
- Create internal circulation and connections between the project and the street to address the needs of pedestrians, bicyclists, and vehicles. If located along a transit route, provide convenient route and schedule information along with access to transit stops from multifamily projects.
- Design new projects that provide connections to adjacent development and allow for connections to future developments.
- Minimize total impervious surface resulting from pavement, sidewalks, and parking through use of landscaping and landscaped open spaces.
- Locate vehicular entrances and exits to provide for safe sightlines and distances from street corners and intersections.
- Provide adequate and well landscaped pedestrian ingress and egress from the development to public rights-of-way, bus stops, and public transit to reduce long walking distances.
- Connections through public and common use areas must be accessible to people of all ages and those with disabilities.
- Provide traffic calming measures such as roundabouts, narrower roadways, on-street parking, chokers, and speed bumps along internal streets. Provide signage, flashing beacons, well-marked crosswalks and other areas where pedestrians and bicyclists are present.
- Design internal streets with sidewalks, signage and well-marked crossings to promote pedestrian activity within the development. Walking paths with a route map that notes distance will encourage internal walking for health and physical activity.

- On larger projects, provide loop circulation on internal streets to the greatest extent possible and minimize segregation of common open spaces.
- Develop projects that face internal streets to enhance the general livability, visual quality, and safety of the street.
- Design internal streets, parking lots, and driveways as parking courts that provide for additional outdoor hard surface play spaces by controlling traffic speed and movements. Such joint use of parking areas provides opportunities for additional social interaction between residents and can also provide the space for large special events.
- Consider designing narrower street sections where fire access is not required to reduce the amount of impervious area and enhance the appearance of driveways.
- For internal streets, include a minimum 5-foot wide landscaped buffer along roadways adjacent to property lines.
- Minimum widths for internal streets or driveways, per Fire Department Standards:
    - Uncurbed driveway with no parallel parking when fire lane is not necessary – 16 feet
    - Curbed internal street with no parallel parking – 20 feet
    - Curbed internal street with parallel parking on one side – 28 feet
    - Curbed internal street with parallel parking on both sides – 36 feet
- Street design and width should be confirmed with the Fire Department.
- Locate paseos where vehicular connections are infeasible due to project or site constraints.
- Visually identify paseos by special paving, landscaping and pedestrian-scale lighting.
- On pedestrian pathways, include amenities such as trellises, trees, seating, lighting and landscaping that visually extend the open spaces for safe pedestrian use. Provide lighting for safety and visual access.
- Locate secure bicycle parking close to, and with direct access to, residential buildings and entries. Bike lockers are preferred for overnight security. Consider providing a bike share program for residents.
- For Categories II and III, a minimum of one bike parking space per unit shall be provided with guest bike parking at one space per 10 units provided on site. Private storage areas in units may qualify for bike parking. Bike parking for guests should be clustered in common areas for easy convenience.
- Bike racks shall be designed with the most current designs that provide secure locking features and are attractive. Many bike racks double as public art to add interest.

DISTINCT AREA PLANS

The County guides development using several land use plans such as SPAs, Specific Plans, Comprehensive Plans, Community Plans, Corridor Plans, and Neighborhood Preservation Areas (NPAs). As shown in Chapter 2, "Project Description," 13 sites are located in distinct area plans, specifically: Fair Oaks Boulevard Corridor Plan, North Watt Avenue Corridor Plan, and Old Florin Town SPA. These plans provide community-specific regulations that supplement the County Zoning Code and are created when the countywide zoning regulations do not adequately address local concerns (County of Sacramento 2023). Relevant transportation policies included in the distinct area plans are summarized below.

Relevant transportation mitigation included in the area planning efforts are summarized below. Where appropriate, mitigation is carried through or updated from these plans and associated environmental documents.

FAIR OAKS BOULEVARD CORRIDOR PLAN

The Fair Oaks Boulevard Corridor Plan was adopted by the Board of Supervisors on October 26, 2011. The accompanying environmental document, the Fair Oaks Boulevard EIR (Control No. PLNP2008-00147), was also certified at the Board of Supervisors hearing. The following regulatory background summarizes and supplements the Fair Oaks Boulevard EIR.

Site 67 is located in the East Fair Oaks District of the Fair Oaks Boulevard Corridor Plan. Projects located outside of the Main Street District are encouraged to opt-into and follow any or part of the development and design standards contained in the Fair Oaks Boulevard Corridor Plan. If applicants choose not to opt-in, projects in the East Fair Oaks District are regulated pursuant to the Zoning Code based on the site zoning. The Fair Oaks Boulevard Corridor Plan contains the following relevant circulation policies and standards if the applicant chooses to opt-in:

CIRCULATION PRINCIPLES

- **CP 1. Pedestrian Priority.** Give pedestrian access and comfort priority in site planning and roadway design.
- **CP 2. Pedestrian Comfort.** Provide wide, well-lit, and well-shaded sidewalks that encourage daytime and nighttime use.
- **CP 3. Pedestrian/Automobile Buffer.** Wherever possible, develop landscaped strips between sidewalks and Fair Oaks Boulevard / Manzanita Avenue to buffer pedestrians from vehicular traffic.
- **CP 4. Pedestrian Connections to Surrounding Neighborhoods.** Create inviting pedestrian connections, through sidewalk improvements, additional landscaping, and street trees, and commercial uses that draw people from surrounding neighborhoods to the Boulevard's districts.

- **CP 5. Bicycle Access.** Establish on-street Class II bicycle lanes along the Boulevard and enhance access from residential streets and American River Parkway. Every commercial or mixed-use project should include bike racks.
- **CP 6. Transit Access.** Enhance access to transit through street design and related site planning on private property.
- **CP 8. Side and Neighborhood Streets Improvements.** Enhance existing local side and neighborhood streets through street repairs, connecting sidewalks, grading, and landscaping.
- **CP 11. Driveway Consolidation.** Consolidate driveways along the Boulevard where appropriate and promote side street driveways to improve pedestrian and traffic safety.

CIRCULATION STANDARDS

Circulation Diagram. The circulation diagram reflects the existing and proposed improvements to Fair Oaks Boulevard, Manzanita Avenue and surrounding neighborhood streets. This section identifies the street standards, turning movements, driveway and curb cut consolidation, pedestrian access, connections to neighborhoods, and parking.

Pedestrian Access, Safety, and Comfort. The Fair Oaks Boulevard Corridor Plan places an emphasis on pedestrian comfort and safety. The Fair Oaks Boulevard Corridor Plan calls for the expansion of Fair Oaks Boulevard right-of-way to allow for wider sidewalks, bike lanes, and planting strips.

In certain locations, the County will need to acquire 10 to 12 feet of private property to improve the streetscape per the Boulevard standards described above. The County will implement the following standards to improve pedestrian and bicyclist mobility, safety, and comfort:

- Design pedestrian facilities and streetscape areas per the Boulevard standards described above
- Provide four-legged crosswalks at four-way signalized intersections
- Provide crosswalks on at least two legs at signalized three-way intersections
- Synchronize traffic signals along Fair Oaks Boulevard and Manzanita Avenue to improve vehicle flow, and minimize noise and vehicle emissions

NORTH WATT AVENUE CORRIDOR PLAN

The North Watt Avenue Corridor Plan was adopted by the Board of Supervisors on August 21, 2012. The accompanying environmental document, the North Watt Avenue EIR (Control No. PLNP2008-00153), was also certified at the Board of Supervisors hearing. The following regulatory background summarizes and supplements the North Watt Avenue EIR.

Sites 68-71 are located within the Elkhorn District and Site 72 is located within the Town Center District of the North Watt Avenue Corridor area. The North Watt Avenue Corridor Plan provides the following transportation policies for residential uses:

- **Policy 4.12** A north-south Class I multi-use trail shall be constructed within a paseo through residential mixed-use neighborhoods. Specific alignments shall be identified in proposed development plans. Alternative trail sections (e.g., Class II bike lanes with pedestrian walkways) are permitted within predominantly commercial areas such as the Elkhorn Commercial Core.
- **Policy 4.14** All bicycle trails, lanes, and routes shall be constructed in conformance with Sacramento County standards.

OLD FLORIN TOWN SPECIAL PLANNING AREA

The Old Florin Town SPA was adopted by the Board of Supervisors on July 20, 2011. The accompanying environmental document, the Old Florin Town SPA EIR (Control No. PLNP2007-0075), was also certified at the Board of Supervisors hearing on May 4, 2011. There are no transportation-related policies in the Old Florin Town SPA applicable to the Project; however, the Old Florin Town SPA contains a Streetscape Master Plan in the Appendices that includes design guidelines relevant to transportation infrastructure. The Streetscape Master Plan includes guidance related to traffic calming and pedestrian ways. Additionally, the Streetscape Master Plan recommends the implementation of a multi-use trail along Florin Creek to provide additional recreation and open space in the community.

OTHER LAND USE PLANS

In addition to the distinct area plans described above, Stockton Boulevard NPA, Victory Avenue NPA, Greenback Lane SPA, and Downtown Rio Linda SPA also contain candidate rezone sites. The Stockton Boulevard NPA, Victory Avenue NPA, Greenback Lane SPA and Downtown Rio Linda SPA do not have any applicable policies related to transportation; however, residential projects within these land use planning areas would be subject to development and design standards including those related to bicycle and pedestrian circulation, vehicle access, traffic calming, and emergency vehicle access.

SACRAMENTO COUNTY CODE, SECTION 17.04.010

Section 17.04.010 of the County Code adopts the 2022 California Fire Code of Regulations (Title 24, Part 9) by reference. See above for a detailed description of the California Fire Code.

TRANSPORTATION ANALYSIS GUIDELINES

The TAG was adopted by the County Board of Supervisors in October 2020. The TAG outlines screening criteria by which projects may be exempt from VMT analysis and provides methodologies to analyze a project's VMT if screening criteria are not met (County of Sacramento 2020). As detailed above, a project's effect on automobile delay is no longer a consideration when identifying a significant impact under CEQA; thus, the portions of the TAG not directly applicable to CEQA are not included here. The TAG and the County General Plan specify VMT per capita as the metric used to evaluate impacts

from residential projects. The TAG includes all vehicle "tours" (both work/commute vehicle tours and non-work vehicle tours) that start and end at residential units. The VMT from these tours are grouped and summed to the home location of those tours. The VMT for each home is then summed for all homes in a particular area and divided by the total population of that area to determine the VMT per capita (County of Sacramento 2020: 17). The TAG also includes guidelines and requirements for multimodal (bicycle, pedestrian, and transit) transportation analysis, hazards related to design, on-site circulation, and construction.

Significance Criteria and Methodology

Significance Criteria

Thresholds of significance are based on Appendix G of the CEQA Statute and Guidelines, the Sacramento County General Plan, the County TAG, and CEQA Guidelines Section 15064.3.

Bicycle and Pedestrian Facility Impacts

Impacts to bicycle and pedestrian facilities would be significant if the Project would:

- Eliminate or adversely affect an existing bikeway or pedestrian facility in a way that would discourage its use;
- Interfere with the implementation of a planned bikeway as shown in the County Active Transportation Plan or be in conflict with the County Active Transportation Plan; or
- Result in unsafe conditions for bicyclists or pedestrians.

Transit Facility Impacts

Impacts to the transit system would be significant if the Project would:

- Adversely affect public transit operations; or
- Fail to adequately provide access to transit.

VMT Impacts

Impacts to VMT would be significant if the Project would:

- Exceed 85 percent of the baseline (no Project) regional average VMT per capita for residential land uses.

Transportation Hazards Impacts

Transportation hazards would be significant if the Project would:

- Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

Emergency Access Impacts

Impacts to emergency access would be significant if the Project would:

- Result in inadequate emergency access.

Airport Safety Hazards Impacts

Airport safety hazards would be significant if the Project would:

- Result in an airport safety hazard for people residing or working in the Project area.

Methodology

Bicycle and Pedestrian Analysis

The bicycle and pedestrian analyses include an evaluation of whether the Project would, either directly or indirectly, disrupt existing bicycle or pedestrian programs or facilities; interfere with the implementation of a planned facility; or create a physical or operational transportation outcomes that conflict with applicable bicycle or pedestrian system plans, guidelines, policies, or standards. Therefore, the Project's consistency with relevant plans, ordinances, or policies (i.e., County General Plan, relevant distinct area plans, and Active Transportation Plan) was evaluated to determine impacts to present or future bicycle and pedestrian facilities in the Project area.

Transit Analysis

The transit analysis evaluates if the Project would, directly or indirectly, disrupt existing transit services or facilities; interfere with the implementation of a planned transit facility; or create physical or operational transportation outcomes that conflict with desired conditions expressed in transit policies adopted by the County or SacRT for their respective facilities in the unincorporated county. Therefore, the Project's consistency with relevant plans, ordinances, or policies (i.e., County General Plan and relevant distinct area plans) was evaluated to determine impacts to present or future transit facilities and service in the Project area.

VMT Analysis

Section 15064.3 of the State CEQA Guidelines was adopted in December 2018 and provides that VMT is the "most appropriate measure of transportation impacts" and mandates analysis of VMT impacts effective July 1, 2020. Given that this change to the CEQA Guidelines occurred after certification of the 2010 General Plan EIR as well as the distinct area plan EIRs (certified in 2011 and 2012), the General Plan EIR and the distinct area plan EIRs did not evaluate impacts to VMT. VMT was a metric used extensively in the transportation industry at the time the General Plan and distinct area plan EIRs were prepared, but its use was generally limited to highway cost allocation, determining user fee structures, and estimating air quality and greenhouse gas emissions. Therefore, VMT related to the buildout of the General Plan and implementation of the distinct planning

areas was a known concept at the time. However, it was not the industry-standard metric used to assess transportation impacts.

Although VMT wasn't analyzed as part of the General Plan or distinct area plan EIRs, development allowed under those adopted plans, as well as the associated existing zoning, would result in increased VMT. This analysis focuses on the level of VMT that would be generated by the level of development currently allowed on the candidate rezone sites under the existing General Plan and zoning and then determines whether that level of VMT would exceed the County's currently adopted threshold (described above) and then also considers the potential change in the level of VMT that would result from the proposed rezone (i.e., the change in the level of development capacity from the currently allowed level). Consistent with the criteria specified in State CEQA Guidelines Section 15162, a significant impact (i.e., substantial new information) would occur if the Project VMT would result in a new significant VMT impact or substantially increase an existing significant VMT impact.

To conduct this evaluation, the SACOG activity based model (SACSIM19) was used to develop the VMT forecasts for the Project. SACSIM19 is used by local jurisdictions, including the County of Sacramento, for regional transportation impact analysis. To analyze the impacts of the proposed rezone on VMT, sites proposed for rezone were modified in the SACSIM19. SACOG currently maintains a base year (2016) scenario, as well as 2027, 2035, and 2040 future year scenarios. Additional documentation about the SACSIM19 is in Appendix TRAN-1.

As described above under "Significance Criteria," a significant VMT impact would occur if the Project would result in a total VMT per capita that is greater than 15 percent below the existing total VMT per capita for the region (i.e., VMT greater than 85 percent of the regional average). Table TRAN-3 details the calculated threshold for Project-generated VMT.

Table TRAN-3: County of Sacramento VMT Threshold for Residential Development

Item	Amount
Total Regionwide Vehicle Miles Traveled (A)	58,394,800
Service Population (B)	2,890,831
Total VMT per Capita (A/B = C)	20.20
VMT per Capita Threshold (C*85% = D)	17.17

Notes: % = percent

Source: DKS Associates 2024.

As shown in Table TRAN-3, the Project would result in a significant impact if the total VMT per capita under "existing with Project conditions" is greater than 17.17. Additionally, because this analysis tiers from the previously certified General Plan EIR that did not evaluate VMT, the Project would be considered to result in a significant impact if VMT per capita under "existing with Project conditions" generates an increase in VMT per capita as compared to "no Project conditions." See Appendix TRAN-1 for a detailed description of the VMT methodology.

TRANSPORTATION HAZARDS AND EMERGENCY ACCESS ANALYSIS

The transportation hazards and emergency access analysis evaluates whether the Project would directly or indirectly, substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); or result in inadequate emergency access. However, because specific details about how the candidate rezone sites would be developed (e.g., paths, building locations) are unknown at this time, the effects are addressed programmatically.

AIRPORT SAFETY ANALYSIS

The following regulations and documents were reviewed for this analysis to determine the potential airport safety hazards in the Project area:

- Federal Aviation Regulations Part 77 (CFR 14 FAR Part 77)
- Rio Linda Airport and McClellan Airport Comprehensive Land Use Plans (CLUPs)
- SACOG ACLU Letter of Determination
    - Included review of California Airport Land Use Planning Handbook and applicable CLUPs

Implementation of the Project was evaluated against the information established in these sources to determine whether any risks associated with airport safety would occur to people residing or working in the vicinity of the Project.

IMPACT AND ANALYSIS

This impact and analysis section is organized by impact then, within each impact, by analysis of Project buildout as compared to the General Plan EIR, and finally by distinct planning area. Mitigation is included or updated, where applicable, from the original environmental documents prepared for the General Plan and distinct area plans. An analysis of cumulative impacts is included at the end of the section.

IMPACT TRAN-1: BICYCLE, PEDESTRIAN, AND TRANSIT FACILITY IMPACTS

SACRAMENTO COUNTY GENERAL PLAN

GENERAL PLAN ENVIRONMENTAL IMPACT REPORT DETERMINATION

BICYCLE AND PEDESTRIAN FACILITIES

The General Plan EIR concluded that development in new growth areas consistent with the smart growth principles would ensure bicycle and pedestrian mobility within these areas. Additionally, the County's plans to improve bicycle and pedestrian facilities on existing and planned roadways would provide important connectivity. Additionally, the provision of appropriate bicycle and pedestrian facilities integrated throughout the unincorporated County, particularly in new growth areas, initiated by implementation of

the General Plan would assist in a mode shift to alternative forms of transportation. Therefore, the General Plan EIR concluded that impacts to bicycle and pedestrian facilities would be less than significant.

TRANSIT FACILITIES

The General Plan EIR concluded that growth would result in increased population and employment, which would increase the demand for transit services, increase service frequency, and extend transit routes to accommodate new development. Additional buses and light rail vehicles would be needed to maintain existing headways as well as additional transit stations, stops, and park-and-ride lots to facilitate existing and future transit routes. Due to uncertainties with funding, it was determined that it may not be possible to provide adequate transit services as necessitated by the General Plan resulting in less transit service than necessary to support development under the General Plan and/or delays in transit service. Therefore, despite the intent of the General Plan to provide an adequate level of transit services in accordance with smart growth principles, the General Plan EIR determined that it may not be possible to provide adequate transit services in a timely fashion due to future funding uncertainties. Impacts related to transit were determined to be significant and unavoidable.

PROPOSED PROJECT IMPACT EVALUATION

Future development on candidate rezone sites would be subject to, and designed in accordance with, County plans, policies, and programs for transit, bicycle, and pedestrian facilities. Specifically, implementation of the Project would be subject to, and implement, General Plan and Active Transportation Plan policies applicable to transit, bicycle, and pedestrian facilities and service. Additionally, subsequent development under the Project would be required to incorporate improvements consistent with applicable County guidelines, standards, and specifications related to transit, bicycle, or pedestrian facilities.

Several General Plan policies pertain to the implementation and accommodation of alternative modes of transportation to result in a safe, integrated, and efficient transportation network throughout the County that serves bicycles, pedestrians, and transit riders. Specifically, General Plan Policy CI-29 includes locating new development near transit. General Plan Policy CI-35 requires new development to install bicycle and pedestrian facilities in accordance with Sacramento County Improvement Standards and/or pay their fair share portion to implement the multi-use trail system identified in the Sacramento County Active Transportation Plan. General Plan Policy CI-40 states that, when possible, new or infill development shall be required to fund or implement TSM programs associated with the Project. Subsequent development and offsite improvements associated with the Project would be subject to the most recent adopted version of the Active Transportation Plan at the time of individual project consideration. This would require the implementation of bicycle and pedestrian facilities and improvements identified in the Active Transportation Plan. As part of Sacramento Department of Transportation (SACDOT), County Engineering, and Site Improvement and Permits Section (SIPS) review of the Project, conditions identifying the required rights-of-way (ROW) and public utilities easements, applicable street improvements along frontages consistent with Improvement Standards, and (if required) subsequent Focus

Access and Circulation Studies (FACS) and Local Transportation Analyses (LTA) were identified for each candidate rezone site. Specifically, the FACS and LTA would identify subsequent development's impacts on existing facilities. These identified conditions take into account the bicycle and pedestrian facility improvements identified in the Active Transportation Plan. Additionally, subsequent development allowed under the Project would be subject to and designed in accordance with all applicable County bicycle, pedestrian, and transit guidelines, standards, and specifications that require bicycle and pedestrian facilities and roadways to be designed to meet safety standards for all modes of transportation.

Implementation of General Plan policies, Active Transportation Plan policies, and all applicable County guidelines, standards, and specifications would be required for future development allowed under the Project. Compliance with these regulations would ensure that there would be no new conflicts with adopted policies, plans, or programs for transit, bicycle, or pedestrian facilities. However, as detailed above, the General Plan EIR determined that there would not be adequate funding to support needed transportation facilities. The Project would result in an increase in residences in the unincorporated County; thus, associated transit ridership and demand for services would increase.

Pursuant to CEQA Guidelines Section 15162, the proposed Project would result in a more severe impact to transit than would occur with implementation of the General Plan. The Project's contribution to impacts would be substantial and overall impacts would remain significant and unavoidable.

MITIGATION MEASURES

There is no feasible mitigation measure to reduce this impact to a less-than-significant level.

DISTINCT AREA PLANS

FAIR OAKS BOULEVARD CORRIDOR PLAN

ENVIRONMENTAL IMPACT REPORT DETERMINATION

BICYCLE AND PEDESTRIAN FACILITIES

The Fair Oaks Boulevard EIR concluded that implementation of the Fair Oaks Boulevard Corridor Plan would not eliminate or adversely affect a bicycle or pedestrian facility, nor would the plan interfere with the implementation of a planned bicycle or pedestrian facility. The Fair Oaks Boulevard Corridor Plan includes a set of bicycle and pedestrian facility standards. The Fair Oaks Boulevard EIR determined that implementation of these standards would result in the construction of bicycle and pedestrian facility improvements in the Fair Oaks Boulevard Corridor area. Therefore, the Fair Oaks Boulevard EIR determined the impact on bicycle and pedestrian facilities would be less than significant.

TRANSIT FACILITIES

The Fair Oaks Boulevard EIR determined that implementation of the Fair Oaks Boulevard Corridor Plan would result in land use development that would increase demand for public

transit in the Fair Oaks Boulevard Corridor area, and the magnitude of the increase is unknown. However, based on ridership data, the Fair Oaks Boulevard EIR determined there would be enough capacity to accommodate anticipated demand. Additionally, the Fair Oaks Boulevard Corridor Plan includes public transit facility standards to improve transit service and facilities. Therefore, the Fair Oaks Boulevard EIR determined that plan improvements would add to the capacity of the public transit system in the Fair Oaks Boulevard Corridor and support planned transit improvements such as the Sacramento Regional Transit Master Plan.

However, as detailed in the Land Use Chapter of the Fair Oaks Boulevard EIR, the Fair Oaks Boulevard Corridor Plan would be inconsistent with floor area ratio (FAR) requirements detailed within General Plan Policy LU-32. Densities proposed in the Fair Oaks Boulevard Corridor Plan are less than those required by General Plan Policy LU-32 that is intended to, in part, support transit supportive uses. Therefore, the Fair Oaks Boulevard Corridor Plan was determined to be in conflict with an adopted policy supporting alternative transportation. Mitigation Measure LA-1, as detailed in the Land Use Chapter of the Fair Oaks Boulevard EIR, is applicable to this alternative transportation impact and would ensure that densities are sufficient to support public transit. Therefore, the Fair Oaks Boulevard EIR concluded that with the implementation of Mitigation Measure LA-1, impacts to public transit would be less than significant.

IMPACT EVALUATION

As detailed in the proposed Project impact evaluation above, future development on Site 67 would be subject to, and designed in accordance with County plans, policies, and programs for transit, bicycle, and pedestrian facilities, including those identified in the Fair Oaks Boulevard Corridor Plan. Additionally, subsequent development allowed on Site 67 as part of the Project would be required to incorporate improvements consistent with applicable County guidelines, standards, and specifications related to transit, bicycle, or pedestrian facilities. As part of SACDOT, County Engineering, and SIPS review of the Project, conditions identifying the required ROW and public utilities easements, applicable street improvements along frontages consistent with Improvement Standards, and (if required) subsequent FACS and LTA were identified for each candidate rezone site, including Site 67. Specifically, the FACS and LTA would identify subsequent development's impacts on existing facilities. These identified conditions take into account the bicycle and pedestrian facility improvements identified in the Active Transportation Plan.

Fair Oaks Boulevard Corridor Plan Policies CP 1, CP 2, CP 3, and CP 4 pertain to the implementation of pedestrian improvements to provide safe facilities and increased comfort for people who walk. Fair Oaks Boulevard Corridor Plan Policy CP 5 proposes bicycle facilities along Fair Oaks Boulevard to enhance bicycle access and includes a provision related to bicycle parking. Fair Oaks Boulevard Corridor Plan Policy CP 6 is related to transit access. Lastly, Fair Oaks Boulevard Corridor Plan Policies CP 8 through CP 12 are specific to design standards and improvements to increase safety for all modes of transportation. Finally, development allowed under the Project on Site 67 would be required to be consistent with the alternative transportation improvements provided in Figure 2.3 and Figure 2.4 of the Fair Oaks Boulevard Corridor Plan that identify pedestrian and bicycle facility improvements, respectively. Specifically, within the vicinity of Site 67,

Fair Oaks Boulevard is identified as a pedestrian district, and California Avenue is identified as a bicycle route.

Development on Site 67 could generate transit ridership; however, existing transit service in the area would have the capacity to accommodate anticipated demand. Additionally, Fair Oaks Boulevard Corridor Plan Policy CP 6 supports improved transit service through the enhancement of transit access.

Development on Site 67 would implement Fair Oaks Boulevard Corridor Plan policies as well as General Plan policies, Active Transportation Plan polices, and all applicable County guidelines, standards, and specifications that would ensure that there would be no new conflicts with adopted policies, plans, or programs for transit, bicycle, or pedestrian facilities. Therefore, the proposed rezone on Site 67 would not exacerbate impacts to pedestrian, bicycle, and/or transit as compared to what was evaluated in the Fair Oaks Boulevard EIR.

Pursuant to CEQA Guidelines Section 15162, the proposed rezone of Site 67 would not result in a new or substantially more severe impacts to bicycle, pedestrian, or transit facilities. Future development on Site 67 would not be substantial and overall impacts would remain less than significant, consistent with the findings of the Fair Oaks Boulevard EIR**.**

MITIGATION MEASURES

Mitigation not required.

NORTH WATT AVENUE CORRIDOR PLAN

ENVIRONMENTAL IMPACT REPORT DETERMINATION

BICYCLE AND PEDESTRIAN FACILITIES

The North Watt Avenue EIR determined that implementation of the North Watt Avenue Corridor Plan would not adversely impact bicycle or pedestrian facilities. The North Watt Avenue Corridor Plan is intended to enhance North Watt Avenue Corridor pedestrian and bicycle facilities by providing improvements to facilities in the area. Therefore, the North Watt Avenue EIR determined the impact on bicycle and pedestrian facilities would be less than significant.

TRANSIT FACILITIES

The North Watt Avenue EIR did not analyze impacts to transit facilities.

IMPACT EVALUATION

Development on Sites 68 through 72 within the North Watt Avenue Corridor area would be required to comply with North Watt Avenue Corridor Plan Policy 4.12 that provides for the construction of a north-south Class I multi-use trail within a paseo through residential mixed-use neighborhoods and specifies that alignments shall be identified in proposed development plans. North Watt Avenue Corridor Plan Policy 4.14 states that all bicycle facilities must be constructed to meet Sacramento County standards. Additionally, the

proposed rezone on Sites 68 through 72 would be required to be consistent with the Circulation Plan provided in Chapter 4 of the North Watt Avenue Corridor Plan.

Future development on Sites 68 through 72 within the North Watt Avenue Corridor area would implement the North Watt Avenue Corridor Plan policies described above as well as General Plan policies, Active Transportation Plan polices, and all applicable County guidelines, standards, and specifications that would ensure that there would be no new conflicts with adopted policies, plans, or programs for transit, bicycle, or pedestrian facilities. As part of SACDOT, County Engineering, and SIPS review of the Project, conditions identifying the required ROW and public utilities easements, applicable street improvements along frontages consistent with Improvement Standards, and (if required) subsequent FACS and LTA were identified for each candidate rezone site, including Sites 68 through 72. Specifically, the FACS and LTA would identify subsequent development's impacts on existing facilities. These identified conditions take into account the bicycle and pedestrian facility improvements identified in the Active Transportation Plan. Therefore, the proposed rezone on Sites 68 through 72 would not exacerbate impacts to pedestrian and/or bicycle facilities as compared to what was evaluated in the North Watt Avenue EIR.

Pursuant to CEQA Guidelines Section 15162, the proposed rezone of Sites 68 through 72 would not result in a new or substantially more severe impact to bicycle, pedestrian, and transit facilities. Stationary noise sources from future of development on Sites 68 through 72 would not be substantial and overall impacts would remain less than significant, consistent with the findings of the North Watt Avenue EIR.

MITIGATION MEASURES

Mitigation not required.

OLD FLORIN TOWN SPA

ENVIRONMENTAL IMPACT REPORT DETERMINATION

BICYCLE AND PEDESTRIAN FACILITIES

The Old Florin Town SPA EIR concluded that implementation of the Old Florin Town SPA would require the implementation of bicycle and pedestrian improvements over time as projects develop within the Old Florin Town SPA. Therefore, the Old Florin Town SPA EIR determined the impact on bicycle and pedestrian facilities would be less than significant.

TRANSIT FACILITIES

There were no transit facilities located along Florin Road at the time the Old Florin Town SPA EIR was prepared; therefore, no significance conclusion was provided.

IMPACT EVALUATION

As detailed above in the Regulatory Setting, there are no policies related to bicycles, pedestrians, or transit contained in the Old Florin Town SPA; however, the Old Florin Town SPA contains a Streetscape Master Plan in the Appendices that includes design guidelines related to traffic calming strategies and pedestrian facilities. Additionally, the

Streetscape Master Plan recommends the implementation of a multi-use trail along Florin Creek to provide additional recreation and open space in the community.

Development on Sites 73 through 79 within the Old Florin Town SPA would be consistent with General Plan policies, Active Transportation Plan polices, and all applicable County guidelines, standards, and specifications that would ensure that there would be no new conflicts with adopted policies, plans, or programs for transit, bicycle, or pedestrian facilities. As part of SACDOT, County Engineering, and SIPS review of the Project, conditions identifying the required ROW and public utilities easements, applicable street improvements along frontages consistent with Improvement Standards, and (if required) subsequent FACS and LTA were identified for each candidate rezone site, including Sites 73 through 79. Specifically, the FACS and LTA would identify subsequent development's impacts on existing facilities. These identified conditions take into account the bicycle and pedestrian facility improvements identified in the Active Transportation Plan. Therefore, the proposed rezone on Sites 73 through 79 would not exacerbate impacts to pedestrian, bicycle, and/or transit facilities as compared to what was evaluated in the Old Florin Town SPA EIR. Additionally, there are currently no transit facilities present in the Old Florin Town SPA; thus, the baseline environmental setting in this area has not changed and development on Sites 73 through 79 would not result in adverse impacts to transit.

Pursuant to CEQA Guidelines Section 15162, the proposed rezone of Sites 73 through 79 would not result in a new or substantially more severe impact to bicycle, pedestrian, and transit facilities. Future development on Sites 73 through 79 would not be substantial and overall impacts would remain less than significant, consistent with the findings of the Old Florin Town SPA EIR.

MITIGATION MEASURES

Mitigation not required.

IMPACT TRAN-2: VMT IMPACTS

SACRAMENTO COUNTY GENERAL PLAN

GENERAL PLAN ENVIRONMENTAL IMPACT REPORT DETERMINATION

Section 15064.3 of the State CEQA Guidelines was adopted in December 2018 providing that VMT is the "most appropriate measure of transportation impacts." Mandated analysis of VMT impacts became effective July 1, 2020. Therefore, the General Plan EIR did not evaluate impacts to VMT. However, VMT was a known and used metric at the time the General Plan EIR was prepared, but its use was generally limited to highway cost allocation, determining user fee structures, and estimating air quality and greenhouse gas emissions.

PROPOSED PROJECT IMPACT EVALUATION

Table TRAN-4 shows the changes in regionwide VMT associated with the Project as well as summarizes total regionwide network VMT and VMT per capita for existing (2016) conditions without and with the Project. The No Project scenario represents the approved

land uses from the General Plan EIR; therefore, for the purpose of this analysis the No Project scenario forms the basis of comparison with the Project. As detailed in Table TRAN-4, regionwide network VMT would increase by approximately 1.1 percent with implementation of the Project, and VMT per capita would increase by approximately 0.06 percent with the Project. Therefore, the Project would contribute to a more severe VMT impact as compared to No Project conditions. Note that the VMT modeling included three additional sites located in the County's Vineyard community. These sites were removed from the rezone list during preparation of the EIR. However, removal of the sites would not result in greater VMT as the sites removed are in a high VMT generating area.

Table TRAN-4: Regionwide Project-Generated VMT

	Base Year			Super-Cumulative		
	No Project	With Rezones	Change	No Project	With Rezones	Change
Region Wide Network VMT	58,394,800	59,033,100	+638,300	76,811,500	77,021,600	+210,100
% Change			+1.1%			+0.3%
Region Wide VMT per Capita	20.20	20.26	+0.06%	18.39	18.39	No change
85% Threshold	17.17			15.63		

Notes:

% = percent

Network VMT rounded to the nearest 100

Source: DKS Associates 2024.

In addition to regionwide VMT, VMT per capita (and resultant percentage of regional average) for each of the 79 candidate rezone sites has been calculated for the Project. Table TRAN-5 shows the VMT per capita associated with development that would be allowed on each candidate rezone site as part of the Project. Bold and shaded table cells are those that would exceed the 85 percent VMT threshold and would result in a significant VMT impact at the site level. Sites that are not bold and shaded meet the 85 percent VMT threshold and would not have a significant VMT impact.

Table TRAN-5: VMT per Capita by Candidate Rezone Site

Rezone Location	Community	Site #	TAZ	DU	VMT/Capita (Rezone Locations)			
					2016		Super-Cumulative	
					VMT per Capita	% of Region Wide	VMT per Capita	% of Region Wide
0.3 miles W of Antelope Road/Walerga Road	Antelope	1	324	300	16.32	81%	15.34	76%
0.2 miles S of Elverta Road/Walerga Road		2	1107	139	17.75	88%	16.18	80%
S Antelope Road/Elverta Road		3	324	387	16.32	81%	15.34	76%
370 feet N Roseville Road/Antelope Road		4	427	211	18.63	92%	17.22	85%
2328 Edison Avenue, 2332 Edison Avenue & 2336 Edison Avenue	Arden Arcade	5	378	59	12.56	62%	11.86	59%
6344 Verner Avenue	Carmichael/ Old Foothill Farms	6	433	54	17.88	89%	16.69	83%
5804 Garfield Avenue		7	434	26	15.60	77%	14.58	72%
4921 Hemlock Street		8	886	39	14.19	70%	13.16	65%
5817 Muldrow Road		9	405	13	15.84	78%	14.46	72%
5108 Pasadena Avenue		10	384	45	14.44	71%	13.56	67%
8545 Fair Oaks Boulevard		11	403	90	16.50	82%	15.47	77%
2421 Garfield Avenue & 2413 Garfield Avenue		12	392	55	16.42	81%	15.41	76%
5020 Arden Way		13	365	7	18.03	89%	16.61	82%
4845 Fair Oaks Boulevard		14	365	21	18.03	89%	16.61	82%
9425 Folsom Boulevard	Cordova	15	590	458	14.78	73%	13.89	69%
450 feet NE Folsom Boulevard/Paseo Rio Way		16	570	98	14.47	72%	13.42	66%
8933 Madison Avenue & 8937 Madison Avenue	Fair Oaks	17	465	37	17.88	89%	17.26	85%
4746 Sunrise Boulevard & 4742 Sunrise Boulevard	Fair Oaks	18	415	48	17.37	86%	15.15	75%

Rezone Location	Community	Site #	TAZ	DU	VMT/Capita (Rezone Locations)			
					2016		Super-Cumulative	
					VMT per Capita	% of Region Wide	VMT per Capita	% of Region Wide
NW Walerga Road/Blackjack Way	North Highlands	19	315	19	14.80	73%	14.20	70%
SW Walerga Road/Don Julio Boulevard		20	317	171	14.58	72%	13.75	68%
NW Walerga Road/Galbraith Drive		21	321	100	15.49	77%	14.87	74%
E Roseville Road/Elkhorn Boulevard overpass		22	328	298	13.75	68%	13.21	65%
5140 Harrison Street		23	331	36	14.64	72%	13.63	67%
6321 Chestnut Avenue	Orangevale	24	455	65	18.95	94%	17.19	85%
6245 Beech Avenue		25	459	42	17.64	87%	17.50	87%
120 feet W of Elverta Road/Bellingrath Drive	Rio Linda/Elverta	26	1411	34	18.65	92%	17.64	87%
480 feet W of Elverta Road/Bellingrath Drive		27	1411	175	18.65	92%	17.64	87%
232 Elkhorn Boulevard		28	303	45	19.87	98%	18.73	93%
5919 Dry Creek Road		29	300	106	17.04	84%	17.22	85%
4541 Fruitridge Road	South Sacramento	30	493	53	15.47	77%	14.46	72%
5903 Southwest Avenue		31	495	85	13.42	66%	12.62	62%
SE 45th Avenue/Franklin Boulevard & 6301 Franklin Boulevard		32	698	51	12.70	63%	11.27	56%
4001 48th Avenue		33	696	105	13.16	65%	12.84	64%
NE 49th Avenue/Wesley Avenue		34	696	41	13.16	65%	12.84	64%
240 feet W of 47th Avenue/Stockton Boulevard		35	497	64	13.37	66%	13.31	66%
180 feet SE of Franklin Boulevard/ Meadowgate Drive		36	700	42	10.74	53%	10.80	53%
7236 E Parkway		37	701	62	15.81	78%	15.44	76%

Rezone Location	Community	Site #	TAZ	DU	VMT/Capita (Rezone Locations)			
					2016		Super-Cumulative	
					VMT per Capita	% of Region Wide	VMT per Capita	% of Region Wide
630 feet W of 66th Avenue/Stockton Boulevard		38	1160	175	14.05	70%	14.02	69%
6130 Orange Avenue		39	1160	70	14.05	70%	14.02	69%
6707 Stacy Avenue		40	503	33	16.33	81%	15.18	75%
NE Stockton Boulevard/Walter Avenue		41	898	67	13.14	65%	12.41	61%
7525 Power Inn Road & 7521 Power Inn Road		42	510	42	13.16	65%	12.51	62%
NE Stockton Boulevard/ Whitewillow Drive		43	898	128	13.14	65%	12.41	61%
7604 Elsie Avenue		44	914	18	15.91	79%	16.06	80%
7825 Robinette Road		45	914	123	15.91	79%	16.06	80%
SE Elsie Avenue/Power Inn Road		46	914	26	15.91	79%	16.06	80%
SW Elsie Avenue/Iona Way		47	914	10	15.91	79%	16.06	80%
140 feet W of Elsie Avenue/Iona Way	South Sacramento	48	914	12	15.91	79%	16.06	80%
220 feet S of Elsie Avenue/Iona Way		49	914	14	15.91	79%	16.06	80%
350 feet S of Elsie Avenue/Iona Way		50	914	28	15.91	79%	16.06	80%
7901 Stevenson Avenue		51	914	195	15.91	79%	16.06	80%
7516 Rangeview Lane		52	914	279	15.91	79%	16.06	80%
8016 Stevenson Avenue & 540 feet S of Stevenson Avenue/Power Inn Rd		53	1125	79	15.46	77%	14.25	71%
540 feet W of Lenhart Road/Power Inn Road		54	914	61	15.91	79%	16.06	80%
7333 Elsie Avenue		55	503	145	16.33	81%	15.18	75%

Rezone Location	Community	Site #	TAZ	DU	VMT/Capita (Rezone Locations)			
					2016		Super-Cumulative	
					VMT per Capita	% of Region Wide	VMT per Capita	% of Region Wide
8207 Elk Grove Florin Road	Vineyard	56	1127	72	20.30	100%	17.46	86%
8225 Elk Grove Florin Road		57	1127	71	20.30	100%	17.46	86%
NE Stockton Boulevard/Orange Avenue	South Sacramento	58	898	90	13.14	65%	12.41	61%
8095 E Stockton Boulevard & 8099 E Stockton Boulevard		59	1125	139	15.46	77%	14.25	71%
8553 Greenback Lane	Orangevale	60	453	10	15.10	75%	15.50	77%
NE Greenback Lane/Kenneth Avenue		61	453	6	15.10	75%	15.50	77%
300 feet E of Greenback Lane/Almond Avenue		62	459	8	17.64	87%	17.50	87%
NW Beech Avenue/Greenback Lane		63	459	52	17.64	87%	17.50	87%
8646 Greenback Lane		64	461	35	17.15	85%	16.44	81%
970 Oak Lane	Rio Linda/Elverta	65	302	111	20.04	99%	18.92	94%
864 Oak Lane		66	302	90	20.04	99%	18.92	94%
7904 Fair Oaks Boulevard	Carmichael/ Old Foothill Farms[1]	67	397	37	14.25	71%	13.40	66%
500 feet N of Watt Avenue/Q Street	North Highlands[2]	68	320	122	13.65	68%	15.14	75%
7235 Watt Avenue		69	320	184	13.65	68%	15.14	75%
0.2 miles S Watt Avenue/Elkhorn Blvd		70	316	154	13.11	65%	14.45	72%
0.1 miles N Watt Avenue/I Street		71	316	190	13.11	65%	14.45	72%
6233 Watt Avenue		72	318	85	13.86	69%	13.65	68%
8149 Florin Road	South Sacramento[3]	73	512	84	10.43	52%	12.09	60%
8165 Florin Road		74	512	141	10.43	52%	12.09	60%
90 feet N of Augusta Way/Bacchini Avenue		75	512	72	10.43	52%	12.09	60%

Rezone Location	Community	Site #	TAZ	DU	VMT/Capita (Rezone Locations)			
					2016		Super-Cumulative	
					VMT per Capita	% of Region Wide	VMT per Capita	% of Region Wide
430 feet N of McCurdy Lane/Florin Road		76	512	141	10.43	52%	12.09	60%
SE Power Inn Road/Florin Road		77	510	174	13.16	65%	12.51	62%
180 feet E of Florin Road/Kara Drive		78	510	90	13.16	65%	12.51	62%
8475 Florin Road & 180 feet S of Florin Road/Simon Street		79	1185	75	14.28	71%	12.69	63%
Weighted Average VMT per Capita				7,419	15.17	75%	14.74	73%

Notes: DU = Dwelling Unit; TAZ = Traffic Analysis Zone

Bold and **shaded** represent VMT Impact = VMT per Capita greater than 17.17 (85% of base year regionwide average)

Source: DKS Associates 2024.

As shown in Table TRAN-4, the Project as a whole would have a significant VMT impact as compared to the regionwide average. Additionally, as shown in Table TRAN-5, 18 of the 79 candidate rezone sites with development allowed under the Project would exceed the 85 percent threshold for VMT. Therefore, the Project would result in an increase of regionwide VMT under baseline conditions (but no increase of regionwide VMT under super-cumulative conditions) and development on specific candidate rezone sites would result in a significant VMT impact.

Pursuant to CEQA Guidelines Section 15162, the proposed Project would result in a new or substantially more severe impact from Project VMT. The Project's contribution to impacts would be significant.

MITIGATION MEASURES

MITIGATION MEASURE TRAN-1: PARTICIPATE IN THE COUNTY OF SACRAMENTO VMT MITIGATION PROGRAM

Applicants for individual development projects located on candidate rezone sites deemed to result in a significant VMT impact, as identified in Table TRAN-5 (Sites 2, 4, 6, 13, 14, 17, 18, 24, 25, 26, 27, 28, 56, 57, 62, 63, 65, and 66), shall compare their project to the VMT screening criteria below. If the applicant's individual project meets one of the screening criteria below, consistent with the County's Transportation Analysis Guidelines, the applicant shall submit a memo detailing the VMT screening consistency to the County's Environmental Coordinator for review and approval.

- Small Projects
    - Projects generating less than 237 average daily trips.
- Projects Near Transit Stations
    - High-Quality Transit: Project is located within ½-mile of an existing major transit stop or an existing stop along a high-quality transit corridor; and
    - Parking: Project does not include substantially more parking than required, such that it discourages transit use by making it too convenient to drive; and
    - Affordable Housing: Project does not replace affordable residential units with a smaller number of moderate- or high-income residential units; and
    - Active Transportation: Project does not negatively impact transit, bike, or pedestrian infrastructure.
- Affordable Residential Projects
    - Affordability: Screening criteria only apply to the affordable units; and
    - Parking: Project does not include substantially more parking than required, such that it discourages transit use by making it too convenient to drive; and
    - Transit Access: Project has access to transit within a ½ mile walking distance; and
    - Active Transportation: Project does not negatively impact transit, bike, or pedestrian infrastructure.

Individual development projects that do not meet any of the screening criteria shall first implement California Air Pollution Control Officers Association (CAPOCA) VMT reduction Measure T-16 to unbundle residential parking costs from property costs (i.e., require those who wish to purchase parking spaces to do so at an additional cost) (CAPCOA 2021). Additional on site VMT reduction measures may be established in the near-future, and individual development projects may utilize those on site measures as means to reduce an individual project's VMT below applicable thresholds. Individual project developers shall demonstrate if implementation of CAPCOA VMT reduction measure T-16 and/or other on site VMT reduction measures would reduce an individual project's VMT below applicable thresholds. Individual development projects that would continue to exceed the County's VMT thresholds following implementation of CAPCOA VMT reduction measure T-16 and/or other onsite VMT reduction measures shall participate in the County of Sacramento's VMT Mitigation Program, when and if the program has been adopted prior to development of the individual project.

SIGNIFICANCE AFTER MITIGATION

Mitigation Measure TRAN-1 would require development proposed on candidate rezone sites that would result in a significant VMT impact (i.e., exceed 85 percent of the regionwide average), as shown in Table TRAN-5, to complete an analysis to determine if the individual development project would screen out of a VMT impact consistent with the County's TAG. Individual projects that would continue to have a VMT impact after applying initial screening criteria shall implement CAPCOA VMT reduction measure T-16

that can result in up to 15.7 percent VMT reduction (CAPCOA 2021) and/or other on site VMT reduction measures. Individual projects that would continue to have a VMT impact after applying CAPCOA VMT reduction measure T-16 and/or other on site VMT reduction measures shall participate in the County's proposed VMT Mitigation Program, if and when the program is adopted. At this time, it can neither be ensured when the County's VMT Mitigation Program would be adopted nor the extent to which the program would reduce Project VMT on an individual project by project basis.

Pursuant to CEQA Guidelines Section 15162, the proposed Project would result in a new and substantially more severe VMT impact. The Project's contribution to impacts would be significant and overall impacts would be significant and unavoidable.

DISTINCT AREA PLANS

FAIR OAKS BOULEVARD CORRIDOR PLAN

ENVIRONMENTAL IMPACT REPORT DETERMINATION

Section 15064.3 of the State CEQA Guidelines was adopted in December 2018 providing that VMT is the "most appropriate measure of transportation impacts." Mandated analysis of VMT impacts became effective July 1, 2020. Therefore, the Fair Oaks Boulevard EIR did not evaluate impacts to VMT. However, VMT was a known and used metric at the time the Fair Oaks Boulevard EIR was prepared, but its use was generally limited to highway cost allocation, determining user fee structures, and estimating air quality and greenhouse gas emissions.

IMPACT EVALUATION

Table TRAN-6 shows VMT generated for each of the distinct area plans with implementation of the Project. As shown in Table TRAN-6 development allowed on Site 67 under the Project within the Fair Oaks Boulevard Corridor area would reduce VMT per capita by 0.39 (approximately 2.66 percent reduction). Additionally, as detailed in Table TRAN-5, Site 67 would not exceed 85 percent of the regionwide VMT per capita (i.e., 17.17 VMT per capita) at the parcel level.

Pursuant to CEQA Guidelines Section 15162, the proposed rezone of Site 67 would not result in a new or substantially more severe VMT impact. The contribution of development on Site 67 to traffic would be less than significant and overall impacts would be less than significant.

Table TRAN-6: VMT per Capita for Rezone Sites within Previous EIRs

Sacramento County CPAC	Number Of Sites	Number Of DU	VMT/Capita (Sacramento County CPACs)			
			2016		Super-Cumulative	
			Base	Rezone Change	No Build	Rezone Change
North Watt Avenue Corridor Plan EIR	5	735	15.39	13.42 -1.97	14.61	14.64 +0.04
Old Florin Town SPA EIR	7	777	13.90	11.73 -2.17	12.65	12.29 -0.36
Fair Oaks Blvd EIR	1	37	14.64	14.25 -0.39	13.46	13.40 -0.06
Regionwide VMT per Capita			20.20	20.26 +0.06	18.39	18.39
85% of Regional			17.17			

Notes: % = percent; TAZ = Traffic Analysis Zone

Bold numbers represent VMT per Capita greater than 17.17 (85% of base year regionwide average)

Source: DKS Associates 2024.

MITIGATION MEASURES

Mitigation not required.

NORTH WATT AVENUE CORRIDOR PLAN

ENVIRONMENTAL IMPACT REPORT DETERMINATION

Section 15064.3 of the State CEQA Guidelines was adopted in December 2018 providing that VMT is the "most appropriate measure of transportation impacts." Mandated analysis of VMT impacts became effective July 1, 2020. Therefore, the North Watt Avenue EIR did not evaluate impacts to VMT. However, VMT was a known and used metric at the time the North Watt Avenue EIR was prepared, but its use was generally limited to highway cost allocation, determining user fee structures, and estimating air quality and greenhouse gas emissions.

IMPACT EVALUATION

As shown in Table TRAN-6, development allowed on Sites 68 through 72 under the Project within the North Watt Avenue Corridor area would reduce VMT per capita by 1.97 (approximately 12.80 percent reduction). Additionally, as detailed in Table TRAN-5, Sites 68 through 72 would not exceed 85 percent of the regionwide VMT per capita (i.e., 17.17 VMT per capita) at the parcel level.

Pursuant to CEQA Guidelines Section 15162, the proposed rezone of Sites 68 through 72 would not result in a new or substantially more severe VMT impact. The contribution of development on Sites 68 through 72 to traffic would be less than significant and overall impacts would be less than significant.

MITIGATION MEASURES

Mitigation not required.

OLD FLORIN TOWN SPA

ENVIRONMENTAL IMPACT REPORT DETERMINATION

Section 15064.3 of the State CEQA Guidelines was adopted in December 2018 providing that VMT is the "most appropriate measure of transportation impacts." Mandated analysis of VMT impacts became effective July 1, 2020. Therefore, the Old Town Florin SPA EIR did not evaluate impacts to VMT. However, VMT was a known and used metric at the time the Old Florin Town SPA EIR was prepared, but its use was generally limited to highway cost allocation, determining user fee structures, and estimating air quality and greenhouse gas emissions.

IMPACT EVALUATION

As shown in Table TRAN-6, development allowed on Sites 73 through 79 under the Project within the Old Florin Town SPA would reduce VMT per capita by 2.17 (approximately 15.61 percent reduction). Additionally, as detailed in Table TRAN-5, Sites 73 through 79 would not exceed 85 percent of the regionwide VMT per capita (i.e., 17.17 VMT per capita) at the parcel level.

Pursuant to CEQA Guidelines Section 15162, the proposed rezone of Sites 73 through 79 would not result in a new or substantially more severe VMT impact. The contribution of development on Sites 73 through 79 to traffic would be less than significant and overall impacts would be less than significant.

MITIGATION MEASURES

Mitigation not required.

IMPACT TRAN-3: HAZARDOUS DESIGN FEATURE IMPACTS

SACRAMENTO COUNTY GENERAL PLAN

GENERAL PLAN ENVIRONMENTAL IMPACT REPORT DETERMINATION

The General Plan EIR evaluated the impacts to safety and found that the General Plan incorporated policies related to transportation facility planning, design, and implementation in accordance with accepted design standards and guidelines. Therefore, the General Plan EIR determined that the impact to safety would be less than significant.

PROPOSED PROJECT IMPACT EVALUATION

The Project would permit increased development density for the proposed candidate rezone sites. Future development on candidate rezone sites would be subject to, and designed in accordance with, the County's 2018 Improvement Standards or the most recent design standards available at the time of development. These standards address potential design hazards including sight distance, driveway placement, signage and striping. As part of SACDOT and SIPS review of the Project, conditions identifying the required driveway upgrades, distance between driveways, and other applicable design standards from the Improvement Standards addressing potential hazards were identified for each candidate rezone site. Additionally, any new transportation facilities, or

improvements to such facilities associated with subsequent development as part of the Project would be constructed based on industry design standards and best practices consistent with the County's General Plan Circulation Element, which prioritizes the safety of all modes of transportation as shown in the Regulatory Setting.

Pursuant to CEQA Guidelines Section 15162, the proposed Project would not result in a new or substantially more severe impact from hazardous design features. The Project's contribution to impacts would be less than significant and overall impacts would remain less than significant, consistent with the findings of the General Plan EIR.

MITIGATION MEASURES

Mitigation not required.

DISTINCT AREA PLANS

FAIR OAKS BOULEVARD CORRIDOR PLAN

ENVIRONMENTAL IMPACT REPORT DETERMINATION

The Fair Oaks Boulevard EIR stated that the addition of a raised median along Fair Oaks Boulevard would decrease collisions as crossing traffic and traffic slowing to enter the center turn lane would be reduced. However, additional traffic would be added to the signalized intersections as part of development from the Fair Oaks Boulevard Corridor Plan, as vehicles which formerly made mid-block left-turn movements would make U-turns at those intersections. The Roadway Project proposed in the Fair Oaks Boulevard Corridor Plan would geographically relocate left-turns in mid-block areas to U-turns at intersections; thus, it would relocate vehicle collisions. The Fair Oaks Boulevard EIR noted that it is was not known if the net change in vehicle collisions would increase or decrease. However, vehicles generally travel at lower speeds at intersections compared to mid-block locations. Therefore, the Roadway Project as part of the Fair Oaks Boulevard Corridor Plan was determined to result in a decrease in the severity of collisions.

Additionally, the Fair Oaks Boulevard EIR assumed that the overall changes outside of the Roadway Project area were likely to have characteristics similar to the Roadway Project and would, thus, have impacts similar to those within the Roadway Project area. Therefore, because the Roadway Project could result in a decrease in the severity of collisions, the area outside the Roadway Project site would similarly have fewer collisions. The Fair Oaks Boulevard EIR determined that the impact on safety would be less than significant.

IMPACT EVALUATION

As detailed under the Project impact evaluation above, future development on candidate rezone sites, including Site 67 located in the Fair Oaks Boulevard Corridor area, would be subject to, and designed in accordance with, the County's 2018 Improvement Standards or the most recent design standards available at the time of development. These standards address potential design hazards including sight distance, driveway placement, and signage and striping. Additionally, any new transportation facilities, or improvements to such facilities associated with Site 67 would be constructed based on industry design standards and best

practices consistent with the County's General Plan Circulation Element and principles and standards, which prioritizes the safety of all modes of transportation as shown in the Regulatory Setting. As part of SACDOT and SIPS review of the Project, conditions identifying the required driveway upgrades, distance between driveways, and other applicable design standards from the Improvement Standards addressing potential hazards were identified for each candidate rezone site, including Site 67.

Additionally, the Roadway Project proposed within the Fair Oaks Boulevard Corridor Plan has been constructed since the plan's approval. Therefore, development allowed on Site 67 as part of the Project would not disrupt the implementation of the safety enhancements because such enhancements have been already constructed.

Pursuant to CEQA Guidelines Section 15162, the proposed rezone of Site 67 would not result in a new or substantially more severe impact from hazardous design features. The contribution of development on Site 67 would be less than significant and overall impacts would remain less than significant, consistent with the findings of the Fair Oaks Boulevard EIR.

MITIGATION MEASURES

Mitigation not required.

NORTH WATT AVENUE CORRIDOR PLAN

ENVIRONMENTAL IMPACT REPORT DETERMINATION

The North Watt Avenue EIR considered impacts to public safety on area roadways in Chapter 17, "Initial Study Checklist" and stated that future projects would be required to comply with applicable access and circulation requirements of the County Improvement Standards and the Uniform Fire Code. Therefore, the North Watt Avenue EIR determined that the impacts related to transportation hazards would be less than significant.

IMPACT EVALUATION

There are five candidate rezone sites located within the North Watt Avenue Corridor area. Development allowed under the Project on Sites 68 through 72 would comply with the County's 2018 Improvement Standards or the most recent design standards available at the time of development. As detailed above, any new transportation facilities, or improvements to such facilities associated with Sites 68 through 72 would be constructed based on industry design standards and best practices consistent with the County's General Plan Circulation Element and principles and standards. As part of SACDOT and SIPS review of the Project, conditions identifying the required driveway upgrades, distance between driveways, and other applicable design standards from the Improvement Standards addressing potential hazards were identified for each candidate rezone site, including Sites 68 through 72.

Pursuant to CEQA Guidelines Section 15162, the proposed rezone of Sites 68 through 72 would not result in a new or substantially more severe impact from hazardous design features. The contribution of development on Sites 68 through 72 would be less than

significant and overall impacts would remain less than significant, consistent with the findings of the North Watt Avenue EIR.

MITIGATION MEASURES

Mitigation not required.

OLD FLORIN TOWN SPA

ENVIRONMENTAL IMPACT REPORT DETERMINATION

The Old Florin Town SPA EIR considered impacts to public safety on area roadways in Chapter 15, "Initial Study Checklist" and stated that future projects would be required to comply with applicable access and circulation requirements of the County Improvement Standards and the Uniform Fire Code. Therefore, the Old Florin Town SPA EIR determined that the impacts related to transportation hazards would be less than significant.

IMPACT EVALUATION

There are seven candidate rezone sites located within the Old Florin Town SPA. Development allowed under the Project on Sites 73 through 79 would comply with the County's 2018 Improvement Standards or the most recent design standards available at the time of development. As detailed above, any new transportation facilities, or improvements to such facilities associated with Sites 73 through 79 would be constructed based on industry design standards and best practices consistent with the County's General Plan Circulation Element and principles and standards. As part of SACDOT and SIPS review of the Project, conditions identifying the required driveway upgrades, distance between driveways, and other applicable design standards from the Improvement Standards addressing potential hazards were identified for each candidate rezone site, including Sites 73 through 79.

Pursuant to CEQA Guidelines Section 15162, the proposed rezone of Sites 73 through 79 would not result in a new or substantially more severe impact from hazardous design features. The contribution of development on Sites 73 through 79 would be less than significant and overall impacts would remain less than significant, consistent with the findings of the Old Florin Town SPA EIR.

MITIGATION MEASURES

Mitigation not required.

IMPACT TRAN-4: EMERGENCY ACCESS IMPACTS

SACRAMENTO COUNTY GENERAL PLAN

GENERAL PLAN ENVIRONMENTAL IMPACT REPORT DETERMINATION

The General Plan EIR evaluated the impacts to safety and concluded that the General Plan incorporates policies related to transportation facility planning, design, and implementation in accordance with accepted design standards and guidelines. Therefore,

the General Plan EIR concluded that impacts to emergency access and safety would be less than significant.

PROPOSED PROJECT IMPACT EVALUATION

Residential development implemented under the Project would be required to meet all State and local regulations related to emergency access during construction and operations. As detailed above, by virtue of being designed in accordance with County and applicable fire protection district standards and specifications, future development under the Project would provide adequate emergency access. Additionally, future developments would be required to comply with the California Fire Code of Regulations (Title 24, Part 9), adopted by reference in the Sacramento County Code, Section 17.04.010. This section of code requires the width of an unobstructed roadway to measure no less than 24 feet to provide adequate access for fire and emergency responders. Furthermore, the County requires coordination for all future subsequent development projects on the candidate rezone sites with Sacramento Metro Fire District (SMFD) and Pacific Fruitridge Fire District (PFFD, through which fire and emergency medical services are provided via a contract with the City of Sacramento) to ensure that the design of local roads would accommodate emergency vehicles. SMFD and PFFD have identified conditions of approval applicable to future residential development on the candidate rezone sites, specifically pertaining to the provision of adequate fire access (i.e., requirements for fire access roadways, aerial apparatus access, etc.). Adherence to these conditions and SMFD or PFFD design standards would ensure that adequate site distances and access for vehicles entering and leaving individual rezone sites is provided for safe travel. Additionally, prior to construction activities, future project proponents are required to coordinate with emergency service providers to ensure that there are no impediments to the provision of emergency services during and after individual project related construction activities.

Pursuant to CEQA Guidelines Section 15162, the proposed Project would not result in a new or substantially more severe impact to emergency access. The Project's contribution to impacts would be less than significant and overall impacts would remain less than significant, consistent with the findings of the General Plan EIR.

DISTINCT AREA PLANS

FAIR OAKS BOULEVARD CORRIDOR PLAN

ENVIRONMENTAL IMPACT REPORT DETERMINATION

The Fair Oaks Boulevard EIR did not analyze impacts related to emergency access.

IMPACT EVALUATION

As noted above, there is one candidate rezone site, Site 67, located within the Fair Oaks Boulevard Corridor area. Development allowed under the Project on Site 67 would be required to meet standards established in County Code Section 17.04.010 pertaining to emergency access, as described above for the Project. SMFD has identified conditions of approval applicable to future residential development on the candidate rezone sites,

specifically pertaining to the provision of adequate fire access (i.e., requirements for fire access roadways, aerial apparatus access, etc.). Adherence to these conditions and SMFD design standards would ensure that adequate site distances and access for vehicles entering and leaving Site 67 is provided for safe travel.

Pursuant to CEQA Guidelines Section 15162, the proposed rezone of Site 67 would not result in a new or substantially more severe emergency access impact. The contribution of development on Site 67 would be less than significant and overall impacts would remain less than significant, consistent with the findings of the Fair Oaks Boulevard EIR.

MITIGATION MEASURES

Mitigation not required.

NORTH WATT AVENUE CORRIDOR PLAN

ENVIRONMENTAL IMPACT REPORT DETERMINATION

The North Watt Avenue EIR considered impacts to access and circulation in Chapter 17, "Initial Study Checklist" and stated that future projects would be required to comply with applicable access and circulation requirements of the County Improvement Standards and the Uniform Fire Code. Therefore, the North Watt Avenue EIR determined that the impacts related to emergency access would be less than significant.

IMPACT EVALUATION

There are five candidate rezone sites located within the North Watt Avenue Corridor area. Development allowed under the Project on Sites 68 through 72 would be required to meet standards established in County Code Section 17.04.010 pertaining to emergency access, as discussed above for the Project. SMFD has identified conditions of approval applicable to future residential development on the candidate rezone sites, specifically pertaining to the provision of adequate fire access (i.e., requirements for fire access roadways, aerial apparatus access, etc.). Adherence to these conditions and SMFD design standards would ensure that adequate site distances and access for vehicles entering and leaving Sites 68 through 72 is provided for safe travel.

Pursuant to CEQA Guidelines Section 15162, the proposed rezone of Sites 68 through 72 would not result in a new or substantially more severe emergency access impacts. The contribution of development on Sites 68 through 72 to traffic noise would be less than significant and overall impacts would remain less than significant, consistent with the findings of the North Watt Avenue EIR.

MITIGATION MEASURES

Mitigation not required.

OLD FLORIN TOWN SPA

ENVIRONMENTAL IMPACT REPORT DETERMINATION

The Old Florin Town SPA EIR considered impacts to access and circulation in Chapter 15, "Initial Study Checklist" and stated that future projects would be required to comply

with applicable access and circulation requirements of the County Improvement Standards and the Uniform Fire Code. Therefore, the Old Florin Town SPA EIR determined that the impacts related to emergency access would be less than significant.

IMPACT EVALUATION

There are seven candidate rezone sites located within the Old Florin Town SPA. Sites 73 through 79 would be required to meet standards established in County Code Section 17.04.010 pertaining to emergency access, as described above for the Project. SMFD has identified conditions of approval applicable to future residential development on the candidate rezone sites, specifically pertaining to the provision of adequate fire access (i.e., requirements for fire access roadways, aerial apparatus access, etc.). Adherence to these conditions and SMFD design standards would ensure that adequate site distances and access for vehicles entering and leaving Sites 73 through 79 is provided for safe travel.

Pursuant to CEQA Guidelines Section 15162, the proposed rezone of Sites 73 through 79 would not result in a new or substantially more severe emergency services impact. The contribution of development on Sites 73 through 79 would be less than significant and overall impacts would remain less than significant, consistent with the findings of the Old Florin Town SPA EIR.

MITIGATION MEASURES

Mitigation not required.

IMPACT TRAN-5: AIRPORT SAFETY IMPACTS

SACRAMENTO COUNTY GENERAL PLAN

GENERAL PLAN ENVIRONMENTAL IMPACT REPORT DETERMINATION

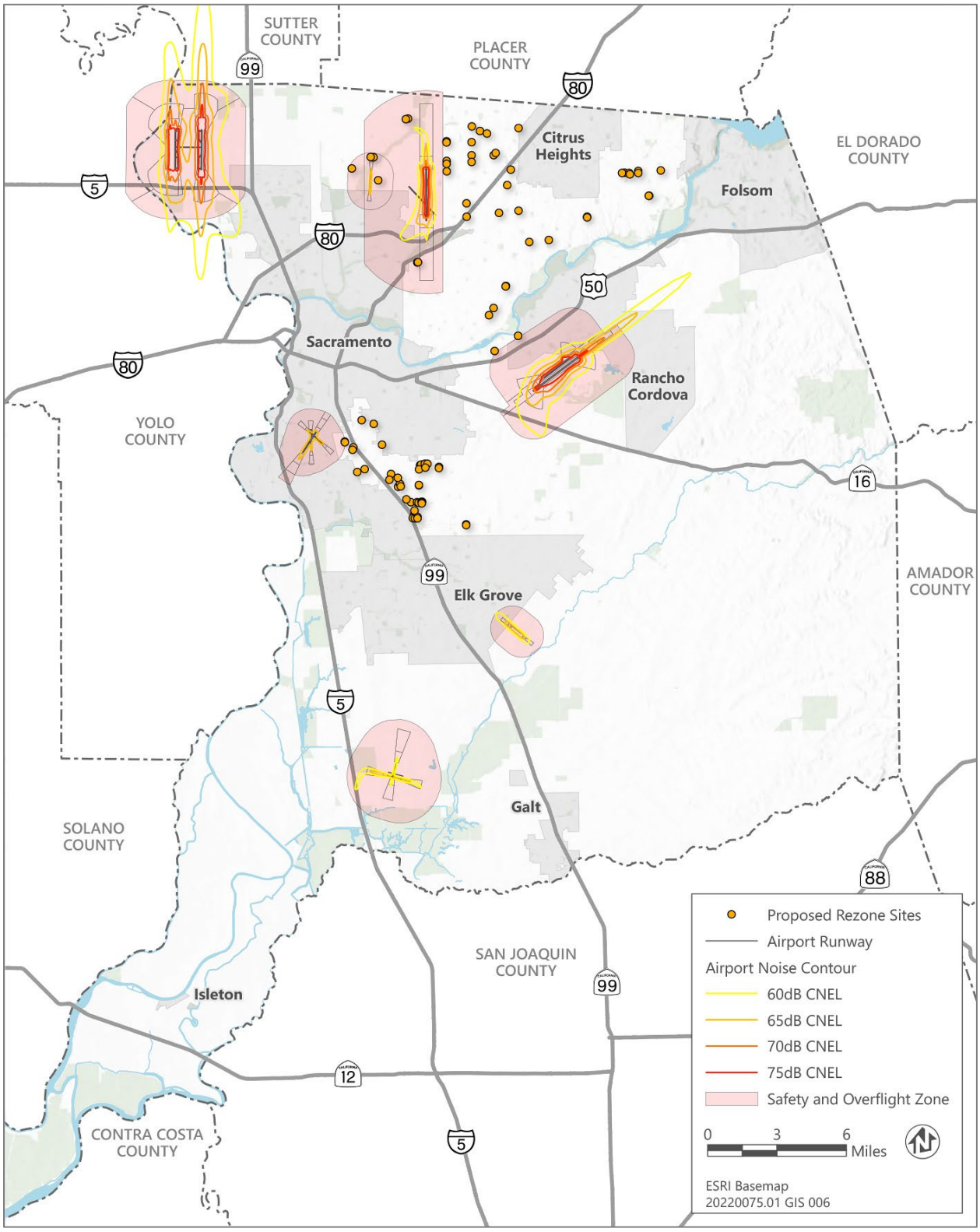
The General Plan EIR evaluated the impacts to airport safety zone incompatibility in the Land Use section of the EIR. The General Plan EIR stated that allowable uses with each safety zone would be restricted based on the applicable CLUPs. The General Plan EIR determined that compliance with provisions of the CLUPs for subsequent development would ensure safety impacts would be minimized. The General Plan EIR concluded that impacts to airport zone safety would be less than significant.

PROPOSED PROJECT IMPACT EVALUATION

There are no rezone sites proposed within the Sacramento International Airport, Mather Airport, Franklin Field Airport, Sacramento Executive Airport, or Sunset Skyranch Airport[1] safety zones. Therefore, herein, the airport safety impact analysis focuses on the impacts to/from the candidate rezone sites within the Rio Linda Airport and McClellan Airport safety zones. See Plate TRAN-1 for the location of the candidate rezone sites in relation to airports located in the County.

[1] The Sunset Skyranch Airport is permanently closed and thus no longer would result in airport hazards.

Plate TRAN-1: Proposed Rezone Sites



Source: Data received from Sacramento County in 2022; adapted by Ascent in 2023.

The SACOG Board of directors serves as the Airport Land Use Commission (ALUC) for Sacramento County. California's State Aeronautics Act (Public Utilities Code sections 21670 et seq.) identifies the role and responsibilities of ALUCs in land use planning. The Act is intended to ensure that proposed land uses in areas around public-use airports are compatible with continued airport operations.

The ALUC designates the following airport safety areas that are used to determine the allowable uses within particular buffered areas surrounding each airport: clear zone, approach-departure zone, and overflight zone. Table TRAN-7 shows the established land use compatibility guidelines for residential uses. All candidate rezone sites proposed within the airport safety zones (i.e., Sites 5, 26, 27, 28, 29, 68, 69, 73, 74, and 75) are located within the overflight zone of their associated airports.

Table TRAN-7: Residential Land Use Compatibility Guidelines for Airport Safety

Land Use Category	Compatibility With		
	Clear Zone	Approach-Departure Zone	Overflight Zone
Single-Family Detached	No	Yes[1]	Yes
Two-Family Dwelling	No	No	Yes
Multi-Family Dwelling (3+ families)	No	No	Yes
Group Quarters and Rooming Houses	No	No	Yes
Mobile Home Parks or Courts	No	No	Yes

Note:

[1] Single-family residential is a compatible land use only if the density of five acres or more per single family residence.

Source: SACOG 1987: 46; SACOG 1988; 32; SACOG 1998; 35.

The Federal Aviation Regulations Part 77 (CFR 14 FAR Part 77) requires proposed structures that exceed height criteria specified in the regulations to notify the FAA and undergo an Obstruction Evaluation/Airport Airspace Analysis. Projects proposing the development of any structures exceeding the height criteria must submit a Notice of Proposed Construction or Alteration to the FAA under CFR 14 FAR Part 77. Any proposed new construction or expansion of existing structures that would penetrate any of the imaginary surfaces for the Rio Linda Airport or McClellan Airport, as adopted by the ALUC, is deemed to be an incompatible land use, unless either the FAA has determined that the proposed structure does not constitute a hazard to air navigation or the State Division of Aeronautics has issued a permit allowing construction of the proposed structure. Therefore, subsequent development allowed under the Project would be required to meet the regulations established in FAR 14 CFR Part 77 if individual development would have the potential to penetrate the height notification limits of FAR 14 CFR Part 77 and would be required to notify the FAA to undergo formal evaluation that would ensure the Project would not result in a safety hazard for people residing within the vicinity of the of the candidate rezone sites.

The County received a letter of determination from SACOG in February 2024 stating that the Project's proposed rezone of 12 sites within the influence areas of McClellan Airport and Rio Linda Airport would be consistent with the associated CLUPs and California Airport Land Use Planning Handbook (SACOG 2024). Additionally, the letter of

determination found that with regard to height limits, all of the rezone sites are located far enough from the airports to be restricted to no less than 150 feet above the airports' elevations. The proposed zoning for the candidate rezone sites limits height restrictions to below 150 feet. Therefore, development allowed under the Project would be consistent with the ALUCPs' height limit criteria.

Pursuant to CEQA Guidelines Section 15162, the proposed Project would not result in a new or substantially more severe impact from airport hazards. The Project's contribution to impacts would be less than significant and overall impacts would remain less than significant, consistent with the findings of the General Plan EIR.

MITIGATION MEASURES

Mitigation not required.

DISTINCT AREA PLANS

FAIR OAKS BOULEVARD CORRIDOR PLAN

ENVIRONMENTAL IMPACT REPORT DETERMINATION

The Fair Oaks Boulevard EIR did not analyze impacts related to airport safety.

IMPACT EVALUATION

As noted above, there is one candidate rezone site, Site 67, located within the Fair Oaks Boulevard Corridor area. The Fair Oaks Boulevard Corridor area is located more than two miles away from the nearest airport. Therefore, Site 67 is not located within an airport land use plan. Development allowed on Site 67 under the Project would not result in a safety hazard for people residing or working in the Fair Oaks Boulevard Corridor area.

Pursuant to CEQA Guidelines Section 15162, the proposed rezone of Site 67 would not result in a new or substantially more severe impact from airport hazards. The contribution of development on Site 67 to airport hazards would be less than significant and overall impacts would remain less than significant, consistent with the findings of the Fair Oaks Boulevard EIR.

MITIGATION MEASURES

Mitigation not required.

NORTH WATT AVENUE CORRIDOR PLAN

ENVIRONMENTAL IMPACT REPORT DETERMINATION

The North Watt Avenue EIR analyzed impacts related to airport safety in Chapter 5, "Airport Compatibility." The North Watt Avenue Corridor area is located directly adjacent to the McClellan Airport. Therefore, impacts related to airport safety were associated with the McClellan Airport and the regulations established in the McClellan Airport CLUP. The North Watt Avenue EIR found that development proposed by the plan would not exceed

height standards defined in FAR Part 77; thus, the North Watt Avenue Corridor Plan was not expected to impact navigable airspace.

The North Watt Avenue EIR states that the Triangle Gateway District of the North Watt Avenue Corridor area is located partially within the McClellan Airport Overflight Zone and the Approach-Departure Zone. Additionally, a very small portion of the North Watt Avenue Corridor Plan EIR area is located within the Clear Zone. The North Watt Avenue EIR found that the plan would implement incompatible uses within the Approach-Departure Zone as well as the Clear Zone. The North Watt Avenue EIR determined that although airport policies can be overridden through Board discretion, the safety impacts from buildout of the plan would still occur. No feasible mitigation could be applied to reduce the potential impact of siting nonconforming uses to a less than significant level. Therefore, the North Watt Avenue EIR determined the impacts related to airport safety and policy would be significant and unavoidable.

IMPACT EVALUATION

There are five candidate rezone sites located within the North Watt Avenue Corridor area, and two of the candidate rezone sites are located within the McClellan Overflight Zone (i.e., Site 68 and Site 69). As detailed above, residential uses are identified as compatible uses within the Overflight Zone as identified in the McClellan Airport CLUP, and the Project obtained a letter of determination that states that the Project, including Sites 68 and 69 are consist with the McClellan Airport CLUP and California Airport Land Use Planning Handbook (SACOG 2024).The Project does not propose to change the maximum height restrictions as currently allowed on Sites 68 and 69. However, development on Sites 68 and 69 are subject to FAR Part 77 regulations associated with building height.

Pursuant to CEQA Guidelines Section 15162, the proposed rezone of Sites 68 through 72 would not result in a new or substantially more severe impact from airport hazards. The contribution of development on Sites 68 through 72 to would be less than significant and overall impacts would remain less than significant, consistent with the findings of the North Watt Avenue EIR.

MITIGATION MEASURES

Mitigation not required.

OLD FLORIN TOWN SPA

ENVIRONMENTAL IMPACT REPORT DETERMINATION

The Old Florin Town SPA EIR considered and dismissed impacts related to airport safety as the Old Florin Town SPA Initial Study Checklist determined that all impacts related to airports would be less than significant.

IMPACT EVALUATION

There are seven candidate rezone sites located within the Old Florin Town SPA, Sites 73 through 79. The Old Florin Town SPA is located more than two miles from the nearest airport. Therefore, development under the Project on Sites 73 through 79 are not located within an airport land use plan. Development on Sites 73 through 79 as allowed by the

Project would not result in a safety hazard for people residing or working in the Old Florin Town SPA.

Pursuant to CEQA Guidelines Section 15162, the proposed rezone of Sites 73 through 79 would not result in a new or substantially more severe impact from airport hazards. The contribution of development on Sites 73 through 79 to airport hazards would be less than significant and overall impacts would remain less than significant, consistent with the findings of the Old Florin Town SPA EIR.

MITIGATION MEASURES

Mitigation not required.

CUMULATIVE TRANSPORTATION

CUMULATIVE SETTING

The geographic scope of analysis for cumulative impacts related to VMT includes the Sacramento Region, based on the OPR Technical Advisory. The geographic scope for the analysis of the impacts related to a program, plan, ordinance, or policy addressing the circulation system, substantially increasing hazards due to geometric features or incompatible uses, and inadequate emergency access, would be different than the geographic scope for the VMT analysis, which would include all past, present, and probable future projects that would have the potential to affect the same transit, roadway, bicycle, and pedestrian facilities within the Project area and the interconnected circulation system of the County of Sacramento.

CUMULATIVE IMPACTS EVALUATION

IMPACT TRAN-6: THE PROJECT, IN COMBINATION WITH PAST, PRESENT, AND REASONABLY FORESEEABLE PROJECTS WOULD NOT RESULT IN IMPACTS TO TRANSIT, BICYCLE, AND PEDESTRIAN FACILITIES

As described above, implementation of the Project would be subject to and implement General Plan and Active Transportation Plan policies applicable to transit, bicycle, and pedestrian facilities and service. Additionally, subsequent development projects under the Project would be subject to all applicable County guidelines, standards, and specifications related to transit, bicycle, and/or pedestrian facilities. Therefore, the Project's contribution to substantial effects related to transit, bicycle, and pedestrian facilities would not be considerable and thus not significant.

IMPACT TRAN-7: THE PROJECT, IN COMBINATION WITH PAST, PRESENT, AND REASONABLY FORESEEABLE PROJECTS COULD RESULT IN A SIGNIFICANT CUMULATIVE VMT IMPACT

Table TRAN-4 details the cumulative VMT impact from the Project. As shown in Table TRAN-4, the Project would not result in a change in VMT per capita in the cumulative context. However, the Project would result in a 0.3 percent increase in total regionwide network VMT. Therefore, the Project would result in a more severe impact as compared to No Project conditions.

As detailed above, subsequent development associated with the Project that would exceed 85 percent of the regionwide VMT per capita at the parcel level (as identified in Table TRAN-5) would be subject to Mitigation Measure TRAN-1. Although participation in the County's VMT Mitigation Program would reduce VMT, at this time, it cannot be guaranteed when that program will be adopted by the County and the effectiveness for VMT reduction. Therefore, the Project's contribution to substantial effects related to VMT would be significant and cumulatively considerable.

IMPACT TRAN-8: THE PROJECT, IN COMBINATION WITH PAST, PRESENT, AND REASONABLY FORESEEABLE PROJECTS WOULD NOT RESULT IN HAZARDS DUE TO A DESIGN FEATURE OR INCOMPATIBLE USES

Cumulative impacts from Project-generated construction effects on transportation would result if other future planned construction activities were to take place close to a proposed rezone site and cumulatively combine to exacerbate the construction-related transportation impacts of the Project. Construction of individual developments associated with the Project would be temporary and short-term. Additionally, implementation of the individual developments under the Project would be subject to, and constructed in accordance with, applicable roadway design and safety guidelines. Therefore, the Project's contribution to substantial effects related to design features or incompatible uses would not be considerable and thus not significant.

IMPACT TRAN-9: THE PROJECT, IN COMBINATION WITH PAST, PRESENT, AND REASONABLY FORESEEABLE PROJECTS WOULD NOT RESULT IN A SIGNIFICANT CUMULATIVE EMERGENCY ACCESS IMPACT

Implementation of the individual developments under the Project would be subject to, and constructed in accordance with, applicable roadway design and safety guidelines and would be subject to review by Sacramento Metro Fire District and all applicable fire districts to ensure emergency access is adequately provided and maintained at subsequent developments under the Project. Therefore, the Project's contribution to substantial effects related to emergency access would not be considerable and thus not significant.

IMPACT TRAN-10: THE PROJECT, IN COMBINATION WITH PAST, PRESENT, AND REASONABLY FORESEEABLE PROJECTS WOULD NOT RESULT IN A SIGNIFICANT CUMULATIVE AIRPORT SAFETY IMPACT

As detailed in the Project level analysis above, FAR 14 CFR Part 77 regulations require proposed structures that exceed height criteria specified in the regulations to notify the FAA and undergo an Obstruction Evaluation/Airport Airspace Analysis. Projects proposing the development of any structures exceeding the height criteria must submit a Notice of Proposed Construction or Alteration to the FAA under 14 CFR Part 77. FAA review and issuance of a determination that a proposed structure would not be a hazard to air navigation, which could include factors other than height, such as flight direction and trajectory, and compliance with any conditions set forth in such FAA determinations, would ensure that new structures developed within the cumulative context would not result in air safety hazards. Additionally, future projects within airport influence areas would be required to undergo the ALUC's review process and obtain approval which would ensure other developments would not result in an airport safety hazard.

As detailed above, the Project obtained a letter of determination for the 12 rezone sites proposed within airport influence areas stating that the Project is consistent with relevant CLUPs and the California Airport Land Use Planning Handbook. Therefore, implementation of the Project would not be cumulatively considerable with respect to airport safety hazards for people residing or working in the Project area. The Project's contribution to substantial effects related to airport safety would not be considerable and thus not significant.

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11 TRIBAL CULTURAL RESOURCES

INTRODUCTION

This chapter analyzes and evaluates the potential impacts of the Project on known and unknown (undiscovered or unidentified) tribal cultural resources. Tribal cultural resources, as defined by Assembly Bill (AB) 52, Statutes of 2014, in Public Resources Code (PRC) Section 21074, are sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a tribe. A tribal cultural landscape is defined as a geographic area (including both cultural and natural resources and the wildlife therein) associated with a historic event, activity, or person or exhibiting other cultural or aesthetic values. Impacts related to cultural resources are discussed in Chapter 1, "Introduction."

AB 52 consultation requirements went into effect on July 1, 2015, for all projects that had not already published a Notice of Intent to Adopt a Negative Declaration or Mitigated Negative Declaration or published a Notice of Preparation (NOP) of an Environmental Impact Report prior to that date (Section 11 [c]). The County General Plan, Fair Oaks Boulevard Corridor Plan, North Watt Avenue Corridor Plan, and Old Florin Town Special Planning Area (SPA) were adopted and EIRs certified in November 2011, October 2011, August, 2012, and July 2011, respectively. AB 52 consultation was not conducted for these EIRs because their certification predated passage of AB 52.

One scoping comment regarding tribal cultural resources was received in response to the NOPs (see Appendix INTRO-1). The Native American Heritage Commission (NAHC) requested AB 52 and Senate Bill (SB) 18 compliance information; although SB 18 does apply to the proposed Project because there is a General Plan amendment associated with the Project (which is the trigger for SB 18 compliance), SB 18 is not a CEQA requirement and therefore is not discussed in this section. AB 52 compliance is described below.

TRIBAL CULTURAL RESOURCES

Tribal cultural resources are defined in CEQA statute Section 21074 (see "Existing Tribal Cultural Resources Regulatory Setting" below) and may include:

- **Resource Collection Location:** This is a location where Native Americans have historically gone, and are known or believed to go today, to collect resources in accordance with traditional cultural rules of practice.
- **Spiritual Location:** This is a location where Native American religious practitioners have historically gone, and are known or believed to go today, to perform ceremonial activities in accordance with traditional cultural rules of practice.
- **Traditional Location:** This is a location associated with the traditional beliefs of a Native American group about its origins, its cultural history, or the nature of the world.

- **Cemetery:** A cemetery is a location that has been selected for human burial or interment.

Additionally, different types of archaeological resources may also be tribal cultural resources; they include the following features:

- **Village Site:** Village sites are locations of continuous and concentrated habitation that typically have a large, well-developed midden deposit containing abundant artifactual evidence. They may also contain burials, rock art, bedrock milling stations, or other features.
- **Burial Site:** A burial site or cemetery is a location where intentional human interments are found in large numbers and close concentration. These locations typically lack evidence of other prehistoric activities.
- **Milling Site:** This is a boulder or group of boulders or bedrock outcrops that contain at least one modified surface (mortar, slick, or metate) caused by the processing of food or other natural resources.
- **Lithic Workshop:** A lithic workshop is a distribution of stone flakes and tool fragments reflecting purposeful modification of parent stone through percussion and/or pressure detachment.
- **Shell Middens:** Shell middens are locations with large amounts of marine shell that extend to an appreciable depth below ground surface. They are normally found in coastal contexts but have been found in the interior.
- **Rock Art:** Rock art consists of designs or design elements on rock surfaces created by surface applications (pictographs) or by etching (petroglyphs).
- **Rock Shelters:** These are natural caves or crevices in rock outcrops in which human use has left artifactual remains.

EXISTING ENVIRONMENTAL TRIBAL CULTURAL RESOURCES SETTING

State CEQA Guidelines Section 15162 indicates that should a lead agency determine that substantial changes to the project or its circumstances result in a new or more significant impact compared to what was addressed in a project's previous EIR, or new information of substantial importance results in a new or more significant impact, a subsequent EIR (SEIR) should be prepared. Therefore, this document serves as a SEIR to Sacramento County's 2030 General Plan EIR (General Plan EIR), as well as to EIRs prepared for various distinct area plans within which a portion of the candidate rezone sites are located. Applicable distinct area plan EIRs include the Fair Oaks Boulevard Corridor Plan EIR (Fair Oaks Boulevard EIR), the North Watt Avenue Corridor Plan EIR (North Watt Avenue EIR), and the Old Florin Town Special Planning Area (SPA) EIR (Old Florin Town SPA EIR). The regional housing needs allocation (RHNA) shortfall of 2,884 lower income category units and needed buffer could not have been known at the time of the General Plan EIR certification, and the RHNA is in excess of the number of dwelling units analyzed in the General Plan EIR. The number of additional units required in various

special planning areas was not known at the time the applicable environmental documents were certified. As required by Section 15162, this SEIR evaluates the potential for the proposed Project or changes in the circumstances to result in new or substantially more severe significant environmental impact than previously analyzed under the General Plan EIR and distinct area plan EIRs. Existing tribal cultural resources for the unincorporated County, Fair Oaks Boulevard Corridor Plan area, North Watt Avenue Corridor Plan area, and Old Florin Town SPA are summarized below.

Sacramento County Existing Tribal Cultural Resources Setting

This environmental setting represents the tribal cultural resources setting in the unincorporated County, Fair Oaks Boulevard Corridor area, North Watt Avenue Corridor area, and Old Florin Town SPA. There is no distinction in the existing setting for tribal cultural resources between the General Plan planning area and three distinct planning areas, as tribes do not follow the planning boundaries.

Tribes

Ethnographic records show that the groups that inhabited Sacramento County are the Nisenan (Southern Maidu) and the Plains Miwok (an Eastern Miwok subgroup).

Nisenan

The Nisenan occupied the County at the time of Euro-American contact (ca. 1850s). Several ethnographers have studied the Maidu people and generally agree that Nisenan territory included the drainages of the Bear, American, Yuba, and southern Feather rivers. Their permanent settlements were generally located on ridges separating parallel streams, either on crests, knolls, or terraces, part way up these ridges (Wilson and Towne 1978).

Nisenan territory offered abundant year-round food sources. Food gathering was based on seasonal ripening, but hunting, gathering, and fishing went on all year, with the greatest activity in late summer and early fall. They gathered many different staples, not depending on one crop. Seasonal harvests were gathered for both communal and personal family use. Most activities and social behaviors such as status, sharing, trading, ceremonies, and disagreements were important adjuncts to the gathering and distribution of food. Extended families or whole villages of hill Nisenan would gather acorns. Men would hunt while women and children gathered the acorns knocked from the trees. Buckeye nuts, sugar and digger pine nuts, and hazelnuts were also gathered. Acorns were cracked on an acorn anvil and shelled. They were then ground into flour using a bedrock mortar (grinding rock) and a soaproot brush to control scattering the resulting flour. The flour was leached to remove the tannin then cooked in watertight baskets. Cooking was done with fire heated stones that were lifted with two sticks, dipped in water to clean them, and then dropped into the cooking basket. Enough soup and mush were usually prepared to last several days (UAIC 2021a).

Roots were dug with a digging stick in the spring and summer and were eaten raw, steamed, baked, or dried and pounded in mortars and pressed into cakes to be stored for winter use. Wild onion (*chan*), sweet potato (*sí kum*), and “Indian potato” (*dúbus*) were

the most desired. Wild carrot (*ba*) was used as medicine while wild garlic was used to wash the head and body. Grasses, herbs, and rushes provided food and material for clothing and baskets. Clover (*Trifolium willdenovii*) was an important food for Nisenan people as it was the first fresh herb available after winter and its emergence set the timing of the Nisenan spring flower dance. Seeds were gathered using a seed beater and tray. They were then parched, steamed, dried, or made into mush. Many varieties of wild plums, native berries, grapes, and other native fruits were eaten. Manzanita berries were often traded to the valley or made into a cider-like drink.

Deer drives were common, with several villages participating and the best shot doing the killing. The animals were often driven into a circle of fire then killed. Deer were also hunted using deadfalls, snares, as well as deerskin and antler decoys. Sometimes they were run down on soft ground or snow. Antelope were taken by surround, drives, and flag decoys while elk were usually killed along waterways on soft ground. The bear hunt was very ceremonial. Black bears were usually hunted in the winter. Lighted brands were often used to drive them from their dens. Grizzlies that lived on the valley floor were greatly feared and rarely hunted. Wildcats and California mountain lions were hunted for food and their skins. Rabbits and other small game were killed with blunted arrows and sticks. Traps, nets, snares, fire, and rodent hooks were also used. In the foothills and valley nets were made into a fence where driven rabbits were entangled and clubbed. Drives generally took place in the late spring. The man in charge of the drive divided the catch. Other small animals were often caught and killed, with exception to the coyote. Game meat was baked, roasted, or dried.

Weirs, traps, harpoons, nets, and gorge hooks, as well as tule balsas and log canoes were used in fishing. Fish were poisoned using turkey mullein and soaproot or driven into shallow water and caught by hand. Freshwater mussels were obtained in the larger rivers. On the lower courses, sturgeon and salmon were netted and speared. Whitefish, suckers, and trout were caught at higher elevations. Waterfalls were eel fishing (freshwater lamprey) stations; Salmon Falls, on the south fork of the American River was one such location. Birds were taken with nets, arrows, snares, traps, and nooses. Owls, vultures, and condors were not killed. Bird skins and feathers were used for regalia, clothing, and decoration. Salt was acquired from springs near Lincoln, Cool, and Latrobe. It was also acquired from a plant with cabbage-like leaves gathered in the summer (UAIC 2021a; Wilson and Towne 1978).

Plains Miwok

The Plains Miwok are part of the larger Eastern Miwok group that forms one of the two major divisions of the Miwokan subgroup of the Utian speakers. The Plains Miwok lived in the Sacramento Valley along the Sacramento, Cosumnes, and Mokelumne rivers. They built their homes on high ground, with major villages concentrated along the major waterways. Conical homes were constructed with poles and thatching of brush, grass, or tule, though semisubterranean earth-covered homes were built as well. Major villages contained an assembly house, which was a semisubterranean structure with a diameter of 40 to 50 feet, as well as a sweathouse, which was a scaled-down version of the assembly house. Plains Miwok people utilized the rich resources of the delta and

surrounding area for both dietary needs and material culture. Tules were woven into matting and clothing, bundled to form canoes, and used in house and granary construction. Salt, nuts, basketry, and obsidian were obtained through trade with neighboring tribes to the east for shells, basketry, and bows obtained in turn through trade from tribes located to the west (Levy 1978).

The Plains Miwok gathered food resources as the seasons varied. As with most California tribes, they subsided heavily on the acorn, but also gathered nuts, seeds, roots, greens, berries, and mushrooms. Animal foods included tule elk, pronghorn antelope, jackrabbits, squirrels, beaver, quail, and waterfowl. Salmon was the dominant animal food resource, ranking above other river resources, such as sturgeon. Technological items of the Plains Miwok included wooden digging sticks, poles, and baskets used for gathering vegetal resources, and stone mortars, pestles, and cooking stones used for processing. Items used for obtaining animal resources included nets, snares, seines, bows, and arrows. Arrow points were made primarily of basalt and obsidian.

The Native American population in the Sacramento Valley first came into contact with Spanish explorers in the late 1700s as the Franciscan missions sought converts. Plains Miwok converts were sent to Mission San José in the early 1800s. Many labored in large ranchos awarded during the Mexican period.

During two epidemics, in 1830 and 1837, foreign diseases decimated the populations of indigenous people in the Sacramento Valley. The discovery of gold in 1848 and the ensuing Gold Rush also contributed to substantial population declines. Between 1805 and 1856, the Miwok population declined from nearly 20,000 to approximately 3,000. Surviving Miwok labored for the growing mining, ranching, farming, and lumber industries (Levy 1978).

CONTEMPORARY NATIVE AMERICAN SETTING

As archaeologists routinely focus on traditional Native American lifeways and ignore current and vibrant Native American culture, a sufficient context or set of values maintained by the current Native American community related to their history and the landscape is often ignored. To help remedy this for the Project, a discussion of the contemporary Native American setting is included below.

United Auburn Indian Community (UAIC) is one of the contemporary Native American communities in the Project area. Descendants of Nisenan and other Maidu peoples are also present within the county. UAIC is a federally recognized tribe comprised of both Miwok and Maidu (Nisenan) tribal members who are traditionally and culturally affiliated with the Project area. The tribe has deep spiritual, cultural, and physical ties to their ancestral land and are contemporary stewards of their culture and landscapes. The Tribal community represents a continuity and endurance of their ancestors by maintaining their connection to their history and culture. It is the tribe’s goal to ensure the preservation and continuance of their cultural heritage for current and future generations (UAIC 2021b).

The contemporary history of UAIC has similarities to those of many other California Native American tribes in the Sacramento River Valley and throughout the State. In 1917, the United States acquired land in trust for the Auburn Band (the predecessor of the UAIC) near the city of Auburn and formally established a reservation, known as the Auburn Rancheria. Tribal members continue to live on this reservation as a community despite great adversity.

In 1953, the United States Congress enacted the Rancheria Acts, authorizing the termination of federal trust responsibilities to a number of California Indian tribes including the Auburn Band. In 1991, surviving members of the Auburn Band reorganized their tribal government as the UAIC and requested that the United States formally restore their federal recognition. In 1994, Congress passed the Auburn Indian Restoration Act, which restored the tribe's federal recognition. The Act provided that the tribe may acquire land in Placer County to establish a new reservation.

Today, as throughout their history, many Native American tribes, such as the UAIC, consider themselves contemporary stewards of their culture and the landscape. These tribal communities represent a continuum from the past to the present. They are resilient, vibrant, and active in the community. Tribes maintain their connection to their history and ongoing culture by practicing traditional ceremonies, engaging in traditional practices (e.g., basketry), and conducting public education and interpretation. The acknowledgement of Native American history and the persistence of tribes cannot be overlooked and should be recognized. Indeed, Native American communities of the Sacramento River Valley and their history are commemorated in the city of Sacramento, on the grounds of the Capitol, and at Sacramento City Hall. Collaboration and consultation with tribes to identify their perspective and incorporate their stewardship ethic to the fullest extent feasible in research is the best way to acknowledge the presence and contributions of Native Americans in both the past and the present, as well as paving a respectful and inclusive pathway to the future (UAIC 2021b).

The members of Wilton Rancheria are descendants of the Penutian linguistic family identified as speaking the Miwok dialect. The tribe's Indigenous Territory encompasses Sacramento County. The lands the tribe's ancestors inhabited were located along a path of massive death and destruction of California Indians caused by Spanish, Mexican, and American military incursions, disease and slavery, and the violence accompanying mining and settlements (Wilton Rancheria 2023).

The tribe's ancestors came back from nearly being annihilated only to have their children taken to boarding schools that stripped their indigenous language and culture further. Finally in July of 1928, the United States of America acquired land in trust for the Miwok people that were living in Sacramento County. A 38.77-acre tract of land in Wilton, Sacramento County, California was purchased from the Cosumnes Company which formally established the Wilton Rancheria. In 1958, the United States Congress enacted the Rancheria Act, authorizing the termination of federal trust responsibilities to 41 California Indian tribes including Wilton Rancheria. The tribe official lost its Federal Recognition in 1964.

Congress reconsidered their policy of termination in favor of Indian self-determination in the 1970s. In 1991, surviving members of Wilton Rancheria reorganized their tribal government and in 1999 they requested the United States to formally restore their federal recognition. Ten years later a decision of a US District Court Judge gave Wilton Rancheria restoration, restoring the tribe to a Federally Recognized tribe in 2009. Wilton Rancheria is a federally recognized Indian tribe as listed in the Federal Register, Vol. 74, No. 132, p. 33468-33469, as "Wilton Rancheria of Wilton, California." The tribe passed their constitution in 2011. It stated its four branches of government that includes the Office of the Chair & Vice Chair, the Tribal Council, a Tribal-Court, and the General Council. The tribe's administration office is located in the City of Elk Grove, Sacramento County in California settlements (Wilton Rancheria 2023).

NATIVE AMERICAN TRIBAL CONSULTATION

The General Plan EIR and distinct area plan EIRs were certified prior to the passage of AB 52. Therefore, no tribal cultural resources setting or background was prepared for any of the previous EIRs.

On June 21, 2023, in compliance with AB 52 requirements, the County sent letters to the three tribal representatives in and surrounding the Project area. A list of the tribes contacted is provided below:

- Ione Band of Miwok Indians; Cultural Committee Chair
- United Auburn Indian Community of the Auburn Rancheria; Gene Whitehouse, Chairperson
- Wilton Rancheria; Steven Hutchason, THPO

No responses were received from any of the tribes as a result of the AB 52 consultation efforts.

EXISTING TRIBAL CULTURAL RESOURCES REGULATORY SETTING

FEDERAL

SECTION 106 OF THE NATIONAL HISTORIC PRESERVATION ACT, 1966

Federal regulations for cultural resources are governed primarily by Section 106 of the National Historic Preservation Act (NHPA) of 1966 (as amended). Section 106 of the NHPA requires Federal agencies to consider the effects of their undertakings on historic properties and affords the Advisory Council on Historic Preservation a reasonable opportunity to comment on such undertakings. The Advisory Council on Historic Preservation's implementing regulations are the "Protection of Historic Properties" 36 Code of Federal Regulations Part 800. The Federal agency first must determine whether it has an undertaking that is a type of activity that could affect historic properties. Historic properties are those that meet the criteria for or are listed in the National Register of Historic Places (NRHP).

Traditional Cultural Properties

Traditional Cultural Properties (TCPs) are resources eligible for listing on the NRHP based on cultural significance derived from the "beliefs, customs, and practices of a living community of people that have been passed down through the generations" ([NPS] 1998:1). TCPs embrace a wide range of historic properties, such as the location associated with a Native American group's origin or the origin of the world (cosmogony), or an urban neighborhood that is the traditional home of a particular cultural group and that still reflects and is associated with their beliefs and practices. Other examples include places where traditional people historically have gone and continue to visit for ceremonial practices. These examples are not intended to be exhaustive, but instead to illustrate the range of possible TCPs. The National Park Service National Register Bulletin 38 defines a historical property as a place that is eligible for NRHP inclusion "because of its association with cultural practices or beliefs of a living community that (a) are rooted in the community's history and (b) are important in maintaining the continuing cultural identity of the community" (NPS 1998:1). The identification and evaluation of TCPs can be conducted only by consultation with members of the relevant group of people that ascribe value to the resource, or through other forms of ethnographic research.

Evaluation of TCPs

Federal agencies must evaluate TCPs for eligibility for listing in the NRHP to determine if they are historic properties subject to management as required under Section 106 of the NHPA. Evaluation of TCPs requires two major steps: first the federal agency evaluates the integrity of the resource as a TCP, then evaluates the resource for eligibility listing on the NRHP under the process for assessing significance and integrity of historic properties. As with any resource that is evaluated for listing on the NRHP, the TCP must be a tangible district, site, building, structure, or object (NPS 1998:11). This consideration requires merely that the TCP be a physical place or tangible object, in the broadest sense, rather than the intangible beliefs or values alone.

Integrity of TCPs

The TCP must have integrity, like any property eligible for listing on the NRHP. For traditional cultural resources, this means that they must have "integrity of relationship" and "integrity of condition" (NPS 1998:11–12). Integrity of relationship means simply that the specific place is integral and necessary to a traditional cultural group's beliefs or specific practices (NPS 1998:11). National Register Bulletin 38 gives the example of two different cultures, one that believes that baptism at a specific river is necessary to accept individuals as members, and another that simply requires baptism in any body of water. For the first example, the river is integrated into beliefs and practices of a traditional culture and thus has integrity of relationship.

Integrity of condition requires simply that the TCP has not been altered in such a way that it no longer can serve its function for the traditional cultural group. For example, a pilgrimage route to a sacred site would no longer have integrity of condition if modern construction had physically interrupted the route and thus made it unusable. This requirement does not mean that the TCP must be completely intact without any changes to the setting or features of the resource; rather, the test is whether the resource can still

function for traditional cultural purposes or whether the presence of new elements disrupts the function. National Register Bulletin 38 offers an example of a resource that has integrity despite changes to the setting. If the TCP has integrity of relationship and integrity of condition, evaluation progresses to the second step of evaluating the resource for eligibility for listing on the NRHP, as described above.

STATE

CALIFORNIA REGISTER OF HISTORICAL RESOURCES

All properties in California that are listed in or formally determined eligible for listing on the NRHP are also listed on the California Register of Historical Resources (CRHR). The CRHR is a listing of State of California resources that are significant in the context of California's history. It is a statewide program with a scope and with criteria for inclusion similar to those used for the NRHP. In addition, properties designated under municipal or county ordinances are also eligible for listing on the CRHR.

A historical resource must be significant at the local, State, or national level under one or more of the criteria defined in the California Code of Regulations Title 15, Chapter 11.5, Section 4850 to be included on the CRHR. The CRHR criteria are tied to CEQA because any resource that meets the criteria below is considered a significant historical resource under CEQA. As noted above, all resources listed on or formally determined eligible for listing on the NRHP are automatically listed on the CRHR.

The CRHR uses the following four evaluation criteria:

Criterion 1. Is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States.

Criterion 2. Is associated with the lives of persons important to local, California, or national history.

Criterion 3. Embodies the distinctive characteristics of a type, period, region, or method of construction; represents the work of a master; or possesses high artistic values.

Criterion 4. Has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California or the nation.

Similar to the NRHP, a historical resource must meet one of the above criteria and retain integrity to be listed on the CRHR. The CRHR uses the same seven aspects of integrity used by the NRHP: location, design, setting, materials, workmanship, feeling, and associations.

CALIFORNIA ENVIRONMENTAL QUALITY ACT

CEQA requires public agencies to consider the effects of their actions on "tribal cultural resources." PRC Section 21084.2 establishes that "[a] project with an effect that may

cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment." PRC Section 21074 states:

a) "Tribal cultural resources" are either of the following:

    1) Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:

        A) Included or determined to be eligible for inclusion in the CRHR.

        B) Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.

    2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

b) A cultural landscape that meets the criteria of subdivision (a) is a tribal cultural resource to the extent that the landscape is geographically defined in terms of the size and scope of the landscape.

c) A historical resource described in Section 21084.1, a unique archaeological resource as defined in subdivision (g) of Section 21083.2, or a "nonunique archaeological resource" as defined in subdivision (h) of Section 21083.2 may also be a tribal cultural resource if it conforms with the criteria of subdivision (a).

Public Resource Code Section 21080.3

AB 52, signed by the California governor in September 2014, established "tribal cultural resources" as a class of resources under CEQA (Section 21074). Pursuant to CEQA Sections 21080.3.1, 21080.3.2, and 21082.3, lead agencies undertaking preparation of an EIR, negative declaration, or mitigated negative declaration, must notify geographically affiliated California Native American tribes, and consult with any tribes that request consultation. CEQA Sections 21080.3.1 and 21080.3.2 state that within 14 days of determining that a project application is complete, or to undertake a project, the lead agency must provide formal notification, in writing, to the tribes that have requested notification of proposed projects in the lead agency's jurisdiction. If it wishes to engage in consultation on the project, the tribe must respond to the lead agency within 30 days of receipt of the formal notification. The lead agency must begin the consultation process with the tribes that have requested consultation within 30 days of receiving the request for consultation. Consultation concludes when either: 1) the parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource, or 2) a party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached.

Health and Safety Code, Section 7050.5

Section 7050.5 of the Health and Safety Code requires that construction or excavation be stopped in the vicinity of discovered human remains until the coroner can determine whether the remains are those of a Native American. If they are determined to be those of a Native American, the coroner must contact NAHC.

California Native American Historical, Cultural, and Sacred Sites Act

The California Native American Historical, Cultural, and Sacred Sites Act (PRC Section 5097.9) applies to both State and private lands. The act requires, upon discovery of human remains, that construction or excavation activity cease and that the county coroner be notified. If the remains are those of a Native American, the coroner must notify the NAHC, which notifies (and has the authority to designate) the most likely descendants (MLD) of the deceased. The act stipulates the procedures the descendants may follow for treating or disposing of the remains and associated grave goods.

Public Resource Code Section 5097

PRC Section 5097 specifies the procedures to be followed in the event of the unexpected discovery of human remains on nonfederal land. The disposition of Native American human burials falls within the jurisdiction of the NAHC. Section 5097.5 of the Code states the following:

No person shall knowingly and willfully excavate upon, or remove, destroy, injure, or deface any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, or any other archaeological, paleontological or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over such lands. Violation of this section is a misdemeanor.

Local

Sacramento County General Plan

General Plan policies in the Conservation Element promote the inventory, protection of the cultural heritage of Sacramento County, including historical and archaeological settings, sites, buildings, features, artifacts and/or areas of ethic historical, religious or socio-economic importance. The following policies pertaining to tribal cultural resources contained in the General Plan Conservation Element are relevant to the Project:

CO-150. Utilize local, state and national resources, such as the NCIC [North Central Information Center], to assist in determining the need for a cultural resources survey during project review.

CO-151. Projects involving an adoption or amendment of a General Plan or Specific Plan or the designation of open space shall be noticed to all appropriate Native American tribes in order to aid in the protection of traditional tribal cultural places.

CO-152. Consultations with Native American tribes shall be handled with confidentiality and respect regarding sensitive cultural resources on traditional tribal lands.

CO-153. Refer projects with identified archeological and cultural resources to the Cultural Resources Committee to determine significance of resource and recommend appropriate means of protection and mitigation. The Committee shall coordinate with the Native American Heritage Commission in developing recommendations.

CO-154. Protection of significant prehistoric, ethnohistoric and historic sites within open space easements to ensure that these resources are preserved in situ for perpetuity.

CO-155. Native American burial sites encountered during preapproved survey or during construction shall, whenever possible, remain in situ. Excavation and reburial shall occur when in situ preservation is not possible or when the archeological significance of the site merits excavation and recording procedure. On-site reinterment shall have priority. The project developer shall provide the burden of proof that off site reinterment is the only feasible alternative. Reinterment shall be the responsibility of local tribal representatives.

CO-157. Monitor projects during construction to ensure crews follow proper reporting, safeguards, and procedures.

CO-158. As a condition of approval of discretionary permits, a procedure shall be included to cover the potential discovery of archaeological resources during development or construction.

CO-159. Request a Native American Statement as part of the environmental review process on development projects with identified cultural resources.

CO-160. County Planning and Environmental Review staff shall take historical and cultural resources into consideration when conducting planning studies and documents in preparation of, including but not limited to, areas plans, corridor plans, community plans, and specific plans.

CO-171. Design and implement interpretive programs about known archeological or historical sites on public lands or in public facilities. Interpretation near or upon known sites should be undertaken only when adequate security is available to protect the site and its resources.

CO-172. Provide historic and cultural interpretive displays, trails, programs, living history presentations, and public access to the preserved artifacts recovered from excavations.

CO-173. Interpretive elements involving Native American cultural resources shall be located at village sites (provided any unexcavated resources are properly protected) representative of different physical environments found in the County.

SACRAMENTO COUNTY CODE

SACRAMENTO COUNTY ZONING CODE

There are no Sacramento County Zoning Codes that are applicable to tribal cultural resources.

DISTINCT AREA PLANS

The County guides development using several distinct area plans such as SPAs, Specific Plans, Comprehensive Plans, Community Plans, Corridor Plans, and Neighborhood Preservation Areas (NPAs). As shown in Chapter 2, "Project Description," 13 sites are located in distinct area plans, specifically: Fair Oaks Boulevard Corridor Plan, North Watt Avenue Corridor Plan, and Old Florin Town SPA. These plans provide specific regulations that supplement the County Zoning Code and are created when the countywide zoning regulations do not adequately address local concerns (County of Sacramento 2024). Fair Oaks Boulevard Corridor Plan, North Watt Avenue Corridor Plan, and Old Florin Town SPA do not have applicable policies related to tribal cultural resources.

OTHER DISTINCT AREA PLANS

In addition to the distinct plans described above, Stockton Boulevard NPA, Victory Avenue NPA, Greenback Lane SPA, and Downtown Rio Linda SPA also contain proposed candidate rezone sites. Relevant tribal cultural resources policies from these land use plans are provided below. The Stockton Boulevard NPA, Victory Avenue NPA, and Greenback Lane SPA do not have applicable policies related to tribal cultural resources. Relevant policies from the Downtown Rio Linda SPA are described below.

DOWNTOWN RIO LINDA SPA

The Downtown Rio Linda SPA contains the following applicable policy related to tribal cultural resources:

1.3.3. CULTURAL RESOURCES PROTECTION

b. If subsurface deposits believed to be cultural or human in origin are discovered during site preparation or construction, then all work must halt within a 200-foot radius of the discovery. A qualified professional archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for prehistoric and historic archaeology, shall be retained at the Applicant's expense to evaluate the significance of the find. If it is determined due to the types of deposits discovered that a Native American monitor is required, the Guidelines for Monitors/Consultants of Native American Cultural, Religious, and Burial Sites as established by the Native American Heritage Commission shall be followed, and the monitor shall be retained at the Applicant's expense.

c. Work shall not continue within the 200-foot radius of the discovery site until the archaeologist conducts sufficient research and data collection to make a determination that the resource is either 1) not cultural in origin; or 2) not potentially eligible for listing on the National Register of Historic Places or California Register of Historical Resources.

1. If a potentially-eligible resource is encountered, then the archaeologist and project proponent shall coordinate with Sacramento County Division of Planning and Environmental Review and arrange for either 1) total avoidance of the resource, if possible; or 2) test excavations or total data recovery as mitigation. The determination shall be formally documented in writing and submitted to Planning and Environmental Review as verification that CEQA provisions for managing unanticipated discoveries have been met.

2. Section 5097.98 of the State Public Resources Code and Section 7050.5 of the State Health and Safety Code require that in the event of the discovery of human remains, all work must stop and the County Coroner be immediately notified. If the remains are determined to be Native American, Native American Heritage Commission guidelines shall be adhered to in the treatment and disposition of the remains.

Significance Criteria and Methodology

Significance Criteria

Thresholds of significance are based on Appendix G of the State CEQA Guidelines. The Project would result in a potentially significant impact on tribal cultural resources if it would:

- cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe.

Methodology

Information related to tribal cultural resources is based on the results of Native American consultation under AB 52. The analysis is also informed by the provisions and requirements of State and local laws and regulations that apply to cultural resources.

PRC Section 21074 defines “tribal cultural resources” as “sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe” that are listed or determined eligible for listing on the CRHR, listed on a local register of historical resources, or otherwise determined by the lead agency to be a tribal cultural resource.

IMPACT AND ANALYSIS

As discussed in the beginning of this chapter, the EIRs certified for the General Plan and three distinct planning areas predate the establishment of PRC Section 21074, which established the new CEQA category of tribal cultural resources. Therefore, AB 52 consultation was not conducted, and no prior tribal cultural resources impact determinations were made in the General Plan EIR, Fair Oaks Boulevard EIR, North Watt Avenue EIR, or Old Florin Town SPA EIR. The following impact discussion is organized by analysis of Project buildout, then by distinct planning area. Mitigation is identified where applicable. An analysis of cumulative impacts is included at the end of the section.

IMPACT TCR-1: CAUSE A SUBSTANTIAL ADVERSE CHANGE IN THE SIGNIFICANCE OF A TRIBAL CULTURAL RESOURCE

SACRAMENTO COUNTY GENERAL PLAN

As detailed above, the County mailed letters to three tribal representatives on June 21, 2023, in compliance with AB 52. No responses were received, and no tribal cultural resources, as defined in PRC Section 21074, were identified. Although no tribal cultural resources (i.e., resources meeting any of the PRC Section 5024.1(c) criteria) within the unincorporated County have been identified as part of this Project, it is possible that tribal cultural resources could be identified during analysis of subsequent development under the Project. California law recognizes the need to protect tribal cultural resources from inadvertent destruction and the procedures for the treatment of tribal cultural resources are contained in PRC Section 21080.3.2 and Section 21084.3 (a).

Future discretionary development as part of the Project would be required to adhere to the General Plan policies designated to protect tribal cultural resources. Specifically, future discretionary development would be subject to Policies CO-150 through CO-155, CO-157 through CO-160, and CO-171 through CO-173 (outlined in the Regulatory Setting). These policies would require future discretionary development projects on the candidate rezone sites to notify the appropriate Native American tribes, protection of tribal cultural resources (preservation in situ), tribal monitoring, and interpretive elements involving Native American cultural resources. In addition to these policies, the County has developed standard mitigation measures in coordination with the local tribes for county-wide projects, separate from the standard AB 52 consultation process.

Compliance with PRC Section 21080.3.2 and the County's continuing notification of the tribes of all future discretionary actions under the Project, would provide an opportunity to avoid or minimize the disturbance of tribal cultural resources, and to appropriately treat any remains that are discovered. However, not all future development would require discretionary review. Future development that would not undergo discretionary review would have the potential to result in the loss of tribal resources during ground-disturbing activities if previous undiscovered tribal resources are present. In addition, even with adherence to the regulations and policies, future discretionary development under the Project could still permit the loss of tribal cultural resources and landscapes that may be

of cultural or religious significance to California Native American tribes and would be subject to the County's standard mitigation measures for TCRs. There is the potential for future development under the Project to result in significant impacts to tribal cultural resources. This impact would be potentially significant.

Mitigation Measures

Mitigation Measure TCR-1: Inadvertent/Unanticipated Tribal Cultural Resources Discoveries.

If any suspected tribal cultural resources (TCR) are discovered during ground disturbing construction activities, all work shall cease within 100 feet of the find, or an agreed upon distance based on the nature of the find. A Tribal Representative from a California Native American tribe that is traditionally and culturally affiliated with the geographic area shall be immediately notified and shall determine if the find is a TCR (PRC Section 21074). The Tribal Representative will make recommendations for further evaluation and treatment as necessary. Preservation in place is the preferred option for mitigation of TCRs, and every effort shall be made to preserve the resources in place, including through project redesign, if feasible. When avoidance is infeasible, culturally appropriate treatments may include, but are not limited to, processing materials for reburial, minimizing handling of cultural objects, leaving objects in place within the landscape, or returning objects to a location within the candidate rezone site where they will not be subject to future impacts. Permanent curation of TCRs shall not take place unless approved in writing by the California Native American Tribe that is traditionally and culturally affiliated with the candidate rezone site. The contractor shall implement any measures deemed by the County to be necessary and feasible to preserve in place, avoid, or minimize impacts to the resource, including, but not limited to, facilitating the appropriate tribal treatment of the find, as necessary. Treatment that preserves or restores the cultural character and integrity of a TCR may include Tribal Monitoring, culturally appropriate recovery of cultural objects, and reburial of cultural objects or cultural soil. Work at the discovery location shall not resume until all necessary investigation and evaluation of the discovery have been satisfied.

Significance after Mitigation

Implementation of Mitigation Measure TCR-1 would address any inadvertent discovery of TCRs, including cessation of construction activities proximate to the discovery and notification of the appropriate Tribal Representative(s). As a result, with implementation of Mitigation Measure TCR-1, the impact on TCRs would be less than significant. Therefore, pursuant to State CEQA Guidelines Section 15162, implementation of the Project would not result in new or more severe significant impacts related to TCRs than would occur with implementation of the General Plan. The Project's contribution to impacts would not be substantial with mitigation and overall impacts would be less than significant.

DISTINCT AREA PLANS

FAIR OAKS BOULEVARD CORRIDOR PLAN

The proposed rezone on Site 67 would result in minor development capacity increase in the Fair Oaks Boulevard Corridor area. Increased development could result in ground disturbance and impacts to tribal cultural resources similar to the discussion above for the General Plan. Impacts would be potentially significant.

MITIGATION MEASURES

MITIGATION MEASURE TCR-1: INADVERTENT/UNANTICIPATED TRIBAL CULTURAL RESOURCES DISCOVERIES

SIGNIFICANCE AFTER MITIGATION

Implementation of Mitigation Measures TCR-1 would address any inadvertent discovery of TCRs, including cessation of construction activities proximate to the discovery and notification of the appropriate Tribal Representative(s). As a result, with implementation of Mitigation Measure TCR-1, the impact on TCRs would be less than significant. Therefore, pursuant to State CEQA Guidelines Section 15162, the proposed rezone on Site 67 would not result in new or more severe significant impacts related to TCRs than would occur with implementation of the Fair Oaks Boulevard Corridor Plan. The contribution to impacts from the proposed rezone on Site 67 would not be substantial with mitigation and overall impacts would be less than significant.

NORTH WATT AVENUE CORRIDOR PLAN

The proposed rezone on Sites 68 through 72 would result in increased development capacity in the North Watt Avenue Corridor area. Increased development could result in ground disturbance and impacts to tribal cultural resources similar to the discussion above for the General Plan. Impacts would be potentially significant**.**

MITIGATION MEASURES

MITIGATION MEASURE TCR-1: INADVERTENT/UNANTICIPATED TRIBAL CULTURAL RESOURCES DISCOVERIES

SIGNIFICANCE AFTER MITIGATION

Implementation of Mitigation Measures TCR-1 would address any inadvertent discovery of TCRs, including cessation of construction activities proximate to the discovery and notification of the appropriate Tribal Representative(s). As a result, with implementation of Mitigation Measures TCR-1, the impact on TCRs would be less than significant. Therefore, pursuant to State CEQA Guidelines Section 15162, the proposed rezone on Sites 68 through 72 would not result in new or more severe significant impacts related to TCRs than would occur with implementation of the North Watt Avenue Corridor Plan. The contribution to impacts from the proposed rezone on Sites 68 through 72 would not be substantial with mitigation, and overall impacts would be less than significant.

OLD FLORIN TOWN SPA

The proposed rezone on Sites 73 through 79 would result in increased development capacity in the Old Florin Town SPA. Increased development could result in ground disturbance and impacts to tribal cultural resources similar to the discussion above for the General Plan. Impacts would be potentially significant**.**

MITIGATION MEASURES

MITIGATION MEASURE TCR-1: INADVERTENT/UNANTICIPATED TRIBAL CULTURAL RESOURCES DISCOVERIES

SIGNIFICANCE AFTER MITIGATION

Implementation of Mitigation Measures TCR-1 would address any inadvertent discovery of TCRs, including cessation of construction activities proximate to the discovery and notification of the appropriate Tribal Representative(s). As a result, with implementation of Mitigation Measure TCR-1, the impact on TCRs would be less than significant. Therefore, pursuant to State CEQA Guidelines Section 15162, proposed rezone on Sites 73 through 79 would not result in new or more severe significant impacts related to TCRs than would occur with implementation of the Old Florin Town SPA. The contribution to impacts from the proposed rezone on Sites 73 through 79 would not be substantial with mitigation and overall impacts would be less than significant.

CUMULATIVE TRIBAL CULTURAL RESOURCES

CUMULATIVE SETTING

Because all significant tribal cultural resources are unique and nonrenewable members of finite classes, meaning there are a limited number of significant cultural resources, all adverse effects erode a dwindling resource base. The loss of any one resource could affect the value of others in a region because these resources are best understood in the context of the entirety of the cultural system of which they are a part. The cultural system is represented archaeologically by the total inventory of all sites and other cultural remains in the region. As a result, a meaningful approach to preserving and managing cultural resources must focus on the likely distribution of cultural resources, rather than on a single project or parcel boundary.

The historic lands of the Nisenan and Plain Miwoks people have been affected by development since Spanish explorer Gabriel Moraga crossed Nisenan territory in 1808. The discovery of gold at Sutter's Mill in Coloma in 1848 was the catalyst that caused a dramatic alteration of Native American cultural patterns as a flood of Euro-Americans entered the region. These changes are highlighted by the development of cities and towns in Sacramento County (established in 1850). These cities and towns were associated with expanding business opportunities related to gold mining, agriculture, or the expansion of the railroad. Development of the Nisenan and Plain Miwoks lands continued with residential growth which increased after World War I and then greatly intensified after World War II. These activities have resulted in an existing significant adverse effect on resources that would likely have been considered tribal cultural resources. Cumulative development in the

region, could result in ongoing substantial adverse changes in the significance of tribal cultural resources, resulting from urban development and conversion of natural lands, which would constitute a potentially significant cumulative impact to these resources.

IMPACT TCR-2: THE PROJECT, IN COMBINATION WITH PAST, PRESENT, AND REASONABLY FORESEEABLE PROJECTS, COULD RESULT IN A SIGNIFICANT CUMULATIVE IMPACT WITH RESPECT TO TRIBAL CULTURAL RESOURCES

No tribal cultural resources have been identified within the unincorporated County as a result of AB 52 consultation. Therefore, no measures were identified through AB 52 consultation process. Compliance with PRC Section 21080.3.2 and Section 21084.3 (a) and the County's continuing notification of the tribes of all projects subject to CEQA would provide an opportunity to avoid or minimize the disturbance of tribal cultural resources, and to appropriately treat any tribal cultural resources that are discovered. All future development as part of the Project would be subject to Mitigation Measure TCR-1 that would reduce Project impacts, and thus, cumulative impacts to TCRs. Therefore, the Project's contribution to a significant TCR impact would not be cumulatively considerable. The TCR cumulative impact would be less than significant.

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12 UTILITIES

INTRODUCTION

This chapter describes current conditions relative to utilities and service systems in Sacramento County. It also includes a description of capacities, analysis of environmental impacts, and recommendations for mitigation measures for any significant or potentially significant impacts that could result from implementation of the Project.

No scoping comments related to utilities were received during the notice of preparation (NOP) public review periods. Although no scoping comments were received on the Project, PER has engaged various utility districts to assess the ability to serve, discuss comments on, and obtain conditions of approval for the Project. Appendices UTL-1 through UTL-4 contains copies of correspondences with the below-discussed utility districts. Comments and/or conditions of approval received for the Project from utility districts are summarized in the Impact and Analysis section below.

EXISTING ENVIRONMENTAL UTILITIES SETTING

State CEQA Guidelines Section 15162 indicates that should a lead agency determine that substantial changes to the project or its circumstances result in a new or more significant impact compared to what was addressed in a project's previous EIR, or new information of substantial importance results in a new or more significant impact, a subsequent EIR (SEIR) should be prepared. Therefore, this document serves as a SEIR to Sacramento County's 2030 General Plan EIR (General Plan EIR), as well as to EIRs prepared for various distinct area plans within which a portion of the candidate rezone sites are located. Applicable distinct area plan EIRs include the Fair Oaks Boulevard Corridor Plan EIR (Fair Oaks Boulevard EIR), the North Watt Avenue Corridor Plan EIR (North Watt Avenue EIR), and the Old Florin Town Special Planning Area (SPA) EIR (Old Florin Town EIR). The reginal housing needs allocation (RHNA) shortfall of 2,884 lower income category units and needed buffer could not have been known at the time of the General Plan EIR certification, and the RHNA is in excess of the number of dwelling units analyzed in the General Plan EIR. The number of additional units required in various distinct area plans was not known at the time of the applicable environmental documents were certified. As required by Section 15162, this SEIR evaluates the potential for the proposed Project or changes in the circumstances to result in new or substantially more severe significant environmental impacts that previously analyzed under the General Plan EIR and distinct area plan EIRs. Existing utilities settings for the unincorporated County, Fair Oaks Boulevard Corridor Plan area (Fair Oaks Boulevard Corridor area), North Watt Avenue Corridor Plan area (North Watt Avenue Corridor area), and Old Florin Town SPA are summarized below.

GENERAL PLAN EXISTING UTILITIES SETTING

WATER SUPPLY AND TREATMENT

This subsection provides information on water supplies that would be used by and may be available to the new units associated with the proposed Project. This subsection also discusses the availability and adequacy of existing and planned water treatment and conveyance infrastructure.

A total of 27 water purveyors supply water to customers in Sacramento County (SCWA 2023a). Nine[1] of these water purveyors provide water service to candidate rezone sites (Plate UTL-1). The amount of water available to these purveyors to supply the project is defined by their individual water rights, surface water contracts, groundwater pumping limitations, and infrastructure necessary to treat, pump, and deliver water.

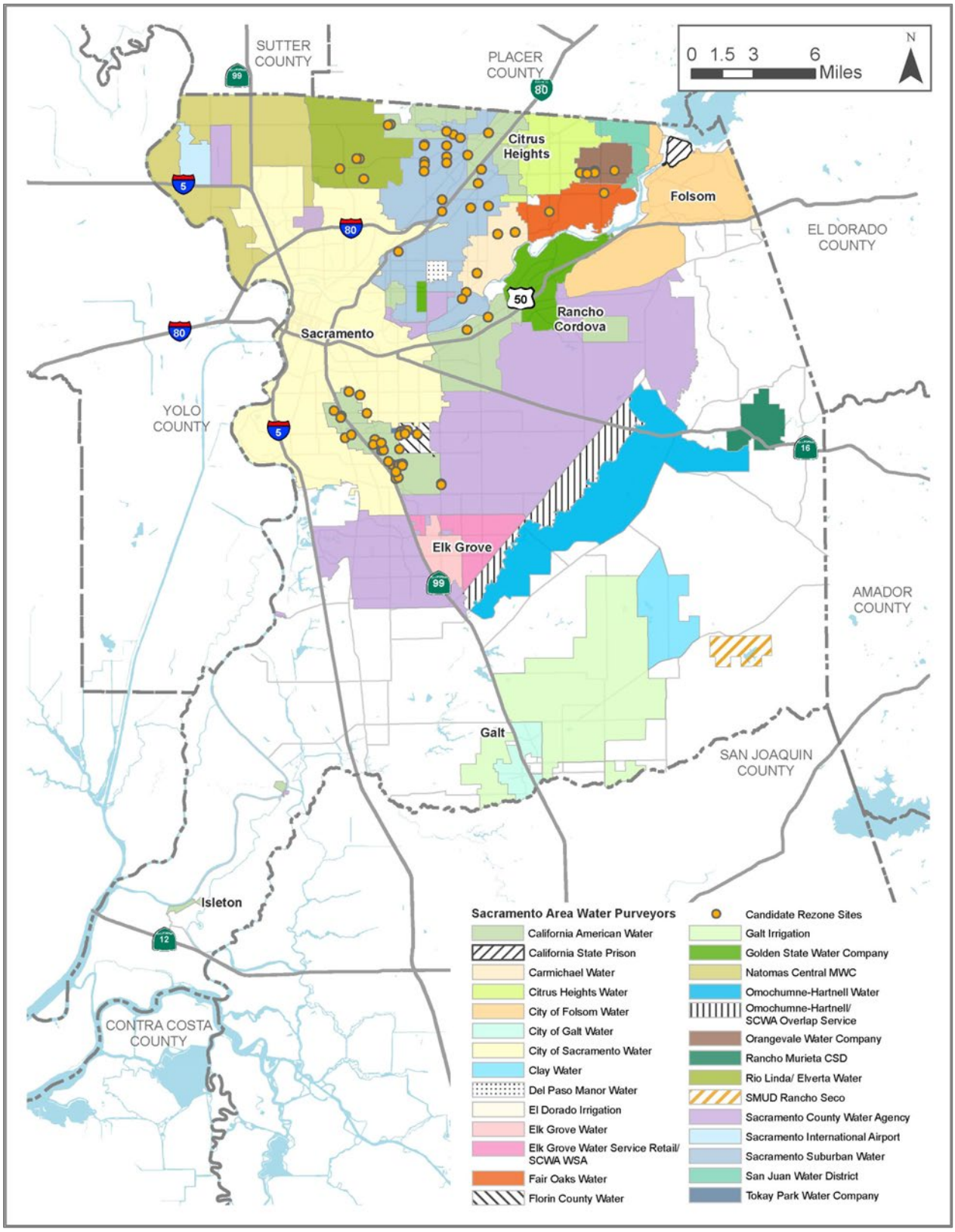
The water purveyors that would supply water for the Project are located within areas of Sacramento County that have distinct geohydrologic conditions or other restrictions that affect their ability to provide water. These areas of the County are comprised of or a part of three groundwater subbasins: the North American Subbasin, South American Subbasin, and Cosumnes Subbasin. Details on water providers applicable to the project are described below.

CALIFORNIA AMERICAN WATER NORTHERN DIVISION

The California American Water (CalAm) delivers water and wastewater services throughout California. CalAm serves 675,000 persons (CalAm 2023). The CalAm Northern Division covers the Sacramento Tariff Area including the unincorporated areas of: Antelope, Arden, Fruitridge, Isleton, Lincoln Oaks, Parkway, Security Park, Suburban-Rosemont, Walnut Grove. The candidate rezone sites are located in Antelope, Lincoln Oaks, Suburban-Rosemont, Fruitridge and Parkway service areas. The Urban Water Management Plan (UWMP) prepared for the Northern Division of CalAm is the planning guide that integrates the balancing of water supplies and demands. CalAm supplied 32,868 acre-feet (AF) of water to the Northern Division in 2020 (CalAm 2021) across all service areas in the division with 30,054 AF of the total, supplied to the five service areas where candidate rezone sites are located. The projected water supply and demand for the North Division service areas where candidate rezone sites are located are shown in aggregate in Table UTL-1. Groundwater is the primary source of water supply for CalAm. CalAm supplements the remainder of its water supply from four wholesale water suppliers (City of Sacramento, Sacramento County Water Agency, Placer County Water Agency, and Sacramento Suburban Water District).

[1] The Fruitridge Vista Water Company was a family-owned Class B Water Utility serving approximately 4,800 connections in Sacramento area and was acquired by California American Water in 2019 (AP 2019).

Plate UTL-1: Sacramento County Water Purveyors



Source:

Table UTL-1: California American Water Northern Division Water Supply and Demand (Million Gallons)

	2025	2030	2035	2040
Normal Year*				
Supply	39,322	39,322	39,322	39,322
Demand	9,220	9,738	10,015	10,302
Surplus	30,102	29,584	29,307	29,020
Single Dry Year**				
Supply	35,857	35,857	35,857	35,857
Demand	9,220	9,738	10,015	10,302
Surplus	26,637	26,119	25,842	25,555
Multiple Dry Years**				
Supply	35,857	35,857	35,857	35,857
Demand	9,220	9,738	10,015	10,302
Surplus	26,637	26,119	25,842	25,555

*Only includes Antelope, Lincoln Oaks, Fruitridge, Parkway, and Suburban-Rosemont service areas.

**Includes five service areas; however, the supply, demand, and surplus amount for the Fruitridge service area stays constant because water supplies are purchased and considered firm supplies

Source: CalAm 2021.

CARMICHAEL WATER DISTRICT

The Carmichael Water District (CWD) is a non-profit public utility district serving approximately 11,700 connections and a population of approximately 41,200 in the unincorporated community of Carmichael (CWD 2023). CWD has two primary water supplies, surface water from the American River and groundwater from the North American Subbasin. Surface water is diverted and treated at CWD's 22 million gallons microfiltration plant and groundwater is produced from a series of production wells within the District's service area. The projected water supply and demand for CWD are shown in Table UTL-2.

Table UTL-2: Carmichael Water District Water Supply and Demand (Acre-Feet)

	2025	2030	2035	2040	2045
Normal Year					
Supply	43,920	43,920	43,920	43,920	43,920
Demand	8,860	8,950	9,070	9,160	9,280
Surplus	35,060	34,970	34,850	34,760	34,640
Single Dry Year					
Supply	43,920	43,920	43,920	43,920	43,920
Demand	9,303	9,398	9,524	9,618	9,744
Surplus	34,617	34,522	34,396	34,302	34,176
Multiple Dry Years					
Supply	43,920	43,920	43,920	43,920	43,920
Demand	9,380	9,496	9,600	9,700	9,820
Surplus	34,540	34,424	34,320	34,220	34,100

Source: CWD 2021.

FAIR OAKS WATER DISTRICT

The Fair Oaks Water District (FOWD) provides water to 14,390 residential and commercial customers in the northeast portion of Sacramento County (FOWD 2021). FOWD's service area covers approximately 6,285 acres and is bound by San Juan Avenue to the west, Madison and Pershing Avenues to the north, Walnut and Main Avenues to the east, and parts of Folsom Lake State Recreation Area and Sacramento County's American River Parkway to the south. FOWD purchases water from the San Juan Water District (SJWD) and delivers the water to residential and non-residential service connections via 180 miles of pipeline. Approximately 90 percent of water supply for FOWD is from treated surface water from the American River. The remaining 10 percent of water demands is from groundwater. The projected water supply and demand for FOWD are shown in Table UTL-3.

Table UTL-3: Fair Oaks Water District Water Supply and Demand (Acre-Feet)

	2025	2030	2035	2040
Normal Year				
Supply	33,065	33,065	33,065	33,065
Demand	10,531	10,614	10,701	10,792
Surplus	22,534	22,451	22,364	22,273
Single Dry Year				
Supply	23,718	23,718	23,718	23,718
Demand	10,531	10,614	10,701	10,792
Surplus	13,187	13,104	13,017	12,926
Multiple Dry Years				
Supply	23,718	23,718	23,718	23,718
Demand	10,531	10,614	10,701	10,792
Surplus	13,187	13,104	13,017	12,926

Source: FOWD 2021.

ORANGE VALE WATER COMPANY

The Orange Vale Water Company (OVWC) encompasses approximately 5 square miles bound by Kenneth Avenue to the west, Madison Avenue to the east, Pershing Avenue to the south, and Oak Avenue to the North. OVWC serves approximately 15,200 persons and 5,500 service connections (OVWC 2023). Water supply from OVWC is provided from the SJWD from the American River (OVWC 2021). The projected water supply and demand for OVWC are shown in Table UTL-4.

Table UTL-4: Orange Vale Water Company Water Supply and Demand (Acre-Feet)

	2025	2030	2035	2040	2045
Normal Year					
Supply	3,700	3,800	3,800	3,800	3,900
Demand	3,700	3,800	3,800	3,800	3,900
Surplus	0	0	0	0	0

	2025	2030	2035	2040	2045
Single Dry Year					
Supply	3,885	4,000	4,000	4,000	4,100
Demand	3,885	4,000	4,000	4,000	4,100
Surplus	0	0	0	0	0
Multiple Dry Years					
Supply	3,300	4,000	4,000	4,000	4,100
Demand	3,300	4,000	4,000	4,000	4,100
Surplus	0	0	0	0	0

Source: OVWC 2021.

RIO LINDA ELVERTA COMMUNITY WATER DISTRICT

The Rio Linda Elverta Water District (RLECWD) supplies water to a 17.8 square mile service district that includes 4,621 connections (RLECWD 2022). The RLECWD is located 8 miles north of Sacramento and services the areas around the communities of Rio Linda and Elverta. Water from RLECWD is provided solely by 12 active wells in the region. The projected water supply and demand for RLECWD are shown in Table UTL-5.

Table UTL-5: Rio Linda Elverta Community Water District Water Supply and Demand (Acre-Feet)

	2025	2030	2035	2040	2045
Normal Year					
Supply	2,876	2,953	3,026	3,092	3,153
Demand	2,876	2,953	3,026	3,092	3,153
Surplus	0	0	0	0	0
Single Dry Year					
Supply	2,876	2,953	3,026	3,092	3,153
Demand	2,876	2,953	3,026	3,092	3,153
Surplus	0	0	0	0	0
Multiple Dry Years					
Supply	2,876	2,953	3,026	3,092	3,153
Demand	2,876	2,953	3,026	3,092	3,153
Surplus	0	0	0	0	0

Source: RLECWD 2022.

SACRAMENTO SUBURBAN WATER DISTRICT

The Sacramento Suburban Water District (SSWD) serves portions of the Arden/Arcade and Foothill Farms communities, Carmichael, Fair Oaks, North Highlands, and Antelope areas, as well as small portions of the Cities of Citrus Heights and Sacramento and the McClellan Business Park. SSWD's customers include residential and non-residential users (SSWD 2021). SSWD uses groundwater supply from the North American Subbasin, and when available surface water from the United States Bureau of Reclamation, Placer

County Water Agency, City of Sacramento, and SJWD. The projected water supply and demand for SSWD are shown in Table UTL-6.

Table UTL-6: Sacramento Suburban Water District Water Supply and Demand (Acre-Feet)

	2025	2030	2035	2040	2045
Normal Year					
Supply	93,064	93,064	93,064	93,064	93,064
Demand	38,184	38,617	38,611	38,574	38,536
Surplus	54,880	54,447	54,453	54,490	54,528
Single Dry Year					
Supply	48,000	48,000	48,000	48,000	48,000
Demand	38,184	38,617	38,611	38,574	38,536
Surplus	9,816	9,383	9,389	9,426	9,464
Multiple Dry Years					
Supply	48,000	48,000	48,000	48,000	48,000
Demand	38,184	38,617	38,611	38,574	38,536
Surplus	9,816	9,383	9,389	9,426	9,464

Source: SSWD 2021.

FLORIN COUNTY WATER DISTRICT

The Florin County Water District (FCWD) is located adjacent to the south of the Sacramento City limits, east of Power Inn Road, north of Gerber Road, and west of Gardner Avenue. FCWD provides urban and rural water service to a population of 7,652 within 2.5 square miles (FCWD 2023). Water is provided by 10 groundwater wells within 2,668 acres of land or through interties for emergency purposes from surrounding water districts. FCWD does not meet the criteria for the preparation of an UWMP. Therefore, projected water supply and demand data is not available.

CITY OF SACRAMENTO

Retail water is provided by the City of Sacramento (City) to small portions of the unincorporated area of Sacramento County located north and south of Fruitridge Road and west of Stockton Boulevard. The City's retail water service covers approximately 101 square miles (City of Sacramento 2021). The City treats surface water diverted from the Sacramento and American Rivers with two water treatment facilities. The City provides wholesale water service to Sacramento County Water Agency (SCWA), Sacramento Suburban Water District, and California American Water Company. The City also wheels water (i.e., diverts, treats, and conveys) to SCWA Zone 40. The projected water supply and demand for the City retail and wholesale water is shown in Table UTL-7 and Table UTL-8.

Table UTL-7: City of Sacramento - Retail Supply and Demand (Acre-Feet)

	2025	2030	2035	2040	2045
Normal Year					
Supply	333,200	350,200	350,200	350,200	350,200
Demand	108,432	114,809	121,187	127,564	133,942
Surplus	224,769	235,391	229,014	222,636	216,258
Single Dry Year					
Supply	333,200	350,200	350,200	350,200	350,200
Demand	108,432	114,809	121,187	127,564	133,942
Surplus	224,769	235,391	229,014	222,636	216,258
Multiple Dry Years					
Supply	333,200	350,200	350,200	350,200	350,200
Demand	113,534	119,911	126,289	132,666	151,764
Surplus	219,667	230,289	223,912	217,534	198,436

Source: City of Sacramento 2021.

Table UTL-8: City of Sacramento - Wholesale Supply and Demand (Acre-Feet)

	2025	2030	2035	2040	2045
Normal Year					
Supply	28,406	53,135	75,098	97,060	97,060
Demand	28,406	53,135	75,098	97,060	97,060
Surplus	0	0	0	0	0
Single Dry Year					
Supply	28,406	53,135	75,098	97,060	97,060
Demand	28,406	53,135	75,098	97,060	97,060
Surplus	0	0	0	0	0
Multiple Dry Years*					
Supply	48,189	70,705	92,668	97,060	97,060
Demand	48,189	70,705	92,668	97,060	97,060
Surplus	0	0	0	0	0

*Utilizes the projected numbers for the fifth dry year

Source: City of Sacramento 2021.

SACRAMENTO COUNTY WATER AGENCY

The SCWA manages water supplies in Sacramento County, and boundaries of the SCWA are identical to the county boundaries. Water supplies consist of surface water, groundwater, recycled water, and purchased water. As authorized by the Sacramento County Water Agency Act in 1952, the agency may contract with the federal government and the State of California with respect to the purchase, sale, and acquisition of water. The service area is divided into eight systems, the largest of which are the Mather Sunrise and Laguna Vineyard systems.

The SCWA constructs and operates water supply infrastructure as well as some drainage systems. Zones have been approved by the Sacramento County Board of Supervisors to "finance, construct, acquire, reconstruct, maintain, operate, extend, repair, or otherwise improve any work or improvement of common benefit to such zone." (SCWA 2023b). There are eight water and drainage zones, some of which are for drainage and long-range planning for water resources development. Other zones are specifically for planning, design, and construction of major water supply facilities that benefit the zone. Each zone encompasses a unique geographic area of benefit to achieve the desired objectives. Funding derived from a zone can only be used to benefit that zone.

Zone 40 serves portions of the City of Rancho Cordova, the City of Elk Grove, and a portion of unincorporated Sacramento County beginning near the Urban Policy Area boundary and ending at the Urban Services boundary. The SCWA 2020 UWMP (2021) provides estimates of existing and future water supply availability and demand for the areas it serves. In 2020, retail deliveries within Zone 40 were approximately 31,000 AFY (SCWA 2021). The projected reasonably available water supply volume for SCWA's water systems through 2045, during a normal climate year considering facility capacity constraints, is presented in Table UTL-9. The increase in supply is the result of planned projects that will expand infrastructure capacity to allow the SCWA to use more of its available water supplies (i.e., it is not due to the acquisition of new or additional supplies) (SCWA 2021). The projected annual availability of each water supply is constrained by available water infrastructure capacity.

Groundwater represents a substantial part of the SCWA's water supply portfolio to meet projected demand. The SCWA 2020 UWMP (SCWA 2021) provides projections of "reasonably available" groundwater volume, based on groundwater supply capacity, with safe yield not quantified. As shown in Table UTL-9, the reasonably available groundwater volume would remain the same for normal, single-dry, and multiple-dry year scenarios. Therefore, to meet demand during dry years, the SCWA would seek to supplement its reduced supplies with the use of other surface water supplies (SCWA 2021).

Table UTL-9: Sacramento County Water Agency Supply and Demand (Acre-Feet)

	2025	2030	2035	2040	2045
Normal Year					
Supply	159,096	164,096	174,096	174,096	174,096
Demand	46,235	54,494	62,006	68,143	74,388
Surplus	112,861	109,602	112,090	105,953	99,708
Single Dry Year					
Supply	87,199	92,676	103,926	105,176	107,676
Demand	48,547	57,219	65,106	71,551	78,107
Surplus	38,652	35,457	38,820	33,625	29,569
Multiple Dry Years*					
Supply	107,431	113,386	125,886	128,386	133,386
Demand	48,547	57,219	65,106	71,551	78,107
Surplus	58,884	56,167	60,780	56,835	55,279

*Utilizes the projected numbers for the fifth dry year

Source: SCWA 2021.

SEWER SERVICE

SACRAMENTO REGIONAL COUNTY SANITATION DISTRICT

The Sacramento Regional County Sanitation District (Regional San) provides wastewater treatment for the County. Regional San serves approximately 1.4 million residents, industrial and commercial customers, and owns and operates the regional wastewater conveyance system. Regional San manages wastewater treatment, major conveyance, and wastewater disposal (Regional San 2023a). Within the County Regional Sans builds and operates the interceptor lines and regional wastewater treatment plant. Regional San is an independent political entity formed under the provisions of the County Sanitation District Act.

SACRAMENTO AREA SEWER DISTRICT

The Sacramento Area Sewer District (SacSewer) builds and maintains trunk lines in the County and serves as one contributing agency to Regional San. SacSewer trunk sewer pipes function as conveyance facilities to transport the collected wastewater flows to the Regional San interceptor system. SacSewer provides wastewater collection and conveyance services in the urbanized unincorporated area of Sacramento County, in the Cities of Citrus Heights, Elk Grove, and Rancho Cordova, and in a portion of the Cities of Sacramento and Folsom. SacSewer owns, operates, and maintains a network of 4,500 miles of main line and lower lateral pipes within a 270 square-mile area (SacSewer 2022).

SacSewer provides wastewater treatment for more than 1 million residents within Sacramento County. Their service area generally encompasses the Sacramento Metropolitan area, including the cities of Sacramento, Citrus Heights, Elk Grove, Folsom, Ranch Cordova, and West Sacramento.

SACRAMENTO REGIONAL WASTEWATER TREATMENT PLANT

The Sacramento Regional Wastewater Treatment Plant (SRWTP), operated by Regional San, is located on 900 acres of a 3,550-acre site between I-5 and Franklin Boulevard, north of Laguna Boulevard. The remaining 2,650 acres serve as a “bufferland” between the SRWTP and nearby residential areas.

The SRWTP has 169 miles of pipeline. Wastewater is treated by accelerated physical and natural biological processes before it is discharged to the Sacramento River. An upgrade of the SRWTP was recently complete and the treatment plant has been renamed the EchoWater Resource Recovery Facility (EWRRF). The upgrade, known as the EchoWater Project, was completed to meet new water quality requirements that were issued by the Central Valley RWQCB as part of Regional San’s 2010 NPDES permit (Regional San 2023b). The requirements are designed primarily to help protect the Delta ecosystem downstream by removing most of the ammonia and nitrates and improving the removal of pathogens from wastewater discharge. The upgrade includes deployment of new treatment technologies and facilities, will increase the quality of effluent discharged into the Sacramento River and ensure that the EWRRF discharge constituents are below permitted discharge limits specified in the NPDES permit. The EchoWater Project was

designed to improve treated effluent water quality but did not increase treatment or disposal capacity of the treatment plant.

Solid Waste

Sacramento County Department of Waste Management and Recycling

The Sacramento County Department of Waste Management and Recycling (DWMR) manages the operations, maintenance, and development of the solid waste management system within unincorporated Sacramento County. DWMR services include residential curbside pickup for garbage, recycling, organics, and bulky waste collection; transfer and disposal of household hazardous waste, residential, commercial, and self-haul customers; and regulating commercial solid waste and recycling requirements for businesses and commercial properties (DWMR 2023).

Landfill Capacity

Solid waste generated in the County is taken to several landfills. Table UTL-10 shows landfills used by the County and the permitted and remaining capacities of those landfills. As shown, half of landfills serving the County have over 80 percent remaining capacity (CalRecycle 2023).

Table UTL-10: Disposal Facilities and Remaining Capacities

Site Name	Maximum Permitted Throughput (tons per day)	Remaining Capacity (cubic yards)	Percentage of Remaining Capacity (%)	Remaining Capacity Date	Total Capacity (cubic yards)
Altamont Landfill & Resource Recovery	11,150	65,400,000	52.6	6/30/2016	124,400,000
Foothill Sanitary Landfill	1,500	125,000,000	90.6	6/10/2010	138,000,000
Sacramento County Landfill (Kiefer)	10,815	112,900,000	96.2	9/12/2005	117,400,000
L and D Landfill	4,125	3,115,900	15.2	7/2/2020	20,500,000
Bakersfield Metropolitan (Bena) SLF	4,500	32,808,260	61.9	7/1/2013	53,000,000
North County Landfill & Recycling Center	825	35,400,000	85.9	12/31/2009	41,200,000
Recology Hay Road	2,400	30,433,000	82.3	7/28/2010	37,000,000
Keller Canyon Landfill	3,500	63,408,410	84.5	11/16/2004	75,018,280
Forward Landfill, Inc.	8,668	24,720,669	41.8	1/31/2020	59,160,000
Potrero Hills Landfill	4,330	13,872,000	16.7	1/1/2006	83,100,000

Source: CalRecycle 2022.

Fair Oaks Boulevard Corridor Plan Existing Utilities Setting

The Fair Oaks Boulevard Corridor area is provided public utilities by a sub-set of the utilities discussed above for the entire Sacramento County area. This section focuses on the public utilities specific to the Fair Oaks Boulevard Corridor area. There is one candidate rezone site (Site 67) located within the Fair Oaks Boulevard Corridor area.

Water Supply and Treatment

The Fair Oaks Boulevard Corridor Plan is located within the North American Groundwater Subbasin. Additionally, dependent upon location within the Fair Oaks Boulevard Corridor area, parcels are provided water supply and treatment services by two water districts - SSWD or the CWD (See Plate UTL-2). Site 67 is located within the CWD. The setting included above for the North American Subbasin and the CWD is the water supply and treatment setting for the Fair Oaks Boulevard Corridor Plan.

Sewer Service

Sewer service is provided to the Fair Oaks Boulevard Corridor area by a combination of Regional San and SacSewer. The sewer service setting provided for the General Plan setting above applies to the Fair Oaks Boulevard Corridor area.

Solid Waste

Solid waste service is provided to the Fair Oaks Boulevard Corridor area by DWMR. The solid waste service setting provided for the General Plan setting above applies to the Fair Oaks Boulevard Corridor area.

North Watt Avenue Corridor Plan Existing Utilities Setting

The North Watt Avenue Corridor area is provided public utilities by a sub-set of the utilities discussed above for the entire Sacramento County area. This section focuses on the public utilities specific to the North Watt Avenue Corridor area. There are five candidate rezone sites (Sites 68 through 72) located within the North Watt Avenue Corridor area.

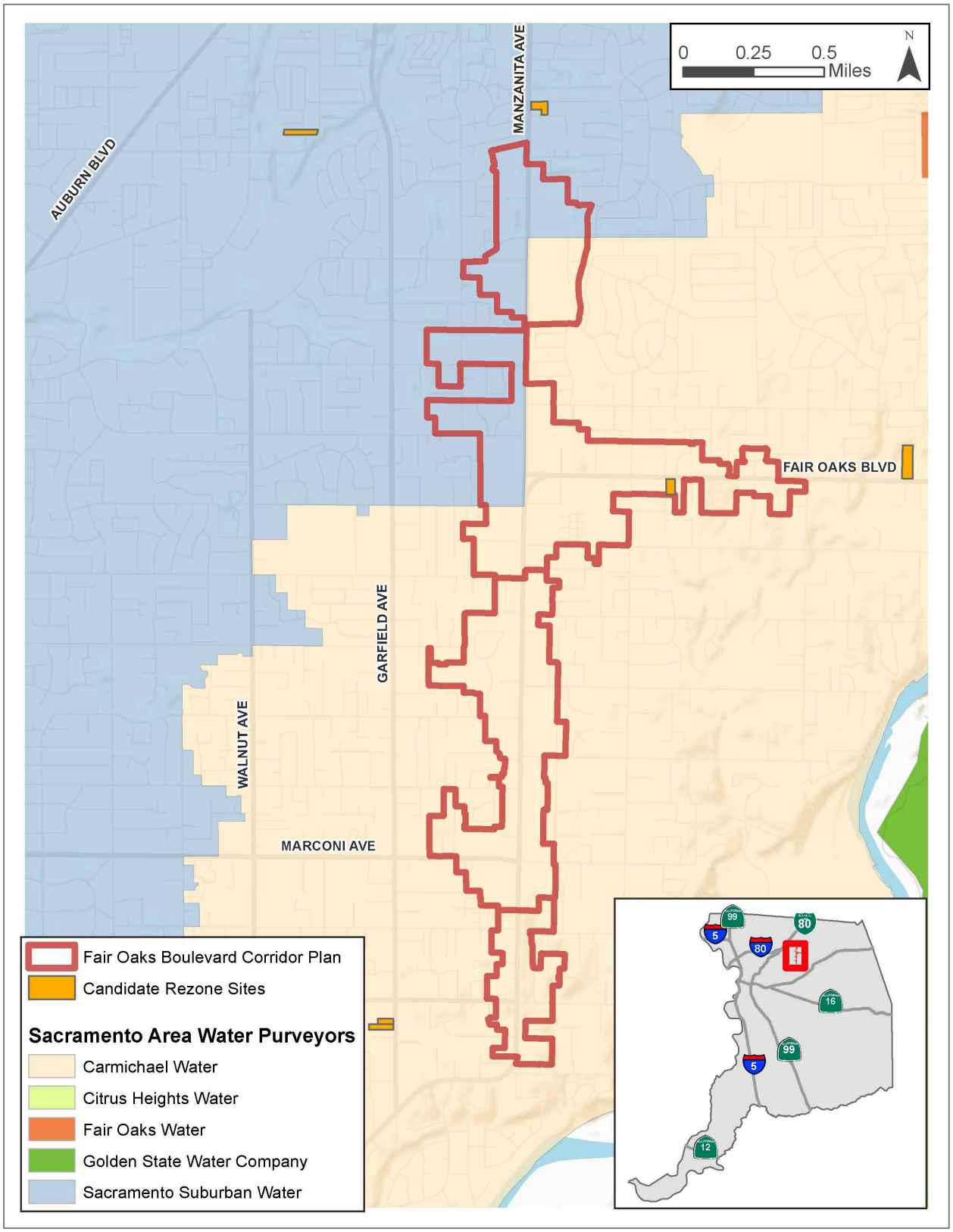
Water Supply and Treatment

The North Watt Avenue Corridor Plan is located within the North American Groundwater Subbasin and is provided water supply and treatment services by Sacramento Suburban Water District (See Plate UTL-3). The setting included above for the North American Subbasin and the Sacramento Suburban Water District is the water supply and treatment setting for the North Watt Avenue Corridor Plan.

Sewer Service

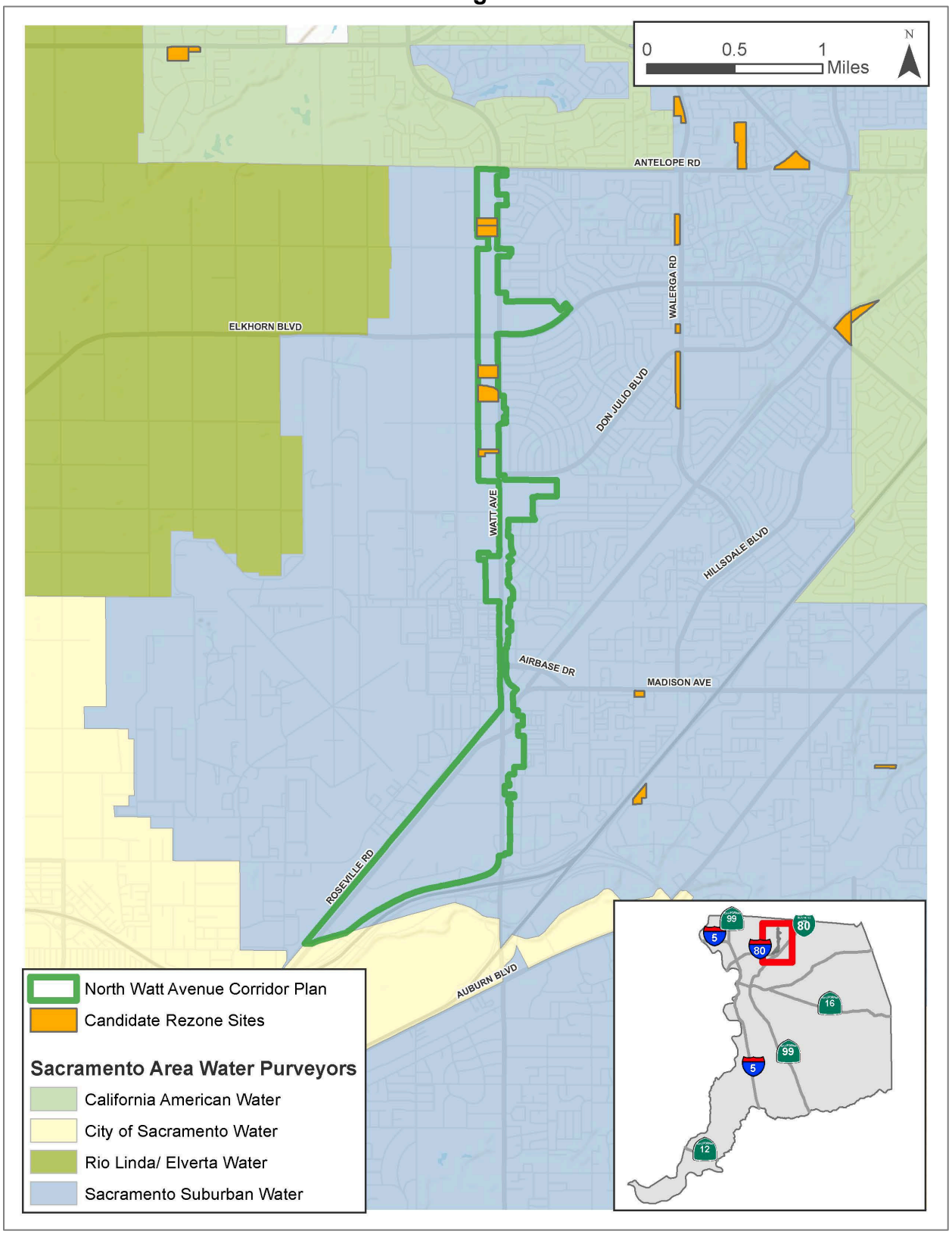
Sewer service is provided to the North Watt Avenue Corridor area by a combination of Regional San and SacSewer. The sewer service setting provided for the General Plan setting above applies to the North Watt Avenue Corridor area.

Plate UTL-2: Fair Oaks Boulevard Corridor Plan Water Purveyors and Site 67



Source: Provided by Sacramento County 2024 and adapted by Ascent 2024.

Plate UTL-3: North Watt Avenue Corridor Plan Water Purveyor and Sites 68 through 72



Source: Provided by Sacramento County 2024 and adapted by Ascent 2024.

Solid Waste

Solid waste service is provided to the North Watt Avenue Corridor area by DWMR. The solid waste service setting provided for the General Plan setting above applies to the North Watt Avenue Corridor area.

Old Florin Town SPA Existing Utilities Setting

The Old Florin Town SPA is provided public utilities by a sub-set of the utilities discussed above for the entire Sacramento County area. This section focuses on the public utilities specific to the Old Florin Town SPA. There are seven candidate rezone sites (Sites 73 through 79) located within the Old Florin Town SPA.

Water Supply and Treatment

The Old Florin Town SPA is located within the South American Groundwater Subbasin. Additionally, dependent upon location within the Old Florin Town SPA, parcels are provided water supply and treatment services by three water districts, Florin County Water District, California-American Water District, or the Tokay Park Water District. Sites 73 through 79 are located within the Florin County Water District (see Plate UTL-4). The setting included above for the South American Subbasin, and the Florin County Water District are the water supply and treatment setting for the Old Florin Town SPA.

Sewer Service

Sewer service is provided to the Old Florin Town SPA by a combination of Regional San and SacSewer. The sewer service setting provided for the General Plan setting above applies to the Old Florin Town SPA.

Solid Waste

Solid waste service is provided to the Old Florin Town SPA by DWMR. The solid waste service setting provided for the General Plan setting above applies to the Old Florin Town SPA.

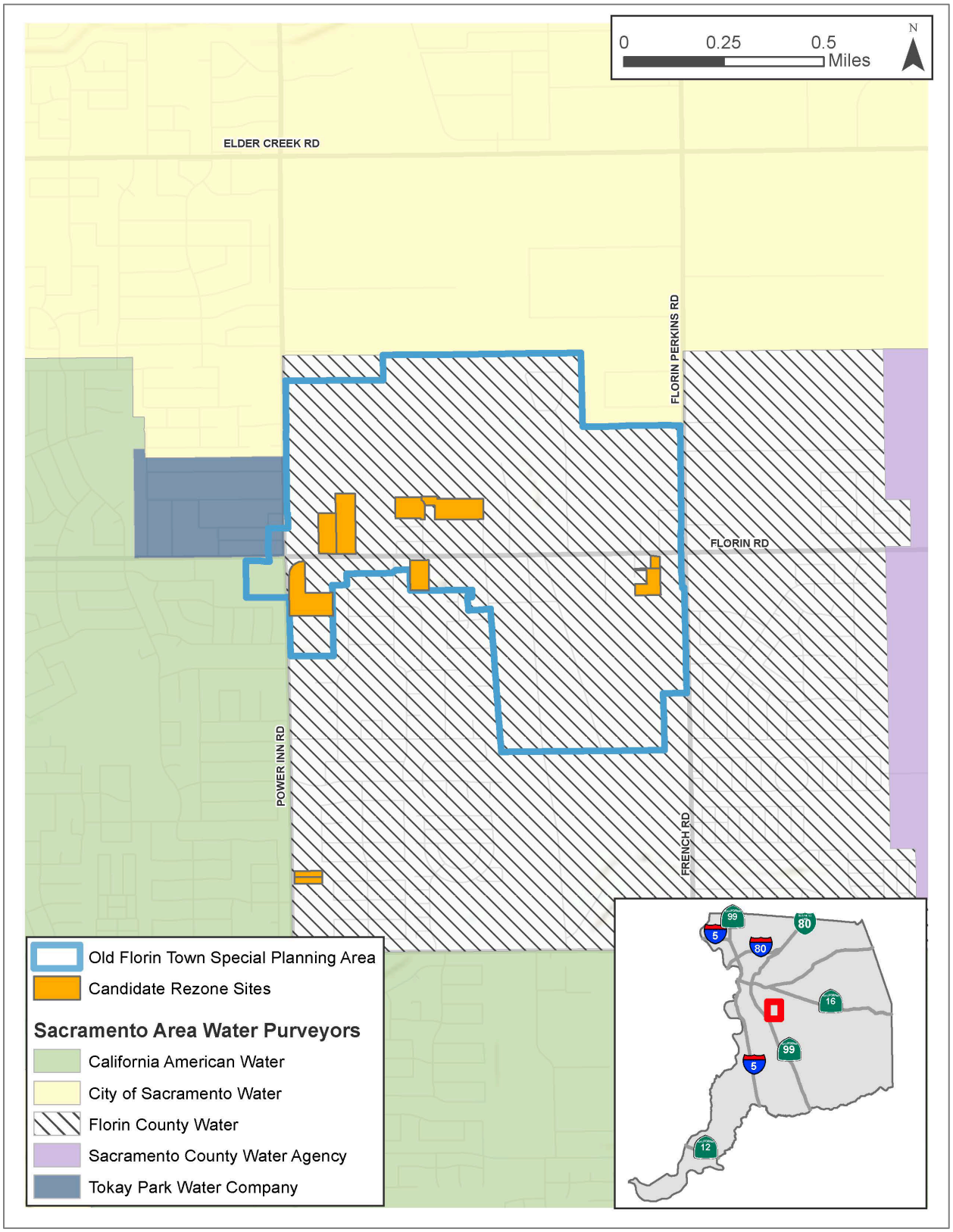
Existing Utilities Regulatory Setting

Federal

Safe Drinking Water Act

As mandated by the Safe Drinking Water Act (Public Law 93-523), passed in 1974, the U.S. Environmental Protection Agency (EPA) regulates contaminants of concern to domestic water supply. Such contaminants are defined as those that pose a public health threat or that alter the aesthetic acceptability of the water. These types of contaminants are regulated by EPA primary and secondary Maximum Contaminant Levels (MCLs). MCLs and the process for setting these standards are reviewed every three years. Amendments to the Safe Drinking Water Act enacted in 1986 established an accelerated schedule for setting drinking water MCLs.

Plate UTL-4: Old Florin Town SPA Water Purveyor and Sites 73 through 79



Source: Provided by Sacramento County 2024 and adapted by Ascent 2024.

EPA has delegated responsibility for California's drinking water program to the State Water Resources Control Board Division of Drinking Water (SWRCB-DDW). SWRCB-DDW is accountable to EPA for program implementation and for adoption of standards and regulations that are at least as stringent as those developed by EPA.

There are no federal regulations applicable to the analysis of wastewater and solid waste.

STATE

CALIFORNIA PUBLIC UTILITIES COMMISSION

The California Public Utilities Commission (CPUC) regulates the design, installation, and management of California's public utilities, including electric, natural gas, water, transportation, and telecommunications. The CPUC also provides consumer programs and information, such as energy efficiency, low-income programs, demand response, and California solar initiative for California's energy consumers.

CALIFORNIA WATER CONSERVATION ACT

The California Water Conservation Act, enacted in November 2009, required each urban water supplier to select one of four water conservation targets contained in California Water Code Section 10608.20, with the statewide goal of achieving a 20 percent reduction in urban per-capita water use by 2020.

URBAN WATER MANAGEMENT PLAN

In 1983, the California Legislature enacted the Urban Water Management Planning Act (UWMPA) (California Water Code Sections 10610–10656). The UWMPA states that every urban water supplier that provides water to 3,000 or more customers, or that provides more than 3,000 af of water annually, should make every effort to ensure the appropriate level of reliability in its water service sufficient to meet the needs of its various categories of customers during normal, dry, and multiple dry years. This effort includes the adoption of an UWMP by every urban water supplier and an update of the plan every 5 years on or before December 31 of every year ending in a five or zero. The UWMPA has been amended several times since 1983, with the most recent amendment occurring with SB 318 in 2004. With the passage of SB 610 in 2001, additional information is required to be included as part of an urban water management plan if groundwater is identified as a source of water available to the supplier. An urban water supplier is required to include in the plan a description of all water supply projects and programs that may be undertaken to meet total projected water use. The UWMPA and SB 610 are interrelated; the UWMP is typically relied upon to meet the requirements of SB 610.

WATER SUPPLY ASSESSMENT

California Public Resources Code Section 21151.9 requires that a Water Supply Assessment (WSA) be prepared for a proposed plan, as defined in the statute, to ensure that long-term water supplies are sufficient to meet the project's demands in normal, single dry, and multiple dry years for a period of 20 years. Preparation of a WSA is

required if a proposed action meets the statutory definition of a "project," which includes at least one of the following (Water Code Section 20912(a)):

- A proposed residential development of more than 500 dwelling units (DU).
- A proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space.
- A proposed commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space.
- A proposed industrial, manufacturing, or processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area.
- A mixed-use project that includes one or more of the projects specified in the above list items.

Completion of a WSA requires the collection of proposed water supply data and information relevant to the project in question, an evaluation of existing/current use, a projection of anticipated demand sufficient to serve a project for a period of at least 20 years, the delineation of proposed water supply sources, and an evaluation of water supply sufficiency under single-year and multiple-year drought conditions.

California Safe Drinking Water Act

The SWRCB-DDW is responsible for implementing the federal SDWA and its updates, as well as California statutes and regulations related to drinking water. State primary and secondary drinking-water standards are promulgated in California Code of Regulations (CCR) Title 22, Sections 64431–64501.

The California Safe Drinking Water Act (CA SDWA) was passed in 1976 to build on and strengthen the federal SDWA. The CA SDWA authorizes DHS to protect the public from contaminants in drinking water by establishing maximum contaminant levels (MCLs) that are at least as stringent as those developed by EPA, as required by the federal SDWA.

NPDES Permit for the Sacramento Regional Water Treatment Plant

The quality of the effluent that can be discharged to waterways in the Sacramento area by the Sacramento Regional Wastewater Treatment Plant (SRWTP) is established by the Central Valley RWQCB through waste discharge requirements (WDRs) that implement the NPDES permit. WDRs are updated at least every 5 years. A new permit must be issued in the event of a major change or expansion of the facility. In April 2016, the Central Valley RWQCB issued Order No. R5-2016-0020, NPDES No. CA 0077682, to Regional San for its SRWTP, which treats wastewater from its service area before discharging the treated effluent to the Sacramento River. The water quality objectives established in the Central Valley RWQCB Basin Plan are protected, in part, by Order No. R5-2016-0020,

NPDES No. CA 0077682. Currently, SRWTP is permitted for a discharge of up to 181 million gallons per day (mgd) of treated effluent to the Sacramento River.

NPDES FOR THE COMBINED SEWER SYSTEM

In April 2015, the Central Valley RWQCB issued WDR Order No. R5-2015-0045 (NPDES No. CA 0079111) to the City of Sacramento for its Combined Wastewater Collection and Treatment System. The system was previously regulated by Order R5-2010-0004, which expired on January 1, 2010. Depending on flow volumes, wastewater and stormwater flows in this system are conveyed to the SRWTP, Combined Wastewater Treatment Plant (CWTP) at South Land Park Drive and 35th Avenue, and Pioneer Reservoir at Front and V streets near the Sacramento River. The Order does not apply to operations at SRWTP.

This Order implements the U.S. EPA Combined Sewer Overflow (CSO) Control Policy, which establishes a consistent national approach for controlling discharges from CSOs to the nation's water through the NPDES permit program. This policy requires implementation of a long-term control plan (LTCP) to comply with water quality-based requirements of the CWA. The City of Sacramento adopted their LTCP, also known as the Combined Sewer System Improvement Plan (CSSIP), in 1995, which contained the infrastructure improvement portion of the LTCP.

WDR Order No. R5-2015-0045 identifies effluent limitations and discharge specifications for discharges from the CWTP and Pioneer Reservoir to the Sacramento River. Discharge from the system to surface waters or surface water drainage courses is prohibited during non-storm events. However, in the event that the capacity of the system is exceeded during a storm event, this Order allows for the discharge of overflows into the Sacramento River. The County is required to implement pollution prevention programs to reduce contaminants in CSOs.

CALIFORNIA INTEGRATED WASTE MANAGEMENT ACT AND CALRECYCLE

The Integrated Waste Management Act of 1989 is the result of two pieces of legislation, AB 939 and SB 1322, which created the California Integrated Waste Management Board (which has been renamed CalRecycle). The Integrated Waste Management Act mandated a goal of 25 percent diversion of each city’s and county’s waste from disposal by 1995 and 50 percent diversion in 2000, with a process to ensure environmentally safe disposal of waste that could not be diverted.

CalRecycle is the State agency designated to oversee, manage, and track California’s 92 million tons of waste generated each year. They provide grants and loans to help California cities, counties, businesses and organizations meet the State’s waste reduction, reuse and recycling goals.

Senate Bill 1016, signed into law on September 26, 2008, represents a fundamental shift in the way local jurisdictions are measured for compliance with state diversion mandates. Jurisdictions are now evaluated based on the implementation of programs that measure per capita waste disposal, rather than diversion percentage.

LOCAL

Sacramento Regional Wastewater Treatment Plant 2020 Master Plan

The SRWTP 2020 Master Plan provides a phased program of recommended wastewater treatment facilities and management programs to accommodate planned growth and to meet existing and anticipated regulatory requirements through the year 2020. The Master Plan addresses both public health and environmental protection issues while ensuring reliable service at affordable rates for Regional San customers. The Master Plan's key goals are to provide sufficient capacity to meet growth projections and an orderly expansion of SRWTP facilities, to comply with applicable water quality standards (now complete), and to provide for the most cost-effective facilities and programs from a watershed perspective (Regional San 2008).

SACRAMENTO LOCAL AGENCY FORMATION COMMISSION

Local Agency Formation Commissions (LAFCos) govern the formation of new agencies, incorporation of new cities and districts, consolidation or reorganization of special districts and/or cities, as well as municipal service reviews and sphere of influence updates, and annexations of cities and special districts. The broad goals of the Sacramento LAFCo's directive are to ensure the orderly formation of local governmental agencies, to preserve agricultural and open space lands, and to discourage urban sprawl. LAFCos must, by law, create Municipal Service Reviews and update Spheres of Influence for each independent local governmental jurisdiction within their jurisdiction.

SACRAMENTO COUNTY INTEGRATED WASTE MANAGEMENT PLAN

The Sacramento County Integrated Waste Management Plan is maintained and re-approved by CalRecycle through a mandatory 5-year review cycle, most recently in May of 2014. This plan consists of the following:

- Siting Element (entire county: cities and unincorporated areas)
- Summary Plan (entire county: cities and unincorporated areas)
- Source Reduction & Recycling Elements (by city or county, respectively)
- Household Hazardous Waste Elements (by city or county, respectively)
- Non-disposal Facility Elements (by city or county, respectively)

These documents are the main sources and references for solid waste facility planning in Sacramento County. The Siting Element and Summary Plan are prepared and administered by the County of Sacramento, Department of Waste Management and Recycling (County DWMR). The remaining documents are prepared and administered by each individual jurisdiction or regional agency.

SACRAMENTO COUNTY DEPARTMENT OF WASTE MANAGEMENT & RECYCLING

The County DWMR manages the operations, maintenance, and development of the solid waste management system within unincorporated portions of Sacramento County. The County DWMR provides solid waste residential curbside pickup services for garbage,

recycling, organics, and bulky waste collection to households in the unincorporated areas; provides transfer and disposal services for household hazardous waste, residential, commercial, and self-haul customers at the North Area Recovery Station and Keifer Landfill; and, through its ordinances, regulates collection by franchised haulers for commercial solid waste and recycling for businesses and commercial properties.

Sacramento Regional Solid Waste Authority

The Sacramento Regional Solid Waste Authority (SWA) is a joint powers authority of Sacramento County and the City of Sacramento. SWA was formed in December 1992 to assume the responsibility for solid waste, recycling, and disposal needs for businesses and apartment complexes in the Sacramento area. The SWA regulates commercial solid waste collection by franchised haulers and offers recycling services to multi-family dwelling units.

SWA Ordinances

The SWA has adopted three recycling ordinances that target three distinct waste streams: (1) The Business Recycling Ordinance, adopted in 2007 for commercial generators who subscribe to 4 cubic yards or more of refuse service per week; (2) The Certification of Construction and Demolition (C&D) Debris Sorting Facilities Ordinance, adopted in 2008, that creates a program for mixed C&D facilities that dovetails with both City and County C&D Ordinances for builders; and (3) The Multifamily Recycling Ordinance, adopted in 2009, that requires owners of multifamily properties with over 5 units to subscribe to a recycling service for their tenants.

Sacramento County General Plan

The following 2030 General Plan policies pertaining to wastewater and solid waste are applicable to the Project:

Land Use Element

LU-73. Sewer and water treatment and delivery systems shall not provide for greater capacity than that authorized by the General Plan.

Public Facilities Element

PF-4. Connector fees for new development shall cover the fair share to acquire and distribute surface water to the urban area.

PF-6. Interceptor, trunk lines, and flow attenuation facilities shall operate within their capacity limits without overflowing.

PF-7. Although sewer infrastructure will be planned for full urbanization consistent with the Land Use Element, an actual commitment of additional sewer system capacity will be made only when the land use jurisdiction approves development to connect and use the system.

PF-8. Do not permit development which would cause sewage flows into the trunk or interceptor system to exceed their capacity.

PF-9. Design trunk and interceptor systems to accommodate flows generated by full urban development at urban densities within the ultimate service area. System design may take into consideration land that cannot be developed for urban uses due to long-term circumstances including but not limited to conservation easements, floodplains, public recreation areas etc. This could include phased construction where deferred capital costs are appropriate.

PF-10. Development along corridors identified by the Sanitation Districts in their Master Plans as locations of future sewerage conveyance facilities shall incorporate appropriate easements as a condition of approval.

PF-13. Public sewer systems shall not extend service into agricultural-residential areas outside the urban policy area unless the Environmental Health Department determines that there exists significant environmental or health risks created by private disposal systems serving existing development and no feasible alternatives exist to public sewer service.

PF-14. Independent community sewer systems shall not be established for new development.

PF-15. Support CSD-1 and SRCSD policies to fund new trunk and interceptor capital costs through connection fees for new development.

PF-16. Support SRCSD policy to fully fund treatment plant operation through monthly service charges to system users. Fund treatment plant expansion and upgrades and existing trunk and interceptor replacements or improvements through connection fees or other revenue sources.

PF-18. New development projects which require extension or modification of the trunk or interceptor sewer systems shall be consistent with sewer facility plans and shall participate in established funding mechanisms. The County should discourage development projects that are not consistent with sewer master plans or that rely upon interim sewer facilities, particularly if the costs of those interim facilities may fall on ratepayers. Prior to approval of a specific Commercial Corridor redevelopment project which requires extension or modification of the trunk or interceptor sewer systems, a sewer study and financing mechanism shall be prepared and considered along with the proposed Corridor redevelopment project, in consultation with the Sacramento Area Sewer District.

PF-19. Extension or modification of trunk or interceptor sewer systems that are required for new developments shall be consistent with sewer facility plans and shall participate in an established funding mechanism. New development that will generate wastewater for treatment at the SRWTP shall not be approved if treatment capacity at the SRWTP is not sufficient to allow treatment and disposal of wastewater in compliance with the SRWTP's NPDES Permit.

PF-23. Solid waste collection, handling, recycling, composting, recovery, transfer and disposal fees shall recover all capital, operating, facility closure and maintenance costs.

PF-24. Solid waste disposal fees and rate structures shall reflect current market rates and provide incentives for recovery.

CONSERVATION ELEMENT

CO-23. Development approval shall be subject to a finding regarding its impact on valuable water-supported ecosystems.

CO-34. Development applicants shall be subject to compliance with applicable sections of the California Water Code and Government Code to determine the availability of an adequate and reliable water supply through the Water Supply Assessment and Written Verification process.

CO-35. New development that will generate additional water demand shall not be approved and building permits shall not be issued if sufficient water supply is not available, as demonstrated by Water Supply Assessment and Written Verification process.

CO-36. Water supply entitlements will be granted on a first come first serve basis to optimize the use of available water supplies.

SACRAMENTO COUNTY CODE

There are no policies related to utilities in the Sacramento County Code applicable to the Project.

SACRAMENTO COUNTY ZONING CODE

Chapter 5 “Development Standards” of the County Zoning Code provide landscaping, irrigation, and stormwater quality management standards to promote sustainable landscaping practices and responsibly conserve water supply.

DISTINCT AREA PLANS

The County contains many distinct area planning efforts and associated documents. The distinct area planning efforts provide community-specific regulations that supplement the County Zoning Code. Some of the candidate rezone sites are located within distinct area plans such as Special Planning Areas (SPAs), Specific Plans, Comprehensive Plans, Community Plans, Corridor Plans, and Neighborhood Preservation Areas (NPAs). These distinct area plans are created when the countywide zoning regulations do not adequately address local concerns (County of Sacramento 2023). As shown in Chapter 2, “Project Description,” 13 sites are located in distinct area plans.

Relevant utilities policies or mitigation included in the area planning efforts are summarized below. Where appropriate, mitigation is carried through or updated from these plans and associated environmental documents.

FAIR OAKS BOULEVARD CORRIDOR PLAN

There are no policies related to utilities in the Fair Oaks Boulevard Corridor Plan applicable to the Project.

NORTH WATT AVENUE CORRIDOR PLAN

Appendix E of the North Watt Avenue EIR contains the mitigation measures applicable to the plan. Specific to utilities, Mitigation Measures PS-1: Public Service Infrastructure and PS-2: Water Supply in the North Watt Avenue Corridor Plan stipulates the preparation of a phasing plan that identifies the thresholds of development for when necessary improvements are required; and when water supply thresholds are met, not allowing further development in accordance with the plan until additional water supply is secured. These mitigation measures are further discussed below in the Impact and Analysis.

OLD FLORIN TOWN SPECIAL PLANNING AREA

An appendix of the Old Florin Town SPA EIR contains the mitigation measures applicable to the plan. Specific to utilities, Mitigation Measures PS-1: Public Service Infrastructure in the Old Florin Town SPA stipulates the preparation of a phasing plan that identifies the thresholds of development for when necessary improvements are required. If private applicants/developers wish to proceed with development ahead of the preparation of the phasing plan, project-specific analyses (i.e., sewer study, water study) would be required to ensure that the existing infrastructure can accommodate the proposed development. This mitigation measure is further discussed below in the Impact and Analysis.

OTHER DISTINCT AREA PLANS

In addition to the distinct planning areas above there are rezone sites included in the Stockton Boulevard NPA, Victory Avenue NPA, Greenback Lane SPA, and Downtown Rio Linda SPA. There are no policies related to utilities in these planning areas applicable to the Project.

SIGNIFICANCE CRITERIA AND METHODOLOGY

SIGNIFICANCE CRITERIA

Based on the CEQA Guidelines, an impact related to public utilities is significant if implementation of the Project would:

1. require the construction of new or the expansion/relocation of existing utility facilities for water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities that could potentially cause significant construction-related environmental effects.

2. result in a water service demand that cannot be met by existing or reasonably foreseeable future service capacity.

3. result in a wastewater service demand that cannot be met by existing or reasonably foreseeable future service capacity.

4. generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.

5. result in non-compliance with federal, state, and local management and reduction statutes and regulations related to solid waste.

Issues Not Discussed Further or Discussed Elsewhere

Telecommunications

Telecommunications services would be provided by way of new connections to existing infrastructure located along roadways within the immediate vicinity of the candidate rezone sites. Therefore, the Project would not require major relocation or expansion of any telecommunication infrastructure. Impacts would be less than significant, and telecommunications are not discussed further.

Natural Gas

New development would be required to meet greenhouse gas (GHG) best management practices (BMP) that state that new development shall not connect to natural gas facilities (Chapter 6, “Climate Change,” Mitigation Measure CC-2). Thus, future multi-family residential development as part of the Project on the candidate rezone sites would be prohibited from connecting to natural gas unless there is substantial evidence that an additional project component would offset the entire GHG impact of providing natural gas to the development and associated units. Almost all multi-family projects would be electric-only and for the rare instance that a future project connects to natural gas, the Project would not require significant new or relocated natural gas utilities. Additional information regarding GHG BMPs is included in Chapter 6, “Climate Change.” Impacts would be less than significant and natural gas infrastructure is not discussed further.

Stormwater Drainage

The General Plan EIR and distinct area plan EIRs identified that development consistent with these respective plans would contribute additional runoff to the existing stormwater drainage systems. However, because development consistent with these respective plans were considered nebulous, potential impacts to the drainage system could not be fully analyzed or quantified at the time. Similarly, future development on candidate rezone sites would be reviewed and coordinated with County Department of Water Resources (Water Resources) to ensure development met the specifications of the Sacramento County Improvement Standards and the Sacramento County Floodplain Management Ordinance. Conformance with applicable standards would ensure that future development on candidate rezone sites would not substantially increase the rate or amount of surface runoff in a manner that causes flooding or that exceeds stormwater system capacity. Additionally, candidate rezone sites are located in infill and commercial corridors where there is existing or planned development served by existing stormwater

drainage infrastructure. When development occurs on candidate rezone sites, with or without the Project, the Department of Water Resources will analyze and require stormwater drainage infrastructure upgrades as needed; however, as noted, because the sites are located within existing urbanized areas, substantial upgrades or new major stormwater drainage infrastructure is not anticipated. Furthermore, relevant topical chapters of the General Plan EIR and distinct area plan EIRs, together with this SEIR, have already disclosed impacts of development on candidate rezone sites and have provided mitigation, as appropriate. Construction of stormwater drainage infrastructure will not result in any additional environmental impacts that have not already been disclosed within the relevant topical chapters of this SEIR together with the General Plan EIR and the distinct area plan EIRs. Therefore, no new or more severe stormwater drainage impacts would occur. Impacts would be less than significant and stormwater drainage is not discussed further.

Electric Power

Impacts associated with the provision of electric power are discussed in Chapter 7, "Energy."

Non-Compliance With Federal, State, And Local Management And Reduction Statutes And Regulations Related To Solid Waste

Future projects on candidate rezone sites would be subject to compliance with all federal, state and local management and reduction statutes and regulations; therefore, the Project would result in a less than significant impact related to non-compliance with regulations related to solid waste and this is not discussed further.

Methodology and Assumptions

This section analyzes utility and service system impacts that may occur from the Project. The evaluation of utility and service impacts is based on review of published information and reports. The analysis considers the impact analysis provided in the General Plan EIR, and focused review of the extent of land use and density changes associated with the proposed candidate rezone sites. The analysis is focused on whether the Project would result in impacts on utilities and services systems not previously considered in the General Plan EIR.

The Project would result in increased development density on all candidate rezone sites and amendments to the General Plan land use designation for some of the sites. The Project does not propose any new development that could result in new or physically altered public utilities and services systems.

For candidate rezone sites located within distinct area plans for which an EIR was prepared for adoption of the area plan, the analysis below considers the public utility analysis in the applicable EIR. Review of sites within distinct area plans is focused on whether the land use and density changes specific to those area plans would result in impacts not previously identified in the area plan EIR. It should be noted that cumulative impacts of all land use changes on candidate rezones sites, is represented in the General

Plan analysis for each utility and the distinct area plan analysis is strictly looking at land use changes on sites within applicable distinct area plans and is a subset of the overall impacts discussed in the General Plan analysis. The cumulative impacts analysis is included at the end of the section.

WATER SUPPLY & DEMAND

The General Plan EIR utilized the unit water demand factors from the Zone 40 Water Supply Master Plan (WSMP) to estimate water demand for the buildout of the General Plan. The unit water demand factor is expressed as a projected volume per acre of land with a specific land use classification and conservation density assumption. Table WS-27 of the General Plan EIR (pages 6-26 and 6-27) shows the water demand for each water purveyor with and without the General Plan.

The estimated water demand for buildout of the candidate rezone sites is discussed below for each of the affected water districts. Correspondence with affected water districts are provided in Appendix UTL-1. Demand factors for multi-family residential units are slightly different dependent upon the water district. All demand factors and population estimates are taken from the applicable UWMP or WSA (if required). In the instance that a water district does not have a UWMP or water demand factors are not stated, the SCWA demand factor for acre-feet (AF) per multi-family residential unit (0.17 acre feet per dwelling unit [af/du]) was utilized to estimate water demand from the net increase in units from the candidate rezone sites.

It should be noted that California Water Code (CWC) Section 10631.1 requires water agencies to project water use for lower income households in their 2020 UWMPs. Thus, for those water agencies that meet the criteria to require a UWMP, the UWMP includes a percentage of future connections that would be low-income households and assigns a water demand for those connections. Although the UWMPs account for some additional demand associated with low-income households, it may not accommodate the total water demand for the Project for any of the following reasons:

1. Future development of candidate rezone sites may not be for low-income households;

2. The candidate rezone sites are not the only sites that may be developed within a water district that will be reserved for low-income households; and,

3. Some water districts span multiple jurisdictions that each have RHNA obligations and the UWMPs do not assign units to each jurisdiction; therefore, even if all future development under the Project was reserved for lower income households, overall development may still exceed the UWMP projections.

Therefore, the estimated water demand discussed below assumes that all of the units added with the Project are additive in nature and that they may be developed with market-rate multi-family projects.

CALIFORNIA AMERICAN WATER – NORTHERN DIVISION

There are 32 candidate rezone sites located within CalAm's northern division service area. For modeling purposes, Site 22 is considered in both SSWD and CalAm, meaning there would be an additional site. The 33 modeled sites (32.5 candidate rezone sites) could result in a total of 2,105 new multi-family residential units that would require water connections to CalAm's Northern Division system. The number of total additional new multi-family residential units in each of the affected CalAm service areas is shown in Table UTL-11.

Table UTL-11: Potential Max Increase in Dwelling Units by CalAm Service Area

Service Area	Additional Dwelling Units
Antelope	203
Fruitridge Vista	89
Lincoln Oaks	299
Parkway	1,236
Suburban-Rosemont	278

Although the Project does not in itself authorize or approve any development, it does meet the statutory definition of a "project" that requires the preparation of a WSA because the Project would result in residential development of more than 500 dwelling units in the water district. Therefore, pursuant to California Public Resources Code Section 21151.9, CalAm prepared a WSA to ensure that long-term water supplies would be sufficient to meet the Project's demands in normal, single dry, and multiple dry years for a period of 20 years.

Water demand for the proposed 33 modeled sites (32.5 candidate rezone sites) was calculated for each of the service areas. Table UTL-12 shows the total calculated CalAm demand of the Project broken down by service area.

Table UTL-12: Water Demand by CalAm Service Area

Service Area	Additional Water Demand (MG/year)
Antelope	10.8
Fruitridge Vista	23.8
Lincoln Oaks	6.2
Parkway	58.7
Suburban-Rosemont	3.4
Total	102.9

Based on CalAm's water use factors, multi-family residential land uses allowed under the Project could generate a total water demand of approximately 103 MG per year (see Table UTL-12).

CARMICHAEL WATER DISTRICT

There are three candidate rezone sites located within the CWD service area. The three sites could result in a total of 142 new multi-family residential units that would require

water connections to CWD's system. Since the potential residential unit count is below 500 units in the CWD service area, a WSA was not required.

Water demand for the three candidate rezone sites was calculated based on CWD's water use factors for multi-family uses (0.14 af/du). CWD's UWMP assumes occupancy of 2 people per unit for multi-family residential indoor use and a total of 400 square feet of landscaped area per unit. Future multi-family residential land uses allowed under the Project could generate a water demand of approximately 19.88 AFY (see Table UTL-13).

Table UTL-13: Water Demand for Candidate Sites Within CWD

Proposed Development		Indoor Water Use Factor (AF/DU)	Outdoor Water Use Factor (AF/DU)	Water Demand (AFY)
Multi-Family Residential				
RD-30 (3 sites)	142 DUs	0.12	0.02	19.88

Notes: AF= acre-feet; AFY = acre-feet per year; DU = dwelling unit

FAIR OAKS WATER DISTRICT

There are two candidate rezone sites located within the FOWD service area. The two sites could result in a total of 51 new multi-family residential units that would require water connections to FOWD's system. Since the potential residential unit count is below 500 units in the FOWD service area, a WSA was not required.

Water demand for the two candidate rezone sites was calculated based on the SJWD's 25-Year Demand Forecast and Capacity Analysis (SJWD Analysis) because FOWD is one of the Wholesale Customer Agencies (WCA) to SJWD. For the FOWD, the SJWD Analysis calculated water use factors for future multi-family uses as 0.15 af/du. Future multi-family residential land uses allowed under the Project could generate a water demand of approximately 7.65 AFY (see Table UTL-14).

Table UTL-14: Water Demand for Candidate Sites Within FOWD

Proposed Development		Indoor Water Use Factor (AF/DU)	Outdoor Water Use Factor (AF/DU)	Water Demand (AFY)
Multi-Family Residential				
RD-30 (2 sites)	51 DUs	0.12	0.03	7.65

Notes: AF= acre-feet; AFY = acre-feet per year; DU = dwelling unit

ORANGE VALE WATER COMPANY

There are seven candidate rezone sites located within the OVWC service area. The seven sites could result in a total of 163 new multi-family residential units that would require water connections to OVWC's system. Since the potential residential unit count is below 500 units in the OVWC service area, a WSA was not required.

Water demand for the seven candidate rezone sites was calculated based on the SJWD's 25-Year Demand Forecast and Capacity Analysis (SJWD Analysis) because OVWC is

one of the WCAs to SJWD. For the OVWC, the SJWD Analysis calculated water use factors for future multi-family uses as 0.15 af/du. Future multi-family residential land uses allowed under the Project could generate a water demand of approximately 24.45 AFY (see Table UTL-15).

Table UTL-15: Water Demand for Candidate Sites Within OVWC

Proposed Development		Indoor Water Use Factor (AF/DU)	Outdoor Water Use Factor (AF/DU)	Water Demand (AFY)
Multi-Family Residential				
RD-10 (2 sites)	12 DUs	0.12	0.03	1.8
RD-15 (1 site)	7 DUs	0.12	0.03	1.05
RD-30 (2 sites)	73 DUs	0.12	0.03	10.95
RD-40 (2 sites)	71 DUs	0.12	0.03	10.65
TOTAL (7 sites)	163 DUs	0.15		24.45

Notes: AF= acre-feet; AFY = acre-feet per year; DU = dwelling unit

RIO LINDA ELVERTA COMMUNITY WATER DISTRICT

There are four candidate rezone sites located within the RLECWD service area. The four sites could result in a total of 118 new multi-family residential units that would require water connections to RLECWD's system. Since the potential residential unit count is below 500 units in the service area, a WSA was not required.

Water demand for the four candidate rezone sites was calculated based on RLECWD's water use factors. For multi-family projects, RLECWD assumes 1,982 gallons per day per account (GPD/account). The definition of an "account" for multi-family uses is not provided in the RLECWD UWMP. However, the SCWA Zone 40 Water System Infrastructure Plan Update (2016), indicates that most multi-family accounts or connections consist of approximately 10-15 units. It was conservatively assumed that each multi-family connection consists of 10 units. Utilizing these assumptions, future multi-family residential land uses allowed under the Project could generate a water demand of approximately 26.2 AFY (see Table UTL-16).

Table UTL-16: Water Demand for Candidate Sites Within RLECWD

Proposed Development		Indoor/Outdoor Water Use Factor (GPD/account)	Water Demand (AFY)
Multi-Family Residential			
RD-30 (4 sites)	118 DUs	1,982	26.2

Notes: GPD= gallons per day; account= 10 multi-family units per account; AFY = acre-feet per year; DU = dwelling unit

SACRAMENTO SUBURBAN WATER DISTRICT

There are 19 candidate rezone sites located within the SSWD service area. There is an additional candidate rezone site that is split between SSWD and CalAm (Site 22) and for the purposes of water demand modeling this site is considered an additional site. The 20

modeled sites could result in a total of 1,030 new multi-family residential units (2,314 units total including previously planned and new) that would require water connections to SSWD's system. This potential increase in residential units meets the statutory definition of a "project" that requires the preparation of a WSA because the Project would result in residential development of more than 500 DUs in the water district. Therefore, pursuant to California Public Resources Code Section 21151.9, SSWD prepared a WSA to ensure that long-term water supplies are sufficient to meet the Project's demands in normal, single dry, and multiple dry years for a period of 20 years.

Water demand for the 20 modeled sites (19.5 candidate rezone sites) was compared to water supplies available to SSWD, and a determination was made regarding the sufficiency of supply for the proposed Project using the WSA (see Appendix UTL-3). Based on SSWD's water use factors, multi-family residential land uses allowed under the Project could generate a water demand of approximately 211 (new) or 473 (total) AFY (see Table UTL-17).

Table UTL-17: Water Demand for Candidate Sites Within SSWD

Proposed Development			Demand[a] Per DU (GPD/DU)	Water Demand (AFY) New /Total
Multi-Family Residential				
Zoning	New DUs	Total DUs		
RD-10 (2 sites)	13	20 DUs	209	3.04 / 4.68
RD-15 (2 sites)	55	67 DUs	198	12.2 / 14.86
RD-20 (1 site)	0 DUs	19 DUs	191	0 / 4.06
RD-30 (11 sites)	621 DUs	1,429 DUs	183	127.3 / 292.92
RD-40 (4 sites)	341 DUs	780 DUs	179	68.37 / 156.39
TOTAL (20 sites)	1,030 DUs	2,314 DUs	-	211 / 473

Notes: GPD= gallons per day; AFY = acre-feet per year; DU = dwelling unit

a) Demand includes: indoor water use, landscape area, and outdoor water use factors

CITY OF SACRAMENTO

There is one candidate rezone site located within the City service area. This site could result in a total of 43 new multi-family residential units that would require water connections to the City's system. Since the potential residential unit count is below 500 units in the service area, a WSA was not required. However, the City requires a Water Supply Assessment and Certification Form process for all projects requiring water demand (see Appendix UTL-1).

The City's Water Study Design Manual (Manual) contains the Water System Design Criteria, a summary of recommended potable-water system performance and operational criteria. The Water System Design Criteria provides a table of gross unit water use factors for various land uses. The demands are divided into two categories of water use factors: residential and nonresidential. Water demand for one candidate rezone sites was calculated based on the City's Manual water use factors (residential high 0.12 af/du) and was confirmed by City staff through the City's WSA and Certification process. Future

multi-family residential land uses allowed under the Project could generate a water demand of approximately 5.16 AFY (see Table UTL-18).

Table UTL-18: Water Demand for Candidate Sites Within City of Sacramento

Proposed Development		Water Use Factor (AF/DU)	Water Demand (AFY)
Multi-Family Residential			
RD-40 (1 site)	43 DUs	0.12	5.16

Notes: AF= acre-feet; AFY = acre-feet per year; DU = dwelling unit

FLORIN COUNTY WATER DISTRICT

There are eight candidate rezone sites located within the FCWD service area. The eight sites could result in a total of 288 new multi-family residential units that would require water connections to FCWD's system. Since the potential residential unit count is below 500 units in the service area, a WSA was not required.

Given that the FCWD is under the size limit for requiring a UWMP, water demand for the eight candidate rezone sites was calculated utilizing SCWA's 2020 demand factor per unit value. SCWA's UWMP calculated water use factors for future multi-family uses as 0.17 af/du. Future multi-family residential land uses allowed under the Project could generate an additional water demand of approximately 48.96 AFY (see Table UTL-19).

Table UTL-19: Water Demand for Candidate Sites Within FCWD

Proposed Development		Indoor Water Use Factor (AF/DU)	Outdoor Water Use Factor (AF/DU)	Water Demand (AFY)
Multi-Family Residential				
RD-30 (7 sites)	243 DUs	0.15	0.02	41.31
RD-40 (1 site)	45 DUs	0.15	0.02	7.65
TOTAL (8 sites)	288 DUs	0.17		48.96

Notes: AF= acre-feet; AFY = acre-feet per year; DU = dwelling unit

SACRAMENTO COUNTY WATER AGENCY

There are two candidate rezone sites located within the SCWA service area. The two sites could result in a total of 141 new multi-family residential units that would require water connections to SCWA's system. Since the potential residential unit count is below 500 units in the service area, a WSA was not required.

Water demand for the two candidate rezone sites was calculated based on SCWA's 2020 demand factor per unit value. SCWA's UWMP calculated water use factors for future multi-family uses as 0.17 af/du. Future multi-family residential land uses allowed under the Project could generate a water demand of approximately 23.97 AFY (see Table UTL-20).

Table UTL-20: Water Demand for Candidate Sites Within SCWA

Proposed Development		Indoor Water Use Factor (AF/DU)	Outdoor Water Use Factor (AF/DU)	Water Demand (AFY)
Multi-Family Residential				
RD-30 (2 sites)	141 DUs	0.15	0.02	23.97

Notes: AF= acre-feet; AFY = acre-feet per year; DU = dwelling unit

Wastewater Treatment and Disposal

For the purpose of this analysis, the estimated additional wastewater that would be generated by the Project is assumed to be equal to the additional water demand.

Solid Waste

The generation rate published by CalRecycle has been applied to determine the potential volume of solid waste produced under full buildout of the Project. Estimated Project solid waste is compared to the available capacity of the infrastructure to determine if the Project can be accommodated, or if additional capacity would be needed.

Impact and Analysis

This impact and analysis section is organized by impact-area, then by analysis of Project buildout as compared to the General Plan EIR, and finally by distinct plan area. Mitigation is included or updated, where applicable, from the original environmental documents prepared for the General Plan and distinct area plans.

Impact UTL-1: Exceed Reasonable Foreseeable Future Water Service Capacity

Sacramento County General Plan

General Plan Environmental Impact Report Determination

General Plan EIR Chapter 6, “Water Supply,” evaluated the sufficiency of water supplies to serve proposed new development in the County. The General Plan EIR determined that impacts to future water service capacity for the various water districts in Sacramento County would be potentially significant. Policy CO-35 was added to the General Plan to address water supply impacts. Policy CO-35 requires new development that would generate additional water demand to not be approved if sufficient water supply is not available. However, impacts were determined to remain significant and unavoidable.

Proposed Project Impact Evaluation

The Project would facilitate the development of residential units by permitting denser development on parcels already planned for development. Implementation of the Project would increase the number of residential units in the County by up to 4,081 new housing

units over development anticipated in the adopted General Plan through redesignation of General Plan land uses and associated zoning.

The additional 4,081 net new housing units would result in additional water demand within nine water districts as identified in the Methodology and Assumptions section, above. An analysis of impacts associated with increased water demand is included for each of the affected water districts is included below.

CALIFORNIA AMERICAN WATER – NORTHERN DIVISION

The 32.5 candidate rezone sites (33 modeled sites; Sites 4, 7, 15, 16, 22, 26, 27, 30, 32 through 41, 43 through 55, 58, and 59) located within CalAm's Northern Division could result in a total of 2,105 new multi-family residential units that would generate an additional water demand of approximately 103 MG per year (See Table UTL- 21). As noted above, pursuant to California Public Resources Code Section 21151.9, CalAm prepared a WSA to ensure that long-term water supplies are sufficient to meet the Project's demands in normal, single dry, and multiple dry years for a period of 20 years.

As included in the WSA, the total water supply, demand, and surplus in normal, one dry year, and multiple dry years, which includes the Project growth and other planned growth in the service areas is summarized by service area in Tables UTL-21 through UTL-25, below.

Table UTL-21: CalAm Supply and Demand (MG/Year) – Antelope Service Area

Year Type	Source	2025	2030	2035	2040	2045
Normal Years	Supply	7,428	7,428	7,428	7,428	7,428
	Demand	1,421	1,469	1,507	1,547	1,565
	Surplus/Deficit	6,007	5,959	5,921	5,881	5,863
Single Dry Year	Supply	6,776	6,776	6,776	6,776	6,776
	Demand	1,421	1,469	1,507	1,547	1,565
	Surplus/Deficit	5,355	5,307	5,269	5,229	5,211
Multiple Dry Year	Supply	6,776	6,776	6,776	6,776	6,776
	Demand	1,421	1,469	1,507	1,547	1,565
	Surplus/Deficit	5,355	5,307	5,269	5,229	5,211

Table UTL-22: CalAm Supply and Demand (MG/Year) – Fruitridge Vista Service Area

Year Type	Source	2025	2030	2035	2040	2045
Normal Years	Supply	4,820	4,820	4,820	4,820	4,820
	Demand	998	1,097	1,158	1,218	1,224
	Surplus/Deficit	3,822	3,723	3,662	3,602	3,596
Single Dry Year	Supply	4,820	4,820	4,820	4,820	4,820
	Demand	998	1,097	1,158	1,218	1,224
	Surplus/Deficit	3,822	3,723	3,662	3,602	3,596

Year Type	Source	2025	2030	2035	2040	2045
Multiple Dry Year	Supply	4,820	4,820	4,820	4,820	4,820
	Demand	998	1,097	1,158	1,218	1,224
	Surplus/Deficit	3,822	3,723	3,662	3,602	3,596

Table UTL-23: CalAm Supply and Demand (MG/Year) – Lincoln Oaks Service Area

Year Type	Source	2025	2030	2035	2040	2045
Normal Years	Supply	8,479	8,479	8,479	8,479	8,479
	Demand	1,830	1,878	1,921	1,966	1,981
	Surplus/Deficit	6,649	6,601	6,558	6,513	6,498
Single Dry Year	Supply	7,827	7,827	7,827	7,827	7,827
	Demand	1,830	1,878	1,921	1,966	1,981
	Surplus/Deficit	5,997	5,949	5,906	5,861	5,846
Multiple Dry Year	Supply	7,827	7,827	7,827	7,827	7,827
	Demand	1,830	1,878	1,921	1,966	1,981
	Surplus/Deficit	5,997	5,949	5,906	5,861	5,846

Table UTL-24: CalAm Supply and Demand (MG/Year) – Parkway Service Area

Year Type	Source	2025	2030	2035	2040	2045
Normal Years	Supply	9,022	9,022	9,022	9,022	9,022
	Demand	2,526	2,595	2,606	2,660	2,723
	Surplus/Deficit	6,496	6,427	6,416	6,362	6,298
Single Dry Year	Supply	7,824	7,824	7,824	7,824	7,824
	Demand	2,526	2,595	2,606	2,660	2,723
	Surplus/Deficit	5,298	5,229	5,218	5,164	5,100
Multiple Dry Year	Supply	7,824	7,824	7,824	7,824	7,824
	Demand	2,526	2,595	2,606	2,660	2,723
	Surplus/Deficit	5,298	5,229	5,218	5,164	5,100

Table UTL-25: CalAm Supply and Demand (MG/Year) – Suburban-Rosemont Service Area

Year Type	Source	2025	2030	2035	2040	2045
Normal Years	Supply	10,855	10,855	10,855	10,855	10,855
	Demand	2,727	3,027	3,325	3,623	3,923
	Surplus/Deficit	8,128	7,828	7,530	7,232	6,932
Single Dry Year	Supply	9,682	9,682	9,682	9,682	9,682

Year Type	Source	2025	2030	2035	2040	2045
	Demand	2,727	3,027	3,325	3,623	3,923
	Surplus/Deficit	6,955	6,655	6,357	6,059	5,759
Multiple Dry Year	Supply	9,682	9,682	9,682	9,682	9,682
	Demand	2,727	3,027	3,325	3,623	3,923
	Surplus/Deficit	6,955	6,655	6,357	6,059	5,759

As shown in Table UTL-21 through UTL-25, the total available 2025-2045 water supply, demand, and water surplus for the five service areas where candidate rezone sites are located in CalAm Northern Division's is sufficient to meet demand generated by the proposed Project in normal, single dry, and multiple dry precipitation years.

CalAm would have adequate planned water supply to serve development allowed under the proposed Project during normal, single dry, and multiple dry years, as confirmed by the WSA prepared for the Project. Therefore, the Project would not exceed reasonably foreseeable future water service capacity within CalAm.

CARMICHAEL WATER DISTRICT

The three candidate rezone sites (Sites 11, 12, and 67) located within CWD's service area could result in a total of 142 new multi-family residential units that would generate an additional water demand of approximately 19.88 AFY (See Table UTL-13).

CWD's UWMP provides water supply and total demand assumptions data for the entire district (see Table UTL-2 above), which identifies a water surplus in all forecasted years (2025, 2030, 2035, 2040, and 2045). The increase in water demand under the proposed Project would represent an increase of approximately 0.22 percent relative to CWD's total 2025 water demand of 8,860 AF. As shown in Table UTL-2, the total available water supply for CWD in 2025 was more than 43,000 AF and is sufficient to meet demand generated by the proposed Project in normal precipitation years. Furthermore, Table UTL-2 demonstrates that there is adequate water supply to meet the demand of the Project in normal, single dry year, and multiple dry years during all projected water supply/demand years to 2045.

CWD also responded to staff's request regarding whether the rezone of candidate rezone sites within CWD, would result in an adverse impact associated with water demand and supply (Appendix UTL-1). CWD provided the following in response (Norris, pers. comm., 2024):

> According to Carmichael Water District's 2020 Urban Water Management Plan (2020 UWMP), the anticipated net increase of 142 lower-income units falls within the forecasted future water use 2020 – 2030 (Section 4.4.3), thus, within the timeline of Sacramento County Housing Element of 2021 – 2029 project.
>
> Annual demand of water for multi-family residential is 0.14 acre-feet/dwelling unit and the proposed net increase of 142 units will result in annual water demand of 19.88 acre-feet. Carmichael Water District anticipates ~30 acre-feet of estimated low-income water use by 2030 (Section 4.6). Carmichael Water District is capable

> of meeting the water demands in its service area in normal, single dry, and five consecutive dry years from 2020 – 2045 as long as the guidelines disclosed in the portfolio is strategically implemented (2020 UWMP, Section 5.4).
>
> Carmichael Water District concludes that the district holds adequate capacity to serve the Project and has considered this level of increased demand within the specified timeframe.

Based on assumptions included in the CWD UWMP for total water demand and supply for multi-family uses (low income or market rate) and CWD's response to staff, the Project would not exceed reasonably foreseeable future water service capacity within CWD.

FAIR OAKS WATER DISTRICT

The two candidate rezone sites (Sites 17 and 18) located within FOWD's service area could result in a total of 51 new multi-family residential units and generate an additional water demand of approximately 7.65 AFY (See Table UTL-13).

FOWD's UWMP provides water supply and total demand assumptions data for the entire district (see Table UTL-3 above), which identifies a water surplus in all forecasted years (2025, 2030, 2035, and 2040). The increase in water demand under the proposed Project would represent an increase of approximately 0.07 percent relative to FOWD's total 2025 water demand of 10,531 AF. As shown in Table UTL-3, the total available water supply for FOWD in 2025 was more than 33,000 AF and is sufficient to meet demand generated by the proposed Project in normal precipitation years. Furthermore, Table UTL-3 demonstrates that there is adequate water supply to meet the demand of the Project in normal, single dry year, and multiple dry years during all projected water supply/demand years to 2040.

FOWD also responded to staff's request regarding whether the rezone of candidate sites within FOWD, would result in an adverse impact associated with water demand and supply (Appendix UTL-1). FOWD provided the following in response (Siebensohn, pers. comm., 2024):

> FOWD can serve all parcels within our existing service area, including those parcels within the Sacramento County Regional Housing Needs Allocation (RHNA) Rezone Project (Control No. PLNP2020-00042).

Based on assumptions included in the FOWD UWMP for total water demand and supply for multi-family uses (low income or market rate) and FOWD's response to staff, the Project would not exceed reasonably foreseeable future water service capacity within FOWD.

ORANGE VALE WATER COMPANY

The seven candidate rezone sites (Sites 24, 25, and 60 through 64) located within OVWC's service area could result in a total of 163 new multi-family residential units that would generate an additional water demand of approximately 24.45 AFY (See Table UTL-15).

OVWC's UWMP provides water supply and total demand assumptions data for the entire district (see Table UTL-4), which does not identify any water surplus in all forecasted

years (2025, 2030, 2035, 2040, and 2045). The increase in water demand under the proposed Project would represent an increase of approximately 0.66 percent relative to OVWC's total 2025 water demand of 3,700 AF.

OVWC responded to staff's request regarding whether development that could occur on candidate rezone sites within OVWC, would result in an adverse impact associated with water demand and supply (Appendix UTL-1). OVWC interim General Manager (GM), Mark DuBose, provided a response indicating that OVWC has capacity to serve future development all candidate rezone sites as part of the Project. He also indicated that OVWC's water demands have decreased recently due to water metering and other conservation efforts (Dubose, pers. comm., 2024).

Although OVWC's UWMP does not identify a water surplus, water demand projections included in the OVWC's UWMP for multi-family uses (low income or market rate) have been reduced since publication of the UWMP and the anticipated increase in water demand from future development associated with the Project, 0.66 percent increase, is minor compared to ongoing water savings due to conservation efforts. Therefore, the Project would not exceed reasonably foreseeable future water service capacity within OVWC.

RIO LINDA ELVERTA COMMUNITY WATER DISTRICT

The four candidate rezone sites (Sites 28, 29, 65 and 66) located within RLECWD service area could result in a total of 118 new multi-family residential units that would generate an additional water demand of approximately 26.2 AFY (see Table UTL-16).

RLECWD's UWMP provides water supply and total demand assumptions data for the entire district (see Table UTL-5), which does not identify water surplus in all forecasted years (2025, 2030, 2035, 2040, and 2045). The increase in water demand under the proposed Project would represent an increase of approximately 0.91 percent relative to RLECWD's total 2025 water demand of 2,876 AF.

RLECWD responded to staff's request regarding whether the rezone of candidate sites within RLECWD, would result in an adverse impact associated with water demand and supply (Appendix UTL-1). RLECWD GM, Tim Shaw, provided a response paraphrased and summarized, as follows (Shaw, pers. comm., 2024):

> Section 4.2.4 of the District's UWMP does provide projections for lower income households subject to the limitations described in Section 4.2.1. Section 4.2.1 explains the severely protracted delay in long-planned residential development coming to fruition within RLECWD. At the center of this protracted delay is the 1998 Rio Linda Elverta Community Plan, which includes a restriction (PF-8) on continued use of groundwater. Generally, PF-8 stipulates there should be no net increase in groundwater pumping and that alternative water supplies (e.g. surface water) are needed to enable development.
>
> The Water Code does require that water districts describe actions to procure sufficient water supplies if such sufficiency does not yet exist in the UWMP. The RLECWD was exploring procurement of surface water with the River Arc project;

however, financial support from Elverta Specific Plan developers ceased. RLECWD did adopt (in 2016) a capacity fee structure to include the projected, substantial costs for surface water facilities but funds in the magnitude needed will not materialize unless and until a substantial number of residential units are constructed with each unit paying a drinking water capacity fee.

Surface water needs and related infrastructure could be reduced water impact fees required of all future development – such as a Mello-Roos tax. Unfortunately, when the RLECWD inquired about the feasibility of a Mello-Roos tax, developers indicated that it would be financially infeasible.

The UWMP assumes annual growth of 0.38 percent for population and employment within the RLECWD. The Project does not include actual development in the candidate rezone sites, nor does it guarantee that the sites would be built within the planning horizon of RLECWD's UWMP. It may be possible that the candidate rezone sites may be developed within the projected demand of RLECWD; however, this analysis conservatively acknowledges that RLECWD's UWMP does not identify a water surplus and the GM indicates that development consistent with the Project could exceed foreseeable future water service capacity. Therefore, it cannot be determined with certainty that the Project would not exceed reasonably foreseeable future water service capacity within RLECWD.

SACRAMENTO SUBURBAN WATER DISTRICT

As noted above, pursuant to California Public Resources Code Section 21151.9, SSWD prepared a WSA to ensure that long-term water supplies are sufficient to meet the Project's demands in normal, single dry, and multiple dry years for a period of 20 years. The 19.5 candidate rezone sites (20 modeled sites) located within SSWD could result in a total of 1,030 new multi-family residential units (2,314 units total including previously planned and new) that would generate an additional water demand of approximately 211 (new) or 473 (total) AFY (see Table UTL-17). According to the WSA, a portion of Project demand (174 AFY) is already accounted for in the 2020 UWMP; therefore, the net increase in demand as a result of the Project would be 299 AFY.

The increase in water demand from future development under the Project would represent an increase of approximately 0.8 percent relative to SSWD's total 2045 water demand of 38,184 AF. As shown in Table UTL-6, the total available water supply for SSWD in 2045 is more than 93,000 AF. An increase in projected demand from 38,536 AFY to 38,835 AFY is minor and the overall surplus is sufficient to meet demand generated by the Project in normal precipitation years. With the Project, SSWD's surplus water supply is projected to range from 9,990 AFY in 2025 to 9,165 AFY in 2045 during a single dry year or multiple dry years (see Appendix UTL-3 for the WSA).

SSWD would have adequate planned water supply to serve development allowed under the proposed Project during normal, single dry, and multiple dry years, as confirmed by the WSA prepared for the Project. Therefore, the Project would not exceed reasonably foreseeable future water service capacity within SSWD.

FLORIN COUNTY WATER DISTRICT

The eight candidate rezone sites (Sites 42, and 73 through 79) located within FCWD's service area could result in a total of 288 new multi-family residential units that would generate an additional water demand of approximately 48.96 AFY (see Table UTL-18). As noted above, the FCWD does not meet the criteria for the preparation of an UWMP thus projected water supply and demand data is not available. Therefore, the Project's water demand was estimated utilizing SCWA's water demand estimates as the best available water demand assumptions for the FCWD.

FCWD responded to staff's request regarding whether development that could occur on candidate rezone sites as part of the Project within FCWD, would result in an adverse impact associated with water demand and supply (Appendix UTL-1). FCWD GM, Edmond Leggette, provided a response indicating that FCWD has capacity to serve all candidate rezone sites (Leggette, pers. comm., 2024). The GM also requested that conditions of approval be placed on the eight candidate rezone sites within the FCWD. The conditions of approval speak to obtaining a will-serve letter from FCWD confirming water service to each candidate rezone site and compliance with FCWD connection requirements.

The General Plan EIR indicated that development within FCWD would substantially increase water demands, specifically with the then contemplated corridor plan known as Old Florin Town SPA. Seven of the eight candidate rezone sites in FCWD are located within the Old Florin Town SPA. In the following italicized discussion, from the General Plan EIR, references to "Commercial Corridors" refer, in part, to the proposed Project specifically the Old Florin Town SPA.

> *Corridor enhancement and residential infill, as proposed in the General Plan Update, would affect the Florin County Water District (FCWD) by designating a corridor along Florin Road for more intense land uses and encouraging higher density infill of vacant land [Old Florin Town SPA]. FCWD obtains its water supply from ten groundwater wells. The proposed General Plan will designate an additional equivalent of 63 acres for single family residential, 32 acres for multi-family residential, and 15 acres for commercial uses over existing 1993 General Plan acreage. The Project will increase projected 2030 water demand by 459 AFA above estimated 2005 levels and by 355 AFA above 1993 General Plan normal year forecast levels.*
>
> *Most of the land proposed for higher density is vacant land that abuts mixed uses (industrial, commercial, and residential) along Florin Road, between French Road and Power Inn Road. The FCWD does not meet the criteria that require the district to prepare an Urban Water Management Plan. The FCWD was contacted during the NOP process for the environmental document preparation for the General Plan Update. The district had no comments at that time.*
>
> *Increasing the density of the land uses in the Commercial Corridors will increase the baseline water demand for FCWD to 3,082 AFA. Increasing the density of parcels and developing vacant parcels in the FCWD will increase normal water year demand for single family residences to 1,780 acre feet per year, for*

multifamily residences to 346 acre feet per year, and for commercial/industrial uses to 956 AFA. The FCWD indicates a total well production of 2,668 AFA. There is inadequate existing water supply to meet the proposed General Plan Update during normal water years. This water supply impact for the FCWD is considered potentially significant and could be considered significant and unavoidable if additional water supplies can not be attained. However, development of the commercial corridor and/or infill projects within the FCWD can not be approved unless there is an available water supply, therefore, in order the meet General Plan Update density requirements, the increase in density would have to occur within another water purveyor's district.

Upgrades in infrastructure will be needed for conveyance of the water supply and fire suppression. Potential impacts associated with new or replacement water supply infrastructure construction in the Commercial Corridors may include construction impacts to native trees, migratory birds, and impacts to special status species; air quality impacts associated with particulate matter; erosion and sedimentation impacts associated with construction in a floodplain; traffic and circulation impacts associated with construction in Florin Road; and potential impacts to historical resources. These impacts will be assessed at such time specific development projects are proposed. The need for any future construction of infrastructure to provide water supply for urban uses and fire suppression to accommodate commercial corridors and infill development would be determined by FCWD at the time a specific Commercial Corridor Plan is developed by the County of Sacramento or infill is proposed by a project applicant. The Corridor Plan, which would provide a guide to land use development within a particular corridor, would require environmental review to evaluate potential physical impacts to the environment. The FCWD will be a responsible agency consulted during the environmental review process. Mitigation measures may be recommended and adopted for inclusion into the Corridor Plan. Infill development may require environmental review with appropriate mitigation measures adopted by the hearing body. Any physical impacts associated with the construction of new infrastructure to accommodate the increase in water demand created by commercial corridors and/or infill development are speculative as the changes in land use are unknown at this time. The impacts associated in infrastructure are considered potentially significant.

For the above mentioned reasons impacts are considered potentially significant.

Communication with FCWD indicates that the water supply from groundwater wells continues to be 2,668 AFA as disclosed in the General Plan EIR. As shown in the General Plan EIR, buildout of the Old Florin Town SPA, without the additional density contemplated under the proposed Project, would exceed the total water supply identified for the groundwater wells in FCWD. FCWD GM indicated that since adoption of the General Plan, an additional intertie with SCWA was established for emergency purposes. To date, there are three interties with adjacent water districts to provide emergency water services; however, no new permanent water supply has been identified.

Future development on candidate rezone sites as part of the Project would be subject to the requested conditions of approval from FCWD. Identified conditions applicable to future development as part of the Project on the candidate rezone sites would include obtaining a will-serve letter from FCWD confirming water service and meeting all FCWD connection requirements. Given that no additional permanent water supply has been identified since the adoption of the General Plan, the Project would contribute to an existing significant water supply impact for FCWD and could result in substantial exceedance of reasonably foreseeable future water service capacity within FCWD.

CITY OF SACRAMENTO

One candidate rezone site (Site 31) is located within the City of Sacramento's service area and could result in a total of 43 new multi-family residential units that would generate an additional water demand of approximately 5.16 AFY (see Table UTL-18).

The City's UWMP provides water supply and total demand assumptions data for the entire district (see Table UTL-7), which identifies a water surplus in all forecasted years (2025, 2030, 2035, 2040, and 2045). As shown in Table UTL-7, the total available water supply for the City in 2025 was more than 333,000 AF and is sufficient to meet demand generated by the proposed Project in normal precipitation years. Furthermore, Table UTL-7 demonstrates that there is adequate water supply to meet the demand of the Project in normal, single dry year, and multiple dry years during all projected water supply/demand years to 2045. The determination of adequate supply was confirmed by City staff through the City's WSA and Certification process. The certification of adequate water supply for the Project can be reviewed in Appendix UTL-1. Therefore, the Project would not exceed reasonably foreseeable future water service capacity within the City of Sacramento.

SACRAMENTO COUNTY WATER AGENCY

The two candidate rezone sites (Sites 60 and 61) located within SCWA's service area could result in a total of 141 new multi-family residential units that would generate an additional water demand of approximately 23.97 AFY (See Table UTL-20).

SCWA's UWMP provides water supply and total demand assumptions data for the entire district (see Table UTL-9 above), which identifies a water surplus in all forecasted years (2025, 2030, 2035, 2040, and 2045). The increase in water demand as part of future development under the Project would represent an increase of approximately 0.05 percent relative to SCWA's total 2025 water demand of 46,235 AF (normal year). As shown in Table UTL-9, the total available water supply for SCWA in 2025 is more than 159,000 AF and is sufficient to meet demand generated by the proposed Project in normal precipitation years. Furthermore, Table UTL-9 demonstrates that there is adequate water supply to meet the demand of the Project in normal, single dry year, and multiple dry years during all projected water supply/demand years to 2045.

SCWA responded to staff's request regarding whether the rezone of candidate sites within SCWA, would result in an adverse impact associated with water demand and supply (Appendix UTL-1). SCWA also requested that conditions of approval be placed on the two candidate rezone sites within the SCWA. SCWA provided the following in response (Grinstead, pers. comm., 2024):

> The 2020 UWMP predicts an increase in the number of connections (and therefore water used) and does not tie that increase to any specific project much less any specific APN. The UWMP also predicts an increase in overall demands due to growth that is lower than what the WSIP predicts. Long story short, the 2020 UWMP predicted an increase in connections that is below what has occurred and predicts a new level of demand that is lower than what our WSIP predicts. So, the increase in DUs associated with this change in zoning, while not explicitly studied in any planning document, would fit within the growth analyzed in the 2020 UWMP and SCWA will have adequate water supplies to serve the project.

Future development under the Project on candidate rezone sites would be subject to the requested conditions of approval. Identified conditions applicable to future development on candidate rezone sites entail meeting all SCWA connection requirements, payment of applicable development fees, destroying all abandoned wells on site, and compliance with the County's Landscape Water Conservation Ordinance.

Based on assumptions included in the SCWA UWMP for total water demand and supply for multi-family uses (low income or market rate) and SCWA's response to staff, the Project would not exceed reasonably foreseeable future water service capacity within SCWA.

WATER SERVICE CAPACITY CONCLUSIONS

As discussed, most Sacramento County water purveyors have sufficient supply to serve future development pursuant to their respective UWMP, with the exception of OVWC, RLECWD, and City of Sacramento (wholesale water service), which do not have identified surplus to meet any new growth and FCWD which does not have a UWMP identifying water supply, demand, or surplus.

The County General Plan Conservation Element includes policies and implementation measures to ensure that adequate water supply would be available for future projects. For example, Policy CO-34 requires that development applications shall comply with applicable regulations to determine the availability of an adequate and reliable water supply through the WSA Written Verification process. Consistent with County policy, water agency policy, and state law, a WSA with written verification of reliable water supply was received from water purveyors that would have increased water demand of 500 new net units or more or if required by the water purveyor (City of Sacramento).

WSAs received from CalAm, SSWD, and the City of Sacramento all indicated that there is adequate and reliable water supply to meet the increased water demand due to future development under the Project on candidate rezone sites. Further, all other affected water districts, except RLECWD, provided PER written confirmation of adequate supply to meet future development consistent with the proposed rezones on candidate sites. Further, as described above, FCWD and SCWA requested that conditions of approval be placed on the candidate rezone sites within their service areas. Although OVWC's UWMP did not identify a surplus, the GM indicated that water demand has decreased since adoption of the UWMP due to water conservation and installation of water meters. OVWC's GM concluded that the increase in water demand anticipated for future development of

candidate rezone sites under the Project in the OVWC service area is minor and due to a reduction in actual water demand, would be adequately served with reliable water with existing supply. For the City, although the UWMP does not identify a water surplus for wholesale water service, it does have a surplus for retail water service, which would serve the singe candidate rezone site located in the City water district.

For RLECWD, both the UWMP and the district's GM indicated that there was no surplus water supply for the four sites located within the district. Further, the RLECWD water supply is based entirely on groundwater and there are no plans to intertie with another provider that has surplus with a surface water supply. Comments provided by the RLECWD GM indicate that the district has put a water impact fee in place for new development but that development alone cannot fund the costs associated with finding a surface water supply to provide adequate infrastructure and supply.

Additionally, the General Plan EIR identified significant impacts associated with water supply for FCWD. Specifically, growth within the Old Florin Town SPA where the majority of candidate rezone sites are located in FCWD (seven of the eight sites), was determined to result in potentially inadequate water supply to meet normal year demands. Like RLECWD, FCWD relies upon groundwater wells as the primary source of water. FCWD has established interties with CalAm and SCWA to supplement water supply in emergency situations only. Since there is no new permanent water supply identified it is unclear if there is enough water supply to meet the FCWD future demands with the Project.

Policy CO-35 requires new development that would generate additional water demand to not be approved if sufficient water supply is not available; and Implementation Measure A (of the Efficient Use of Municipal and Industrial Water section) requires coordination with appropriate water purveyors to demonstrate adequate water supply for development. However, similarly to the findings of the General Plan EIR it cannot be assumed that sufficient water supply would be available for all future development proposed as part of the Project. All applicable General Plan policies would apply and be consistent with the determination in the General Plan EIR; however, it cannot be assumed that development as part of the Project, specifically in RLECWD and FCWD jurisdiction, would have sufficient water supply. This impact would be significant.

MITIGATION MEASURES

None available beyond compliance with General Plan Policy CO-35 and Implementation Measure A.

SIGNIFICANCE AFTER MITIGATION

It cannot be assured that there would be sufficient water supply to meet the water demand needed for the Project. Therefore, pursuant to CEQA Guidelines Section 15162, the proposed Project would result in a more severe impact associated with exceeding reasonable foreseeable future water service capacity over what was already disclosed in the General Plan EIR. The Project's contribution to impacts would be significant and unavoidable and the overall impacts would remain significant and unavoidable. .

DISTINCT AREA PLANS

FAIR OAKS BOULEVARD CORRIDOR PLAN

ENVIRONMENTAL IMPACT REPORT DETERMINATION

The Fair Oaks Boulevard EIR concluded that there would be adequate water supply for full build out of the Fair Oaks Boulevard Corridor area and that there would be no substantial adverse physical impacts associated with construction of water supply facilities. Service providers, including SSWD and CWD, documented the finding of adequate water supply in a WSA prepared for the entire corridor. The water districts also detailed water infrastructure needs in a separate Water Supply Infrastructure Study. The water districts noted that infrastructure would be funded through development impact fees and through consumer fees and grants for existing infrastructure needs. Both districts determined that existing water supplies would support the expected demand generated by the mix of uses proposed on the corridor. No mitigation was required, and impacts were determined to be less than significant.

IMPACT EVALUATION

The Project would result in the rezone of one site (Site 67) located within the Corridor area. The rezone of Site 67 could result in a net increase of 12 units of multi-family uses within the Fair Oaks Boulevard Corridor area. Site 67 is located within the CWD and the change in land use would reduce demand associated with commercial/office uses and would increase water demand associated with residential uses on the corridor. Pursuant to the CWD UWMP, the one site located in the Fair Oaks Corridor Plan could contribute up to 1.68 AFY of new water demand (see Table UTL-26) and all sites would contribute 19.88 AFY (see Table UTL-13 above).

Table UTL-26: Water Demand for Candidate Sites Within CWD and Fair Oaks Boulevard Corridor Plan

Proposed Development		Indoor Water Use Factor (AF/DU)	Outdoor Water Use Factor (AF/DU)	Water Demand (AFY)
Multi-Family Residential				
RD-30 (1 site)	12 DUs	0.12	0.02	1.68

Notes: AF= acre-feet; AFY = acre-feet per year; DU = dwelling unit

CWD has reviewed this change in land use, along with all changes in land use proposed within the CWD district, and has determined that total water demand and supply would not exceed reasonably foreseeable future water service capacity shown in the CWD UWMP. Pursuant to CEQA Guidelines Section 15162, the rezone of Site 67 would not result new substantial adverse physical impacts associated with exceeding reasonable foreseeable future water service capacity than would occur with implementation of Fair Oaks Boulevard Corridor Plan. The Project's contribution to impacts from rezoning Site 67 would not be substantial and overall impacts remain less than significant.

MITIGATION MEASURES

Mitigation not required.

NORTH WATT AVENUE CORRIDOR PLAN

ENVIRONMENTAL IMPACT REPORT DETERMINATION

SSWD prepared a WSA for development of the North Watt Avenue Corridor Plan and the North Watt Avenue EIR concluded that SSWD has adequate water supply to serve existing zoning; however, may need additional supplies for full buildout of the corridor plan. Additionally, a water infrastructure study indicated that some upgrades to water infrastructure would be required to serve the North Watt Avenue Corridor area. These impacts were considered significant. To ensure that adequate water facility improvements are identified prior to the initiation of development, the need for a holistic infrastructure phasing plan was recommended. Additionally, mitigation was added to secure water supply when thresholds identified in the phasing plan, are met. The following mitigation measures, with "NW" added for clarity, were adopted associated with water supply and infrastructure:

NW-PS-1: PUBLIC SERVICE INFRASTRUCTURE

Prior to Development Plan Review or issuance of building permits for projects resulting in intensification of use or increased square footage associated with development pursuant to the North Watt Avenue Corridor Plan, the Sacramento County Municipal Services Agency (MSA) shall prepare, or facilitate the preparation of, a phasing plan that identifies thresholds of development for when necessary improvements are required. The phasing plan shall also identify a mechanism to track when thresholds are met so infrastructure improvements are constructed when needed.

If private applicants/developers wish to proceed with development ahead of MSA's phasing plan, project specific analyses (i.e. sewer study, water study, traffic study) will be required to ensure that the existing infrastructure can accommodate the proposed development. Infrastructure improvements that are needed to accommodate proposed development shall be constructed prior to issuing building permits.

NW-PS-2: WATER SUPPLY

When water supply thresholds are met, as identified in the MSA phasing plan, no further development in accordance with the Corridor Plan shall occur until additional water supply is secured to support future Corridor Plan development and necessary fire flows.

The North Watt Avenue EIR concluded that with implementation of Mitigation Measures NW-PS-1 and NW-PS-2, impacts related to water supply and required infrastructure were less than significant.

IMPACT EVALUATION

The Project would result in the rezone of five candidate sites (Sites 68 through 72) currently zoned SPA with four located in the RMU-1 subzone and one site located in RMU-2 subzone. Under the Project the five sites would be rezoned to the RD-30 (2 sites)

and RD-40 zones (3 sites) with a potential maximum net increase of 230 units within the North Watt Avenue Corridor area. The North Watt Corridor Plan continues to be served public water supply by SSWD. Since adoption of the North Watt Avenue Corridor Plan, SSWD updated their UWMP, which accounted for existing zoned densities within their service area. According to the UWMP, SSWD has a water supply surplus in normal, single dry year and multiple dry years. SSWD would serve the five candidate rezone sites within the North Watt Avenue Corridor Plan and an additional 14.5 sites (19.5 sites total) that are candidate rezone sites located outside of the North Watt Corridor area. Consistent with state law, a WSA was prepared by SSWD that includes written verification of water supply for the candidate rezone sites located in SSWD service area. The five sites located with the North Watt Avenue Corridor area are a subset of the total candidate rezone sites located within the SSWD. Pursuant to the UWMP and the WSA, the five North Watt Avenue Corridor Plan sites would contribute 46.51 (new) or 149.6 (total) AFY of water demand (see Table UTL-27). The WSA also noted that the aggregate of all candidate rezone sites located within SSWD would contribute 211(new) or 473 (total) AFY (see Table UTL-16). Further, a portion of the total Project demand (174 AFY) is already accounted for in the 2020 UWMP; therefore, the net increase in water demand as a result of the entire Project is 299 AFY. The amount of water demand that is already accounted for in the UWMP (174 AFY) is not allocated to any single parcel but rather to the entire service area. The conclusion of the WSA is that SSWD has adequate water supply to serve the Project, including the North Watt Avenue Corridor Plan sites, in normal years, single dry years, and multiple dry years scenarios.

Although SSWD has verified that there is adequate water supply to support the increased density associated with development on Sites 68 through 72 under the Project within the North Watt Avenue Corridor Plan, the North Watt Avenue EIR indicated that cumulative development could result in significant impacts prior to mitigation. Since adoption of the North Watt Avenue Corridor Plan, SSWD has updated their UWMP and new water conservation requirements have modified the water demand and overall surplus projections for many water districts over the last 15 years. Nonetheless, as development occurs within the North Watt Avenue Corridor area and the greater SSWD, the ability to provide water will be evaluated as development comes forward. Compliance with North Watt Avenue EIR Mitigation Measure NW-PS-2 would ensure that development does not proceed without adequate water. In addition to water supply, impacts related to water supply conveyance infrastructure within the North Watt Avenue Corridor area were evaluated and deficiencies were identified. The development of candidate rezone sites within the Corridor would still need to study, plan, and construct necessary water infrastructure. Therefore, even though the Project may not result in substantially more severe impacts associated with water supply, impacts related to water infrastructure needs may be the same or slightly increased from what was disclosed in the North Watt Avenue EIR. Impacts associated with water supply and construction of water supply infrastructure on the Corridor remain significant.

Table UTL-27: Water Demand for Candidate Sites Within SSWD And North Watt Corridor Plan

Proposed Development			Demand[a] Per DU (GPD/DU)	Water Demand (AFY) New /Total
Multi-Family Residential				
Zoning	New DUs	Total DUs		
RD-30 (2 sites)	83 DUs	346 DUs	183	17.01 / 70.8
RD-40 (3 sites)	147 DUs	392 DUs	179	29.5 / 78.8
TOTAL (5 sites)	230 DUs	738 DUs	-	46.51 / 149.6

Notes: GPD= gallons per day; AFY = acre-feet per year; DU = dwelling unit

a) Demand includes indoor water use, landscape area, and outdoor water use factors

MITIGATION MEASURES

MITIGATION MEASURE UTL -1A (NW-PS-1: PUBLIC SERVICE INFRASTRUCTURE, MITIGATION IN NORTH WATT AVENUE EIR) [APPLIES ONLY TO NORTH WATT CORRIDOR PLAN SITES]

Prior to Development Plan Review or issuance of building permits for projects resulting in intensification of use or increased square footage associated with development pursuant to the North Watt Avenue Corridor Plan, the Sacramento County Municipal Services Agency (MSA) shall prepare, or facilitate the preparation of, a phasing plan that identifies thresholds of development for when necessary improvements are required. The phasing plan shall also identify a mechanism to track when thresholds are met so infrastructure improvements are constructed when needed.

If private applicants/developers wish to proceed with development ahead of MSA's phasing plan, project specific analyses (i.e. sewer study, water study, traffic study) will be required to ensure that the existing infrastructure can accommodate the proposed development. Infrastructure improvements that are needed to accommodate proposed development shall be constructed prior to issuing building permits.

MITIGATION MEASURE UTL -1B (NW-PS-2: WATER SUPPLY, MITIGATION IN NORTH WATT AVENUE EIR) [APPLIES ONLY TO NORTH WATT CORRIDOR PLAN SITES]

When water supply thresholds are met, as identified in the MSA phasing plan, no further development in accordance with the Corridor Plan shall occur until additional water supply is secured to support future Corridor Plan development and necessary fire flows.

SIGNIFICANCE AFTER MITIGATION

Pursuant to CEQA Guidelines Section 15162, the proposed Project within the North Watt Avenue Corridor area would not result in new substantial adverse physical impacts associated with the water supply and construction of water supply infrastructure, over what was already disclosed in the North Watt Avenue EIR. The Project's contribution to impacts would be less than significant with mitigation and overall impacts would remain less than significant with mitigation.

OLD FLORIN TOWN SPA

ENVIRONMENTAL IMPACT REPORT DETERMINATION

The Old Florin Town SPA EIR concluded that additional water supply and infrastructure upgrades for water supply and fire suppression needs would be required from each of the water districts within the SPA area to support the increased water demand associated with the land use plan. For one water district, FCWD, which is the main water supplier within the Old Florin Town SPA, the additional water demand would exceed water supply during normal water years. Procurement of additional water supply was nebulous at the time for FCWD and impacts were considered significant and unavoidable. For infrastructure upgrades needed, mitigation was added requiring a phasing plan to identify appropriate needs for the Old Florin Town SPA area but if individual applicants went ahead of the comprehensive phasing plan, mitigation requires developers to demonstrate and construct adequate water supply infrastructure prior to the issuance of building permits.

The following mitigation measures were adopted associated with water supply and infrastructure, with "OFT" added for clarity:

OFT-PS-1: PUBLIC SERVICE INFRASTRUCTURE

Prior to Development Plan Review or issuance of building permits for projects resulting in intensification of use or increased square footage associated with development pursuant to the Old Florin Town Special Planning Area Ordinance, the Sacramento County Municipal Services Agency (MSA) shall prepare, or facilitate the preparation of, a phasing plan that identifies thresholds of development for when necessary improvements are required. The phasing plan shall also identify a mechanism to track when thresholds are met so infrastructure improvements are constructed when needed.

If private applicants/developers wish to proceed with development ahead of MSA's phasing plan, project specific analyses (i.e. sewer study, water study, traffic study) will be required to ensure that the existing infrastructure can accommodate the proposed development. Infrastructure improvements that are needed to accommodate proposed development shall be constructed prior to issuing building permits.

Even with adoption of the mitigation measure, the Old Florin Town SPA concluded that impacts related to water supply and infrastructure constriction were significant and unavoidable for FCWD served parcels.

IMPACT EVALUATION

The Project would result in the rezone of seven candidate sites (Sites 73 through 79) with a potential maximum net increase of 274 units within Old Florin Town SPA. All sites are zoned SPA with six located in the MUR subzone and one site located in MUR/MUC subzone. Under the Project Sites 73 through 79 would be rezoned to the RD-30 (6 sites) and RD-40 zones (1 site). All seven sites located within the Old Florin Town SPA are served water from FCWD.

As indicated above, both the General Plan EIR and the Old Florin Town SPA EIR determined that FCWD had insufficient water supplies to construct the entire Old Florin Town SPA area. The proposed Project would exacerbate this situation by increasing demand in the FCWD by approximately 48.96 AFY (see Table UTL-18 – for all 8 sites). The seven sites within Old Florin Town SPA make up 46.58 AFY of the total increase in demand for FCWD (See Table UTL-28).

Table UTL-28: Water Demand for Candidate Sites Within FCWD and Old Florin Town SPA

Proposed Development		Indoor Water Use Factor (AF/DU)	Outdoor Water Use Factor (AF/DU)	Water Demand (AFY)
Multi-Family Residential				
RD-30 (7 sites)	229 DUs	0.15	0.02	38.93
RD-40 (1 site)	45 DUs	0.15	0.02	7.65
TOTAL (8 sites)	274 DUs	0.17		46.58

Notes: AF= acre-feet; AFY = acre-feet per year; DU = dwelling unit

Though the FCWD GM has indicated that the additional demand of the Project would be adequately served by the District, the additional water supply to meet increased demand, is uncertain at this time. The mitigation measure in the Old Florin Town SPA EIR would apply to the proposed Project; however, because increased development density could result in additional water demand, the Project could result in a substantially more severe impact than what would have been addressed in the Old Florin Town SPA EIR. Impacts would be significant and unavoidable.

MITIGATION MEASURES

MITIGATION MEASURE UTL-1C (OFT-PS-1: PUBLIC SERVICE INFRASTRUCTURE, MITIGATION IN OLD FLORIN TOWN SPA EIR) [APPLIES ONLY TO OLD FLORIN TOWN SPA SITES]

Prior to Development Plan Review or issuance of building permits for projects resulting in intensification of use or increased square footage associated with development pursuant to the Old Florin Town Special Planning Area Ordinance, the Sacramento County Municipal Services Agency (MSA) shall prepare, or facilitate the preparation of, a phasing plan that identifies thresholds of development for when necessary improvements are required. The phasing plan shall also identify a mechanism to track when thresholds are met so infrastructure improvements are constructed when needed.

If private applicants/developers wish to proceed with development ahead of MSA's phasing plan, project specific analyses (i.e. sewer study, water study, traffic study) will be required to ensure that the existing infrastructure can accommodate the proposed development. Infrastructure improvements that are needed to accommodate proposed development shall be constructed prior to issuing building permits.

SIGNIFICANCE AFTER MITIGATION

Pursuant to CEQA Guidelines Section 15162, the proposed Project within the Old Florin Town would result in more severe adverse physical impacts associated with the water supply and construction of water supply infrastructure, over what was already disclosed in the Old Florin Town EIR. The Project's contribution to impacts would be significant and overall impacts would remain significant and unavoidable, even with implementation of Mitigation Measure UTL-1C.

IMPACT UTL-2: EXCEED THE CAPACITY OF THE WASTEWATER TREATMENT PROVIDER OR ADVERSE EFFECTS ASSOCIATED WITH CONSTRUCTION OF WASTEWATER TREATMENT AND DISPOSAL INFRASTRUCTURE

SACRAMENTO COUNTY GENERAL PLAN

GENERAL PLAN ENVIRONMENTAL IMPACT REPORT DETERMINATION

General Plan EIR Chapter 5, "Sewer Services," evaluated whether implementation of the General Plan would increase demand for wastewater treatment or require the construction of new or expanded wastewater infrastructure, which could result in impacts to the physical environment. The General Plan EIR used two different calculation methods to determine impacts: per capita wastewater generation and equivalent of single-family dwelling units (ESD). The General Plan EIR determined that buildout from the General Plan would result in a minimum of 76 mgd of wastewater that would need to be accommodated by conveyance facilities and 52.9 mgd that would need to be processed by the SRWTP. The increase in flows from buildout of the General Plan were determined to exceed the existing permitted capacity at the SRWTP. This impact was considered significant. General Plan EIR Mitigation Measure SE-1 (referred to herein as Mitigation Measure GP-SE-1 for clarity), requires new development to be consistent with sewer facility plans through Policy PF-18, which requires new development projects be consistent with sewer facility plans and participate in established funding mechanisms. Compliance with Mitigation Measure GP-SE-1 would reduce wastewater impacts but not to less than significant level. The General Plan EIR concluded impacts were significant and unavoidable both at the General Plan level and the cumulative level.

PROPOSED PROJECT IMPACT EVALUATION

As described below, the Project would rezone parcels and redesignate General Plan land uses and would result in an increase in water demand of 681 AFY. Based on the additional water demand, the Project could result in an increase in wastewater generated by approximately 607,306 gpd or 0.61 mgd. This represents an approximately 0.8 percent increase of total estimated wastewater generation from the growth anticipated from the General Plan.

The flows to the EWRRF have decreased as a result of water conservation over the last 15 years. Further, adequate capacity for wastewater is anticipated well into the future. Flows in 2021 were approximately 124 mgd, compared to the current permitted capacity of 181 mgd (Regional San 2022). It is not anticipated that Regional San would need to

consider further improvements to the EWRRF until after 2050. The EWRRF has been master planned to accommodate additional growth beyond the planning horizon to 350 mgd of treatment capacity (Regional San 2008). Regional San estimates that there is more than enough capacity in the system to meet expected growth in the Sacramento area. Additionally, reduction in water use in the region has led to more capacity in the system (Gehlke 2023).

Planned facility expansion is based on projected growth rates provided by the Sacramento County Council of Governments. The construction of future treatment facilities would occur in incremental stages to best accommodate the growth rates. If the actual growth rate is slower than projected, construction of the next increment of treatment capacity can be delayed. Conversely, if the growth rate is faster than projected, the next increment of treatment capacity can be constructed earlier than anticipated (Regional San 2008). As a result, additional wastewater generation associated with the Project would not exceed the capacity of the treatment plant.

Projects developed as part of the proposed rezone would be required to adhere to General Plan Policy PF-18, which requires new development projects that need extension or modification of the trunk or interceptor sewer system to be consistent with sewer facility plans, through a sewer study, and establish funding mechanisms. Additionally, the Sacramento County Code regulates public sewage systems in the County. The County Code includes connection requirements, permits and applicable fees, design and operation requirements to ensure public safety and lessen environmental related impacts. Wastewater service provision for future projects under the rezone would be subject to County Code requirements as well as regulatory review and compliance with any applicable wastewater master plans. Additionally, all new development projects would be required to pay sewer impact fees identified in the General Plan and would be required to be in compliance with sewer facility plans.

Construction impacts associated with extension, expansion, and/or replacement of on-site wastewater system facilities may result in temporary aesthetic impacts, disturbance of biological and/or cultural resources, conversion of agricultural land, temporary air emissions, soil erosion and water quality degradation, handling of hazardous materials, temporary excessive noise, and temporary construction traffic. However, these impacts are considered throughout this SEIR.

Staff consulted with SacSewer staff regarding the proposed Project. SacSewer indicated there would be sufficient capacity at the wastewater treatment plant (EWRRF) to serve the additional wastewater generated by the Project. However, certain localized areas where the Project proposes to increase residential density may require significant upgrades to the local collection system to accommodate the additional flows created by the Project. SacSewer will identify and evaluate these specific areas requiring upgrades to the local collection system (i.e., upsizing pipes) when a subsequent development is proposed on a candidate rezone site through the submittal of a sewer master plan. SacSewer intends to provide conditions and/or advisories when a specific development project is proposed on the candidate rezone sites.

Pursuant to CEQA Guidelines Section 15162, the Project would result in minimal additional demand for wastewater treatment and would not result in new or substantially more severe impact regarding wastewater capacity than was evaluated in the General Plan EIR. The Project's contribution to impacts would not be substantial; however, overall impacts would remain significant and unavoidable.

MITIGATION MEASURES

Mitigation not required.

DISTINCT AREA PLANS

FAIR OAKS BOULEVARD CORRIDOR PLAN

ENVIRONMENTAL IMPACT REPORT DETERMINATION

SacSewer prepared a sewer study for the Fair Oaks Boulevard Corridor Plan. The increase in wastewater generated by the Fair Oaks Boulevard Corridor Plan was calculated utilizing the same EDU factors utilized in the General Plan. Land use densities were assumed to be 20-25 EDUs per acre across the entire Fair Oaks Boulevard Corridor area. The sewer study and Fair Oaks Boulevard EIR concluded that there was adequate capacity to treat the additional wastewater effluent for the entire Fair Oaks Boulevard Corridor Plan. The sewer study also identified the need for existing sewer relief projects that may be triggered by development within the Corridor but they themselves are not impacts of Fair Oaks Boulevard Corridor Plan development. Additional minor upgrades to the sewer system were identified and SacSewer indicated upgrades would occur and would be funded by development that needs the associated minor upgrades. Impacts were determined to be less than significant.

IMPACT EVALUATION

As described, the Project would rezone one site (Site 67) in the Fair Oaks Boulevard Corridor Plan and would result in a potential increase in water demand of 1.68 AFY (see Table UTL-20). Based on the additional water demand, development on Site 67 as part of the Project could result in an increase in wastewater generated by approximately 1,499.82 gpd or 0.001 mgd. This represents a minor and unsubstantial portion of the total Fair Oaks Boulevard Corridor Plan contribution to wastewater effluent.

Pursuant to CEQA Guidelines Section 15162, the rezone of Site 67 as part of the Project would result in minimal additional demand for wastewater treatment and would not result in new substantial adverse physical impacts associated with wastewater treatment or construction of wastewater facilities than would was evaluated in the Fair Oaks Boulevard EIR. The Project's contribution to impacts from rezoning Site 67 would not be substantial and overall impacts remain less than significant.

MITIGATION MEASURES

Mitigation not required.

NORTH WATT AVENUE CORRIDOR PLAN

ENVIRONMENTAL IMPACT REPORT DETERMINATION

SacSewer prepared a comprehensive sewer study for the North Watt Avenue Corridor Plan. The sewer study calculated increased wastewater flows from buildout of the entire North Watt Avenue Corridor Plan and identified necessary sewer relief and major sewer infrastructure that would be required to service the Corridor Plan. The total wastewater effluent increase from the North Watt Avenue Corridor Plan, as shown in Table UTL-29 below, is substantially more than the total effluent that could result from the entire Project.

Table UTL-29: Total Projected Wastewater Flows from North Watt Avenue Corridor Plan

Area	Acres	ESDs	ADWF (MGD)	PF	PWWF (MGD)
North of Elkhorn Blvd.	246	824,633	1.787	1.647	2.943
South of Elkhorn Blvd.	272	1,044,063	1.609	1.66	2.666
Triangle District	278	2,044,063	4.196	1.57	6.572
Totals	**796**	**3,935,829**	**7.592**	**1.604**	**12.181**

ADWF= Average Dry Weather Flow
PF= Peaking Factor
PWWF= Peak wet Weather Flow
MGD= Million Gallons Per Day

Source: SASD Level 2 Sewer Study for North Watt Avenue Corridor, 04/06/2009.

This substantial increase in wastewater flows could be accommodated at the wastewater treatment plant within planned capacity; however, the sewer study identified substantial infrastructure needs to service the North Watt Avenue Corridor area. Large portions of the North Watt Avenue Corridor area north of the Triangle Gateway District are currently on private septic systems. The sewer study indicated that existing sewer services are constrained and identified necessary system upgrades in order to serve the North Watt Avenue Corridor Plan. These upgrades would provide relief to capacity constrained facilities in the project area. SASD characterized the necessary improvements required to serve the entire North Watt Avenue Corridor Plan at proposed land use densities as major infrastructure projects. Impacts were considered significant. To ensure that adequate sewer facility upgrades are identified prior to the initiation of development, a phasing plan was recommended as mitigation. Mitigation Measure NW-PS-1 (see above in the Water Supply discussion) requires a phasing plan and development tracking for necessary sewer infrastructure. If private developers proceed without the phasing plan the mitigation stipulates that project specific analyses and construction of required infrastructure must proceed development. With mitigation, the North Watt Avenue EIR concluded that impacts would be less than significant.

IMPACT EVALUATION

As described, the Project would rezone five sites in the North Watt Avenue Corridor Plan (Sites 68 through 72) and would result in a potential increase in water demand of 46.51 AFY (see Table UTL-27). Based on the additional water demand, the development on Sites 68 through 72 could result in an increase in wastewater generated by approximately

41,521.45 gpd or 0.04 mgd. This represents a minor and unsubstantial portion of the total North Watt Avenue Corridor Plan contribution to wastewater effluent.

Sites 68 through 72 are located in areas of the Corridor Plan that were identified in the sewer study as needing substantial wastewater collection and conveyance infrastructure. In recent years, there has been continued momentum to seek out funding opportunities to address infrastructure needs along the North Watt Avenue Corridor. Development on the five candidate rezone sites would require infrastructure analysis and improvements with or without the proposed Project. As with other impact areas, increased density on Sites 68 through 72 would bring the developer additional funds to make infrastructure needs more economically feasible and would increase the total amount of sewer impact fees collected in the North Watt Avenue Corridor area. Additional impact fees would also increase the chance for capital improvement projects to be funded sooner to fix deficient infrastructure along the North Watt Avenue Corridor. Overall, the rezone of five sites that could yield 230 additional units along the North Watt Avenue Corridor does not substantially change or worsen impacts that were already described in the North Watt Avenue EIR.

MITIGATION MEASURES

MITIGATION MEASURE UTL-1A (NW-PS-1 IN THE NORTH WATT AVENUE EIR)

See Mitigation Measure UTL-1A, above.

SIGNIFICANCE AFTER MITIGATION

Pursuant to CEQA Guidelines Section 15162, the rezone of Sites 68 through 72 as part of the Project would result in minimal additional demand for wastewater treatment and would not result in new or substantially more severe impact regarding wastewater capacity than was evaluated in the North Watt Avenue EIR. The Project's contribution to impacts would be less than significant with mitigation and overall impacts would remain less than significant with mitigation.

OLD FLORIN TOWN SPA

ENVIRONMENTAL IMPACT REPORT DETERMINATION

SacSewer reviewed the Old Florin Town SPA and made technical comments regarding the plan. SacSewer determined that there is adequate capacity at the Treatment Plant to treat the additional effluent for the entire Old Florin Town SPA . Preliminary analysis also indicated that local infrastructure, including pipelines and pump stations, may not be sufficiently sized to handle the total increase in wastewater flow from the Old Florin Town SPA.

To ensure that adequate sewer facility upgrades are identified prior to the initiation of development, a phasing plan was recommended as mitigation. Mitigation Measure PS-1 (UTL-1C - see above in the Water Supply discussion) requires a phasing plan and development tracking for necessary sewer infrastructure. If private developers proceed without the phasing plan the mitigation stipulates that project specific analyses and construction of required infrastructure must proceed development. With mitigation, the Old

Florin Town SPA EIR concluded that impacts would be reduced; however, given that the location of needed future infrastructure is unknown, other secondary impacts could occur. Therefore, the Old Florin Town SPA EIR determined that impacts would be significant.

IMPACT EVALUATION

As described, the Project would rezone seven sites (Sites 73 through 79) in the Old Florin Town SPA and would result in a potential increase in water demand of 46.58 AFY (see Table UTL-28). Based on the additional water demand, development under the Project on Sites 73 through 79 could result in an increase in wastewater generated by approximately 41,584.17 gpd or 0.04 mgd. This represents a minor and unsubstantial portion of the total Old Florin Town SPA contribution to wastewater effluent.

As indicated in the Old Florin Town SPA EIR local infrastructure, including pipelines and pump stations, may need to be upgraded in order to handle increased wastewater effluent. Given existing Mitigation Measure OFT-PS-1 for the Old Florin Town SPA, development on the seven candidate rezone sites would require infrastructure analysis and improvements with or without the proposed Project. As with other impact areas, increased density on sites would bring the developer additional funds to make infrastructure needs more economically feasible and would increase the total amount of sewer impact fees collected in the Old Florin Town SPA. Additional impact fees would also increase the chance for capital improvement projects to be funded sooner to fix deficient infrastructure in the Old Florin Town SPA. Therefore, the rezone of Sites 73 through 79 with a potential maximum net increase of 274 units is not a substantial or new impact related to wastewater treatment.

MITIGATION MEASURES

MITIGATION MEASURE UTL-1C (OFT-PS-1 IN THE SPA EIR)

See Mitigation Measure UTL-1C above.

SIGNIFICANCE AFTER MITIGATION

Pursuant to CEQA Guidelines Section 15162, the rezone of Sites 73 through 79 as part of the Project would result in minimal additional demand for wastewater treatment and would not result in new or substantially more severe impact regarding wastewater capacity than was evaluated in the Old Florin Town EIR. The Project's contribution to impacts would not be substantial with mitigation and overall impacts would remain less than significant with mitigation.

IMPACT UTL-3: SOLID WASTE SERVICES AND LANDFILL CAPACITY

SACRAMENTO COUNTY GENERAL PLAN

GENERAL PLAN ENVIRONMENTAL IMPACT REPORT DETERMINATION

The General Plan EIR analyzed solid waste disposal demand in Chapter 4, "Public Services." As discussed in the General Plan EIR, new growth areas in the Planning Area would generate additional solid waste at or below the States disposal rate for the County

of 5.9 pounds per capita per day (Sacramento County 2010). With the increases in recycling efforts in the county, Kiefer Landfill has the capacity to meet demand until 2035 or later. Based on compliance with State goals and General Plan policies the analysis concluded that implementation of the General Plan would not generate solid waste in excess of State or local standards, or in excess of the capacity of the local infrastructure. Therefore, the impact was concluded to be less than significant.

PROPOSED PROJECT IMPACT EVALUATION

CONSTRUCTION

Future construction associated with the Project would generate construction debris. Implementation of General Plan Policy FP-19, implementation and support of recycling programs, and associated regulations, such as AB 393 would substantially reduce the volume of generated waste that would be disposed of in landfills. In addition, Chapter 6.20 of the Sacramento County Code regulates solid waste management, including recycling to reduce solid waste. Specifically, Section 6.20.625 requires recycling of construction debris for all projects. Therefore, the Project would not result in substantial solid waste from construction.

OPERATIONAL

The Project would result in up to 4,081 additional residential units beyond the number assumed in the General Plan EIR, which could result in approximately 11,264 additional residents (assuming 2.76 residents per dwelling unit [U.S 2020 Census]). CalRecycle estimates a daily per resident disposal rate of 4.9 pounds per day in the unincorporated County in 2021 (CalRecycle 2022). This results in an estimated 27.6 tons of solid waste per day upon buildout of the candidate rezone sites. This represents an increase beyond those discussed in the General Plan EIR. However, this increase represents approximately 0.25 percent of the maximum permitted throughput (10,815 tons per day) of Kiefer Landfill. As shown in Table UTL-10, there are additional disposal facilities in the region that would accommodate the solid waste generated from the project, such as L and D Landfill that has existing capacity to accept waste (Table UTL-10). In addition, the current per capita disposal rate of 4.9 pounds per day is below the per capita disposal rate of 5.9 pounds per day in 2010. Implementation of the Project would not increase the County-wide per capita disposal rate above the State's goal of 7.7 pounds per day.

Waste generated by future residential uses would be hauled by private commercial waste haulers operating with a valid County franchise permit as selected by the individual developer, and waste would be hauled to a permitted landfill for disposal as selected by the hauler. The Department of Waste Management and Recycling and other permitted haulers that serve the County would need to expand services to meet this projected future demand from additional residential units. Additional services would be funded by service fees imposed on customers. As shown in Table UTL-10, there is substantial remaining capacity in the landfills serving local waste haulers, with an average remaining capacity of more than 80 percent. Therefore, new residential units associated with the proposed Project would be served by solid waste management companies and landfills with sufficient capacity to serve future development.

SUMMARY

Development proposed by the Project would be subject to local and state requirements related to solid waste. This would include compliance with General Plan policies and the County's Municipal Code. Pursuant to CEQA Guidelines Section 15162, the rezone of candidate sites would not result in new substantial adverse physical impacts associated with the provision of solid waste services and facilities than would occur with implementation of General Plan. The Project's contribution to impacts would not be substantial and overall impacts remain less than significant.

MITIGATION MEASURES

Mitigation not required.

DISTINCT AREA PLANS

FAIR OAKS BOULEVARD CORRIDOR PLAN

ENVIRONMENTAL IMPACT REPORT DETERMINATION

The Fair Boulevard EIR determined that buildout of the Corridor Plan would not result in a substantial impact to solid waste facilities. The Kiefer Landfill was identified as the primary municipal solid waste disposal facility that would serve the proposed project and indicated that capacity at the County landfill would meet demand through the year 2035. Existing and planned solid waste facilities were determined to be sufficient to serve the development and/or redevelopment of the Fair Oaks Boulevard Corridor area. No mitigation was required, and impacts were determined to be less than significant.

IMPACT EVALUATION

The project would result in up to 12 additional residential units beyond the number assumed in the Fair Oaks Boulevard EIR, which could result in approximately 33 additional residents (assuming 2.76 residents per dwelling unit [U.S 2020 Census]). CalRecycle estimates a daily per resident disposal rate of 4.9 pounds per day in the unincorporated County in 2021 (CalRecycle 2022). This results in an estimated 0.08 tons of solid waste per day upon buildout of the candidate rezone sites. This represents a potential increase in solid waste produced on the Corridor because there was an assumption of solid waste produced on Site 67 if it was built out with Business Professional uses. Either way, the total increase represents approximately 0.0007 percent of the maximum permitted throughput (10,815 tons per day) of Kiefer Landfill.

As addressed above for the General Plan, the Project would result in construction debris waste and residential waste during the operational period; however, the Project would result in minor increases (if any) in waste over what was analyzed and assumed for the entire Corridor Plan. Pursuant to CEQA Guidelines Section 15162, the rezone of Site 67 would not result new substantial adverse physical impacts associated with the provision of solid waste services and facilities than would occur with implementation of Fair Oaks Boulevard Corridor Plan. The Project's contribution to impacts from rezoning Site 67 would not be substantial and overall impacts remain less than significant.

MITIGATION MEASURES

Mitigation not required.

NORTH WATT AVENUE CORRIDOR PLAN

ENVIRONMENTAL IMPACT REPORT DETERMINATION

The North Watt Avenue EIR determined that buildout of the Corridor Plan would not result in a substantial impact to solid waste facilities. The Kiefer Landfill was identified as the primary municipal solid waste disposal facility that would serve the proposed project and indicated that capacity at the County landfill would meet demand through the year 2035. Existing and planned solid waste facilities were determined to be sufficient to serve the development and/or redevelopment of the North Watt Avenue Corridor area. No mitigation was required, and impacts were determined to be less than significant.

IMPACT EVALUATION

The project would result in up to 230 additional residential units beyond the number assumed in the North Watt Avenue EIR, which could result in approximately 635 additional residents (assuming 2.76 residents per dwelling unit [U.S 2020 Census]). CalRecycle estimates a daily per resident disposal rate of 4.9 pounds per day in the unincorporated County in 2021 (CalRecycle 2022). This results in an estimated 1.56 tons of solid waste per day upon buildout of the candidate rezone sites. This represents a potential increase in solid waste produced on the Corridor on Sites 68 through 72. The total increase represents approximately 0.01 percent of the maximum permitted throughput (10,815 tons per day) of Kiefer Landfill.

As addressed above for the General Plan, the Project would result in construction debris waste and residential waste during the operational period; however, the Project would result in minor increases in waste over what was analyzed and assumed for the entire Corridor Plan. Pursuant to CEQA Guidelines Section 15162, the rezone of Sites 68 through 72 would not result new substantial adverse physical impacts associated with the provision of solid waste services and facilities than would occur with implementation of North Watt Avenue Corridor Plan. The Project's contribution to impacts from rezoning Sites 68 through 72 would not be substantial and overall impacts would be less than significant with mitigation.

MITIGATION MEASURES

Mitigation not required.

OLD FLORIN TOWN SPA

ENVIRONMENTAL IMPACT REPORT DETERMINATION

The Old Florin Town SPA EIR determined that buildout of the SPA would not result in a substantial impact to solid waste facilities. The Kiefer Landfill was identified as the primary municipal solid waste disposal facility that would serve the proposed project and indicated that capacity at the County landfill would meet demand through the year 2035. Existing and planned solid waste facilities were determined to be sufficient to serve the

development and/or redevelopment of the Old Florin Town SPA. No mitigation was required, and impacts were determined to be less than significant.

IMPACT EVALUATION

The project would result in up to 274 additional residential units beyond the number assumed in the Old Florin Town SPA EIR, which could result in approximately 756 additional residents (assuming 2.76 residents per dwelling unit [U.S 2020 Census]). CalRecycle estimates a daily per resident disposal rate of 4.9 pounds per day in the unincorporated County in 2021 (CalRecycle 2022). This results in an estimated 1.85 tons of solid waste per day upon buildout of the candidate rezone sites. This represents a potential increase in solid waste produced on the SPA on Sites 73 through 79. The total increase represents approximately 0.017 percent of the maximum permitted throughput (10,815 tons per day) of Kiefer Landfill.

As addressed above for the General Plan, the Project would result in construction debris waste and residential waste during the operational period; however, the Project would result in minor increases in waste over what was analyzed and assumed for the entire SPA. Pursuant to CEQA Guidelines Section 15162, the rezone of Sites 73 through 79 would not result new substantial adverse physical impacts associated with the provision of solid waste services and facilities than would occur with implementation of Old Florin Town SPA. The Project's contribution to impacts from rezoning Sites 73 through 79 would not be substantial and overall impacts would be less than significant with mitigation.

MITIGATION MEASURES

Mitigation not required.

CUMULATIVE UTILITIES

The cumulative utility impacts would be the same for the General Plan and distinct area plans for water supply, wastewater, and solid waste.

CUMULATIVE SETTING

The cumulative setting for the General Plan and the distinct area plans are identical and discussed below for water supply, wastewater, and solid waste.

WATER SUPPLY

The cumulative setting for water supply impacts would be the service areas of the water purveyors serving the candidate rezone sites.

WASTEWATER

The cumulative setting for wastewater impacts would be the Regional San and SacSewer service areas, which include the unincorporated Sacramento County as well as the cities of Citrus Heights, Elk Grove, Folsom, Rancho Cordova, Sacramento, West Sacramento and the communities of Courtland and Walnut Grove.

SOLID WASTE

The cumulative setting of solid waste impacts would be the service areas of the landfills that serve the candidate rezone sites.

CUMULATIVE IMPACTS EVALUATION

IMPACT UTL-4: THE PROJECT, IN COMBINATION WITH PAST, PRESENT, AND REASONABLY FORESEEABLE PROJECTS, COULD RESULT IN A SIGNIFICANT CUMULATIVE IMPACT WITH RESPECT TO WATER SUPPLY

The General Plan EIR evaluated whether implementation of the General Plan, in combination with surrounding development would contribute to cumulative impacts related to groundwater recharge, groundwater pumping, and secondary impacts of obtaining additional water supply (pages 6-53 through 6-87 of the General Plan EIR). The General Plan EIR concluded that development within the Easton New Growth Area and Grant Line East New Growth Area would result in loss of substantial areas of recharge capability over the Central Groundwater Basin. Therefore, the cumulative impact related to groundwater recharge was considered significant and unavoidable. Cumulative impacts of the General Plan Update related to exceeding the 131,000 AFY for the North Area Groundwater basin is less than significant and exceeding the 273,000 AFY sustainable yield of the Central Basin can be reduced to less than significant with implementation of a new water supply master plan to serve the new growth proposed in the Jackson and Grant Line East New Growth Areas. The General Plan EIR included a cumulative assessment of water needs, and identified the various methods (including recycled water, surface water diversions, remediated water, and groundwater) by which additional supply could be obtained. The secondary impacts of obtaining additional water supply were determined to be potentially significant due to the needs for additional pipeline and infrastructure development for recycled water facilities, unknown impacts to biological resources from surface water diversion, and unknown impacts related to contamination and water levels from pumping groundwater.

As discussed above, the Project, including development in the SPAs, would result in an increase in water demand to serve residential development associated with the proposed Rezone. Although the water demand increase would be minor compared with existing and projected demand, supply, and surplus of most water providers the additional water demand from implementation of the project would result in a more severe impact regarding water supply than was addressed in the General Plan EIR. The FCWD and RLECWD do not have surplus to meet new growth. Therefore, the FCWD and RLECWD jurisdictions, would not have sufficient water supply to serve the proposed Project and any reasonably foreseeable development beyond what was assumed the General Plan EIR. Therefore, the project's contribution to substantial effects related to water service would be cumulatively considerable**.**

IMPACT UTL-5: THE PROJECT, IN COMBINATION WITH PAST, PRESENT, AND REASONABLY FORESEEABLE PROJECTS, COULD RESULT IN A SIGNIFICANT CUMULATIVE IMPACT WITH RESPECT TO WASTEWATER

The General Plan EIR evaluated whether implementation of the General Plan, in combination with other development in Sacramento County and the service boundaries of Regional San and SacSewer, and the City of West Sacramento, would generate new wastewater flows requiring conveyance and treatment (pages 5-18 to 5-22 of the General Plan EIR). Future development associated with the General Plan would result in an incremental cumulative demand for wastewater and related services, and the construction of new and expanded wastewater facilities would provide additional capacity to accommodate current and future demand.

The General Plan's contribution to the need to expand the SRWTP was considered significant and unavoidable in the short-term in the General Plan EIR, until completion of the upgrades to the SRWTP at which time impacts would become less than significant. The EWRRF was completed in 2023 to meet new water quality requirements. As described in the General Plan EIR, once the SRWTP has been upgraded, there would be adequate capacity to accommodate the new wastewater flows, and expansion to wastewater facilities would not be required. As discussed above, the proposed project could generate approximately 0.61 mgd of wastewater beyond the amount anticipated under the adopted General Plan. This represents an approximately 0.8 percent increase in the estimated wastewater generation associated with the population growth identified in the General Plan. The maximum buildout capacity of EWRRF is expected to be 350 mgd. Because the EWRRF has been completed long-term capacity would be available for increased wastewater from the project and future development in the Sacramento region. The project impacts on wastewater would not be cumulatively considerable.

In addition to capacity impacts, the General Plan EIR concluded that the cumulative impacts associated with the provision of sewer services would be considered significant and unavoidable due to indirect environmental effects identified in the sewerage master plans associated with construction related air quality, water quality, traffic control, circulation, aesthetics, soils, cultural resources, hazardous materials, and biological resources. Development under the project would have similar indirect environmental effects as those identified in the General Plan EIR. Therefore, the project, including development in the distinct area plans, would result in a considerable contribution to cumulative effects related to wastewater. The Project's contribution to substantial effects related to wastewater would be cumulatively considerable, consistent with the conclusion in the General Plan EIR. The project would not result in a new or more severe cumulative effect related to wastewater.

IMPACT UTL-6: THE PROJECT, IN COMBINATION WITH PAST, PRESENT, AND REASONABLY FORESEEABLE PROJECTS, COULD RESULT IN A SIGNIFICANT CUMULATIVE IMPACT WITH RESPECT TO SOLID WASTE

General Plan EIR did not include an evaluation of a regional or cumulative solid waste impact related to implementation of the General Plan in combination with other development

in the Sacramento County. However, the General Plan EIR concluded that implementation of the General Plan would not result in significant impacts to solid waste facilities.

As discussed above, the proposed project, including development in the distinct area plans, could result in increased solid waste generation associated with proposed rezone sites. The analysis noted that there is substantial remaining capacity in the landfills serving local waste haulers, with an average remaining capacity of 80 percent. The level of waste that would be generated by cumulative development in other areas served by the landfills is not known at this time. However, it is unlikely that waste from other regional projects would exceed the capacity of available landfills, as the future development would be required to comply with relevant adopted statues and regulations designed to reduce solid waste Similarly, future development under the project would be required to comply with all applicable solid waste regulations, including General Plan Policy FP-19 (implementation and support of recycling programs, and associated regulations), Chapter 6.20 of the Sacramento County Municipal Code (regulations related to solid waste management, including recycling), and Section 6.20.625 the Sacramento County Municipal Code (requirements related to recycling of construction debris for all projects). Compliance with existing regulations and adopted General Plan policies would ensure the project's contribution to cumulative impacts would be less than cumulatively considerable. Therefore, the Project would not result in a new cumulative effect related to solid waste.

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13 WILDFIRE

INTRODUCTION

In 2018, Appendix G of the State CEQA Guidelines was updated to include a separate section to evaluate a project's potential impact related to wildfire. The General Plan and distinct area plans associated with the Fair Oaks Boulevard Corridor, the North Watt Avenue Corridor, and the Old Florin Town Special Planning Area (SPA) were adopted prior to the 2018 CEQA Guidelines update. Therefore, the CEQA documents associated with these plans did not evaluate potential for impacts associated with wildfire. This chapter describes the existing conditions for wildfire in the unincorporated County and evaluates potential wildfire-related impacts associated with implementation of the Project.

No scoping comments related to wildfire were received during the notice of preparation (NOP) public scoping periods. The NOP and comments received in response to the NOP are provided in Appendix INTRO-1.

WILDFIRE OVERVIEW

Wildfire is any uncontrolled fire on undeveloped land that requires fire suppression. Wildfire behavior is a product of several variables, primarily vegetation, topography, weather, and human influences, which intermix to produce local and regional fire regimes that affect how, when, and where fires burn. The fire regime in any area is defined by several factors, including fire frequency, intensity, severity, and area burned. Each of these are important for an understanding of how the variables that affect fire behavior produce fire risks. Fire frequency refers to the number of fires that occur in a given area over a given period of time; fire intensity refers to the speed at which fire travels and the heat that it produces; fire severity involves the extent to which ecosystems and existing conditions are affected or changed by a fire; and area burned is the size of the area burned by wildfire.

VEGETATION/FUELS

Fuel is the material that feeds a fire and is a key factor in wildfire behavior. Fuel sources are diverse and include dry grass, dead tree leaves, twigs, branches, brush, and trees. Additional fuel sources can include human-made structures such as homes, buildings, and other associated combustible materials.

TOPOGRAPHY

Topography describes the shape of the land and can include descriptions of elevation (height above sea level), slope (the steepness of the land), aspect (the direction of a slope faces), and features such as canyons and valleys. Topography can strongly influence fire behavior, including how fast a fire moves through an area: fire typically moves more quickly as it travels uphill compared to either downhill or across flat terrain.

WEATHER/CLIMATE

Weather conditions such as wind, temperature, and humidity also contribute to fire behavior. Fuels located in hotter and drier temperatures are more susceptible to ignition and catch fire more readily than fuels located in moister and/or cooler temperature conditions.

Climate change has been a key factor in increasing the risk and severity of wildfires as weather conditions become hotter and drier. In recent years as the landscape responds to climate change and decades of fire suppression, wildfires are a significant threat in California. It is estimated that between 1979 to 2015, anthropogenic climate change accounted for more than 50 percent of observed increases in fuel aridity in the western US (Abatzoglou and Williams 2016). As climate change persists, it will produce increasing temperatures and drier conditions that will generate abundant dry fuels. All wildfires (those initiated by both natural and human-made sources) tend to be larger under drier atmospheric conditions and when fed by drier fuel sources (Balch et al. 2017).

Additionally, climate change has led to exacerbation of wildfire conditions during a longer period of the year as the spring season has warmed—driving an earlier spring snowmelt, and as winter precipitation has overall decreased (Westerling et al. 2006). Further, wildfire activity is closely related to temperature and drought conditions, and in recent decades, increasing drought frequency and warming temperatures have led to an increase in wildfire activity (Westerling et al 2006, Schoennagel et al. 2017). In particular, the western US, including California, has seen increases in wildfire activity in terms of area burned, number of large fires, and fire season length (Westerling et al. 2006, Abatzoglou and Williams 2016). These conditions have resulted in the largest, most destructive, and deadliest wildfires on record in California history, several of which occurred in 2020. The top 10 wildfires in terms of size in California are summarized in Table WF-1. The 2018 Camp Fire (caused by powerlines) resulted in 85 known deaths and was the deadliest fire in recorded California history. However, the Camp Fire is not reflected in Table WF-1 due to small size (153,336 acres) (CAL FIRE 2022a). All the State's top 10 largest wildfires have occurred since 2003 (CAL FIRE 2022b).

Table WF-1: Top 10 Largest California Wildfires

Fire Name (cause)	Acres	Date	County
August Complex (Lighting)	1,032,648	August 2020	Mendocino, Humboldt, Trinity, Tehama, Glenn, Lake, and Colusa
Dixie (Powerlines)	963,309	July 2021	Butte, Plumas, Lassen, Shasta, and Tehama
Mendocino Complex (Human Related)	459,123	July 2018	Colusa, Lake, Mendocino, and Glenn
SCU Lightning Complex (Lighting)	396,625	August 2020	Stanislaus, Santa Clara, Alameda, Contra Costa, and San Joaquin
Creek (Undetermined)	379,895	September 2020	Fresno and Madera
LNU Lighting Complex (Lightning/Arson)	363,220	August 2020	Napa, Solano, Sonoma, Yolo, Lake, and Colusa

Fire Name (cause)	Acres	Date	County
North Complex (Lightning)	318,935	August 2020	Butte, Plumas, and Yuma
Thomas (Powerlines)	281,893	December 2017	Ventura and Santa Barbara
Cedar (Human Related)	273,246	October 2003	San Diego
Rush (Lightning)	271,911 California/ 43,666 Nevada	August 2012	Lassen

Source: CAL FIRE 2022b.

In addition to the size and destructiveness of the largest fires, the total number and acreage of wildfires are also important. While the highly destructive fires attract the most attention in press coverage and public awareness, from the perspective of wildfire risk reduction, it is also critical to understand and address the more frequent and more widespread smaller fires. Total burned acreage in California can be highly variable, for example, more than 4.3 million acres burned in 2020 compared to approximately 363,939 acres in 2022 (CAL FIRE 2022c).

Climate change will continue to produce conditions that facilitate a longer fire season, which, when coupled with human-caused changes in the seasonality of ignition sources, will produce more, longer, and bigger fires during more times of the year. According to California's Fourth Climate Change Assessment, one study found that if greenhouse gas emissions continue to rise, the frequency of extreme wildfires burning over 25,000 acres could increase by 50 percent, and that average area burned statewide would increase 77 percent by the end of century (OPR et al. 2019).

HUMAN INFLUENCE

Human influence on wildfire is broad and can be substantial. It includes direct influences such as the ignition and suppression of fires, and indirect influence through climate change and alterations in land use patterns that support modified vegetative regimes and increased development in the wildland urban interface (WUI).

Anthropogenic influence more directly controls fire frequency (i.e., number of ignitions) than size of a burn because humans are responsible for most ignitions. Once started, fires spread, and behavior becomes a function of fuel characteristics, terrain, and weather conditions (Syphard et al. 2008). Human-induced wildfire ignitions can change fire regime characteristics in three ways: (1) changing the distribution and density of ignitions, (2) changing the seasonality of burning, and (3) altering available fuels (Balch et al. 2017). A study of wildfires across the United States for the 21-year period between 1992 and 2012 showed that 84 percent of wildfires during that period were started by human causes (Balch et al. 2017). In California specifically, humans account for starting approximately 95 percent of both the number of fires and area burned in the last century (Syphard et al. 2007). In 2022, the majority of the fire incidents in California were caused by humans, including miscellaneous and undetermined causes (CAL FIRE 2022d).

Human ignitions include a multitude of sources, including escapes from debris and brush-clearing fires, electrical equipment malfunctions, campfire escapes, smoking, fire play (e.g., fireworks), vehicles, and arson. Consequently, areas near human development, especially in the WUI or in areas near campgrounds and roads, generate fires at a more frequent rate than very remote or urban areas (Syphard et al. 2007, Mann et al. 2016, Balch et al. 2017). Circumstances in California have made the environment particularly vulnerable to human-caused fires with expansion of the WUI and introduction of more people in areas susceptible to wildfire at all times of the year.

Impacts of Wildfire on Air Quality

As wildfires burn fuel, large amounts of smoke, primarily made up of carbon dioxide, particulate matter, and ozone precursors, are released into the atmosphere. Wildfires also emit a substantial amount of volatile and semi-volatile organic materials and nitrogen oxides that form ozone and organic particulate matter. These emissions can lead to harmful exposures for first responders, nearby residents, and population in regions farther from the wildfires. Exposure to these pollutants can cause asthma attacks, coughing, and shortness of breath. Chronic exposure to these pollutants can increase the risk of developing chronic health conditions such as heart disease, diabetes, and cancer. These pollutants are described in more detail in Chapter 5, “Air Quality.

Existing Wildfire Environmental Setting

State CEQA Guidelines Section 15162 indicates that should a lead agency determine that substantial changes to the project or its circumstances result in a new or more significant impact compared to what was addressed in a project’s previous EIR, or new information of substantial importance results in a new or more significant impact, a subsequent EIR (SEIR) should be prepared. Therefore, this document serves as a SEIR to Sacramento County’s 2030 General Plan EIR (General Plan EIR), as well as to EIRs prepared for various distinct area plans within which a portion of the candidate rezone sites are located. Applicable distinct area plan EIRs include the Fair Oaks Boulevard Corridor Plan EIR (Fair Oaks Boulevard EIR), the North Watt Avenue Corridor Plan EIR (North Watt Avenue EIR), and the Old Florin Town SPA EIR. The regional housing needs allocation (RHNA) shortfall of 2,884 lower income category units and needed buffer could not have been known at the time of the General Plan EIR certification, and the RHNA is in excess of the number of dwelling units analyzed in the General Plan EIR. The number of additional units required in the distinct area plans was not known at the time the applicable environmental documents were certified. As required by Section 15162, this SEIR evaluates the potential for the proposed Project or changes in the circumstances to result in new or substantially more severe significant environmental impacts than previously analyzed under the General Plan EIR and distinct area plan EIRs. Existing wildfire settings for the unincorporated County, Fair Oaks Boulevard Corridor Plan area (Fair Oaks Boulevard Corridor area), North Watt Avenue Corridor Plan area (North Watt Avenue Corridor area), and Old Florin Town SPA are summarized below.

UNINCORPORATED COUNTY EXISTING WILDFIRE SETTING

The Project includes the rezone of 79 candidate sites, totaling approximately 235 acres. All of the 79 candidate rezone sites are located in the unincorporated portions of Sacramento County. Sacramento County has a relatively flat and generally low-lying terrain (Sacramento County 2022). In Sacramento, the summers are hot, arid, and mostly clear and the winters are short, cold, wet, and partly cloudy. Typically, over the course of the year, the temperature varies from 39 degrees Fahrenheit to 94 degrees Fahrenheit. The average hourly wind speed in Sacramento experiences mild seasonal variation over the course of the year. The windier part of the year lasts for over seven months from the end of January to the beginning of September, with average wind speeds of more than 6.2 miles per hour. The windiest month of the year is July, with an average hourly wind speed of 7.1 miles per hour (Weather Spark 2024).

Grass and peat fires are the two main types of wildland fire of concern in Sacramento County. Grass fires are an annual threat in the unincorporated County, especially recreational areas such as the American River parkway. Peat fires are unique to the Delta where peat is subject to spontaneous combustion (Sacramento County 2022).

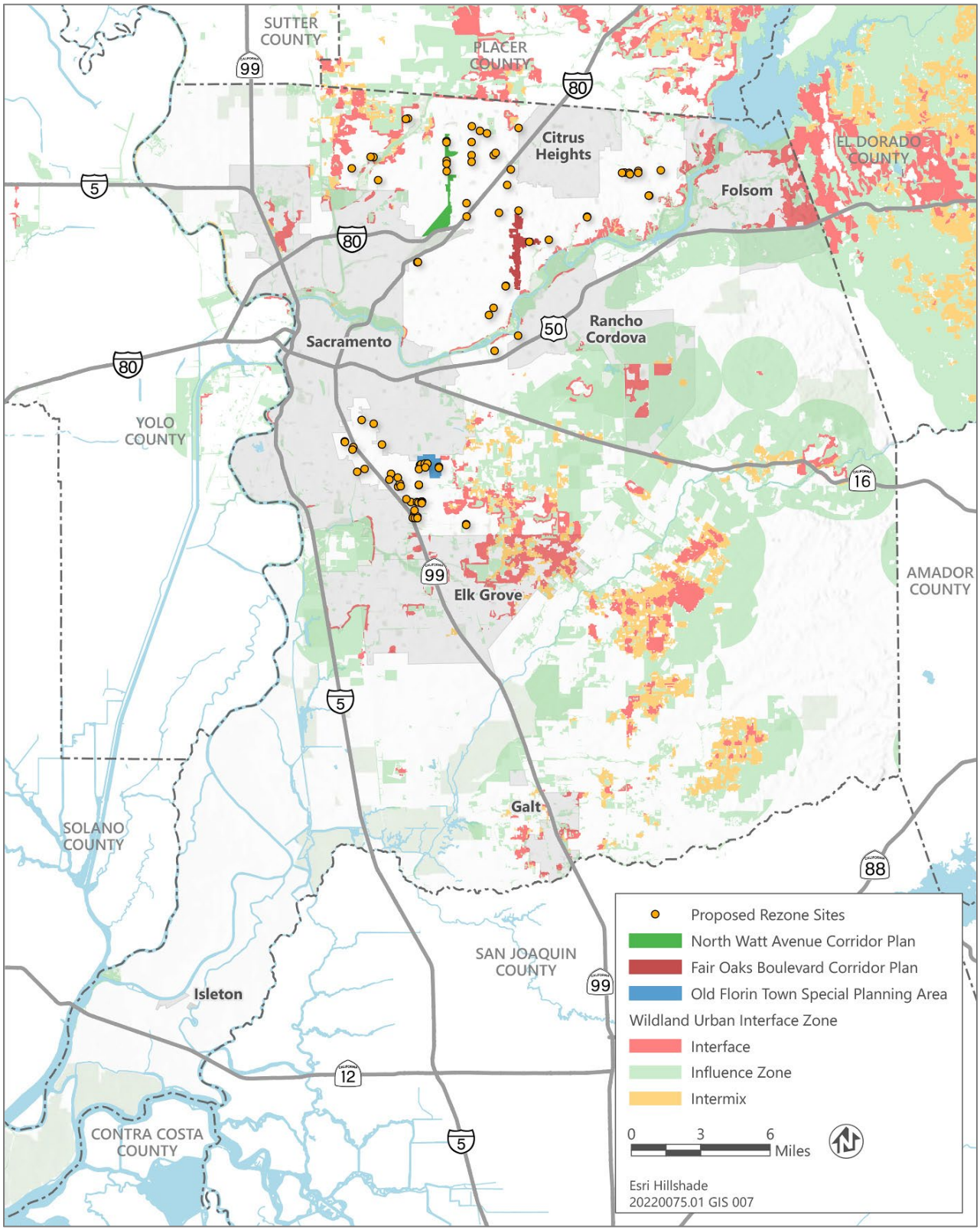
As shown in Plate WF-1, thirteen proposed candidate rezone sites (Sites 3, 47 to 52, 54, 59, 65, 66, 68, and 69) are located in or near WUI. There are 11 fire districts that serve the unincorporated areas of Sacramento County: Sacramento Metropolitan Fire District (SMFD), Cosumnes Community Services District, Delta, Herald, Fruitridge, Wilton, Pacific, Natomas, River Delta, Walnut Grove, and Courtland. All fire districts provide emergency medical rescue and fire protection service. Fire protection and emergency services information is discussed further in Chapter 9, “Public Services and Recreation.”

According to the currently adopted 2007 Fire Hazard Severity Zone (FHSZ) maps for Sacramento County, none of the proposed candidate rezone sites are located near or within an SRA (CAL FIRE 2007). Additionally, none of the candidate rezone sites are located near or within a Very High FHSZ in an LRA (CAL FIRE 2008). The 2022 updated FHSZ map for Sacramento County also indicates that none of the proposed candidate rezone sites are located within an FHSZ in an SRA (CAL FIRE 2023a). Because the 2022 updated maps are still under regulatory review, this SEIR incorporates the currently adopted 2007 maps in the analysis, as shown in Plate WF-2.

FAIR OAKS BOULEVARD CORRIDOR AREA EXISTING WILDFIRE SETTING

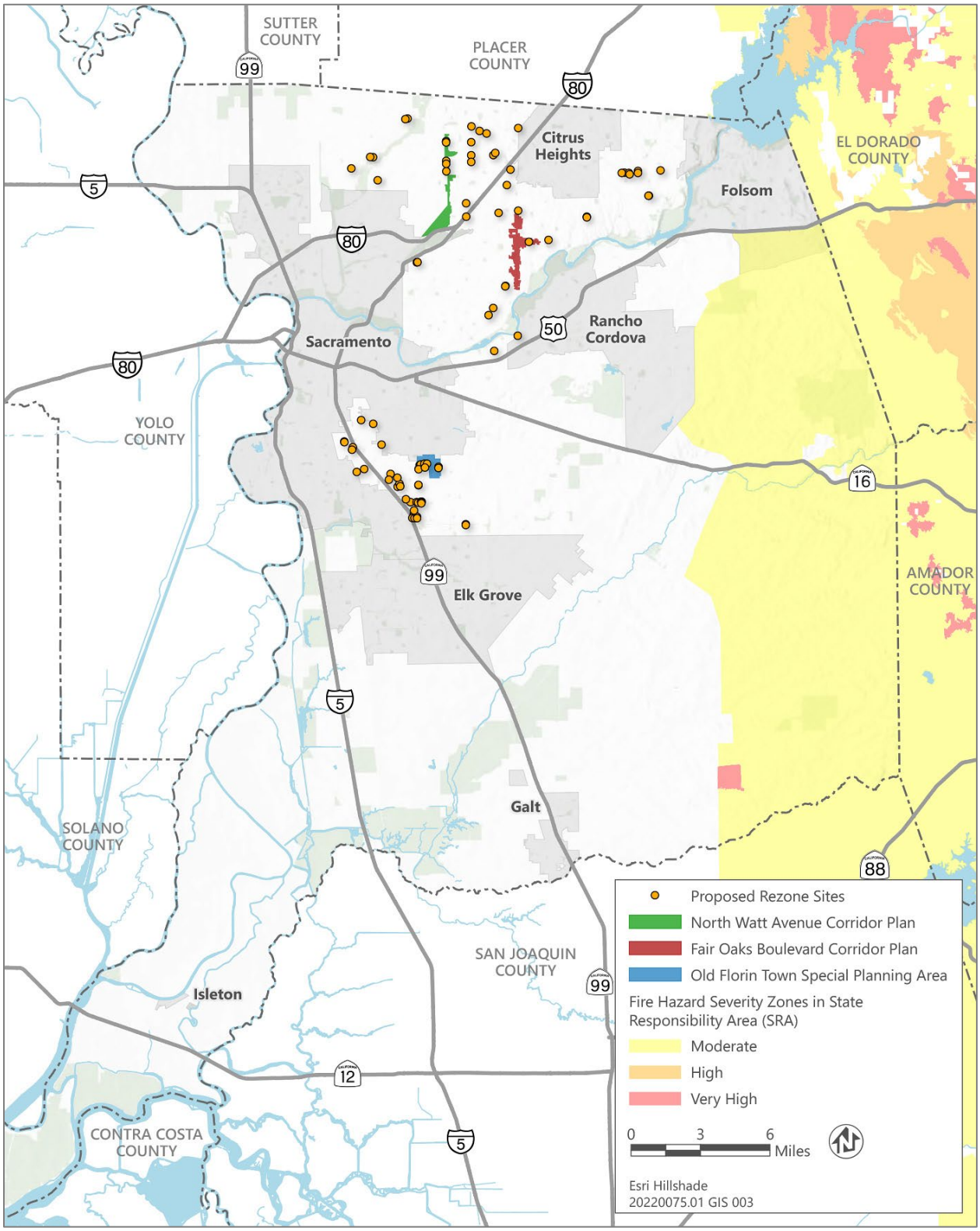
The Fair Oaks Boulevard Corridor area is located in the northern portion of Sacramento County and is within a developed area completely within both the County’s Urban Services Boundary and Urban Policy Area. Topography across the Fair Oaks Boulevard Corridor area is generally flat (Sacramento County 2011a). One candidate rezone site (Site 67) is located within the Fair Oaks Boulevard Corridor area. Site 67 is located in the East Fair Oaks Boulevard District of the Fair Oaks Boulevard Corridor area. East Fair Oaks Boulevard District includes areas between Engle on the south, the intersection of Manzanita, and east to Marshall Avenue. The district has a mix of anchored commercial centers, strip centers, automotive repair and service, commercial and storage facilities.

Plate WF-1: Wildland Urban Interface Zone



Sources: Data received from Sacramento County in 2024; Data download from SACOG in 2024; adapted by Ascent in 2024.

Plate WF-2: Fire Hazard Severity Zones in State Responsibility Area



Sources: Data received from Sacramento County in 2022; Data download from CAL FIRE in 2023; adapted by Ascent in 2022.

Site 67 is bounded by Fair Oaks Boulevard to the north, residential housing to the east and south, and industrial development to the west. Fair Oaks Boulevard Corridor area is not located within a WUI or FHSZ as shown in Plate WF-1 and Plate WF-2, respectively. The Fair Oaks Boulevard Corridor area is within the service area of SMFD.

North Watt Avenue Corridor Area Existing Wildfire Setting

The North Watt Avenue Corridor area is located along Watt Avenue from Interstate-80 (I-80) on the south end to Antelope Road/U Street on the north end. The North Watt Avenue Corridor area includes a segment of the Union Pacific Railroad Main Line. Five candidate rezone sites (Sites 68 through 72) are located northeast of the McClellan Business Park within the North Watt Avenue Corridor area. These candidate rezone sites are located between "West of Watt," a new growth area proposed in the 2030 General Plan, to the west and single-family residential neighborhoods to the east. Existing development in "West of Watt" includes primarily low-density residential (agricultural residential) and industrial uses. The North Watt Avenue Corridor area is not located within a WUI or FHSZ, as shown in Plate WF-1 and Plate WF-2, respectively. The North Watt Avenue Corridor area is within the service area of SMFD.

Old Florin Town SPA Existing Wildfire Setting

The Old Florin Town SPA is located along Florin Road approximately between Power Inn Road and Florin Perkins Road/French Road in the South Sacramento Community Plan Area. The Old Florin Town SPA is vegetated with typical roadside landscaping vegetation as well as native and non-native trees. The topography across the SPA is flat with very minor topographic undulations (Sacramento County 2011b). Seven candidate rezone sites (Sites 73 through 79) are located within the Old Florin Town SPA. These candidate sites are located in an urban setting and surrounded by single-family residential neighborhoods, commercial development, and industrial development. The Old Florin Town SPA is not located within a WUI or FHSZ, as shown in Plate WF-1 and Plate WF-2, respectively. The Old Florin Town SPA is within the service area of SMFD.

Existing Wildfire Regulatory Setting

Federal

There are no federal regulations pertaining to wildfire that are applicable to the Project.

State

Board of Forestry and Fire Protection

The Board of Forestry and Fire Protection (Board) is a Governor-appointed body within CAL FIRE. It is responsible for developing the general forest policy of the state, determining the guidance policies of CAL FIRE, and representing the state's interest in federal forestland in California. Together, the Board and CAL FIRE work to carry out the

California Legislature's mandate to protect and enhance the state's unique forest and wildland resources.

The Board is charged with developing policy to protect all wildland forest resources in California that are not under federal jurisdiction. These resources include major commercial and non-commercial stands of timber, areas reserved for parks and recreation, woodlands, brush-range watersheds, and all private and state lands that contribute to California's forest resource wealth. In addition, the Board is responsible for identifying Very High Fire Hazard Severity Zone (FHSZ) in the State Responsible Area (SRA) and Local Responsible Area (LRA). Local agencies are required to designate, by ordinance, Very High FHSZ and to require landowners to reduce fire hazards adjacent to occupied buildings within these zones (Government Code Sections 51179 and 51182). The intent of identifying areas with very high fire hazards is to allow CAL FIRE and local agencies to develop and implement measures that would reduce the loss of life and property from uncontrolled wildfires (Government Code Section 51176).

California Public Resources Code (PRC) Sections 4114 and 4130 authorize the Board to establish a fire plan, which, among other things, determines the levels of statewide fire protection services for SRA lands. The most current fire plan is the 2018 Strategic Fire Plan for California, which is discussed below.

2018 Strategic Fire Plan for California

The 2018 Strategic Fire Plan for California lays out central goals for reducing and preventing the impacts of fire in the state (Board and CAL FIRE 2018). The goals are meant to establish, through local, state, federal, and private partnerships, a natural environment that is more resilient and human-made assets that are more resistant to the occurrence and effects of wildland fire.

California Department of Forestry and Fire Protection

CAL FIRE is dedicated to the fire protection and stewardship of over 31 million acres of the state's privately-owned wildlands. In addition, CAL FIRE provides emergency services in 36 of the state's 58 counties via contracts with local governments. PRC Section 4291 gives CAL FIRE the authority to enforce 100 feet of defensible space around all buildings and structures on non-federal SRA lands, or non-federal forest-covered lands, brush-covered lands, grass-covered lands, or any land that is covered with flammable material. PRC Sections 4790 through 4799.04 provide the regulatory authority for CAL FIRE to administer the California Forest Improvement Program. PRC 4113 and 4125 give CAL FIRE the responsibility for preventing and extinguishing wildland fires in the SRA (PRC Sections 4113 and 4125). The PRC, beginning with Section 4427, includes fire safety statutes that restrict the use of equipment that may produce a spark, flame, or fire; require the use of spark arrestors on construction equipment with internal combustion engines; specify requirements for the safe use of gasoline-powered tools in fire hazard areas; and specify fire suppression equipment that must be provided on site for various types of work in fire-prone areas.

In addition to the 2018 Strategic Fire Plan, individual CAL FIRE Units develop Fire Plans, which are major strategic documents that establish a set of tools for each CAL FIRE Unit to achieve in its local area. Updated yearly, Unit Fire Plans identify wildfire protection areas, initial attack success, assets and infrastructure at risk, pre-fire management strategies, and accountability within their Units' geographical boundaries. Sacramento County is located within the Amador El Dorado Unit and the County is subject to goals and objectives outlined within the 2023 Strategic Fire Plan Amador El Dorado Unit (2023 Unit Strategic Fire Plan). The 2023 Unit Strategic Fire Plan is divided into battalions (geographical boundaries), where fuel, weather, topography, and fire history specific to each area are identified. Sacramento County is located within the jurisdiction of Battalion 1 and Battalion 4; Fair Oaks Boulevard Corridor and North Watt Avenue Corridor areas are within the jurisdiction of Battalion 1; and Old Florin Town SPA is within the jurisdiction of Battalion 4 (CAL FIRE 2023b).

Emergency Services Act

Under the Emergency Services Act, Government Code Section 8550, et seq., the State developed an emergency response plan to coordinate emergency services provided by federal, State, and local agencies. Rapid response to incidents involving wildfire and other natural and/or human-caused incidents is an important part of the plan, which is administered by the Governor's Office of Emergency Services (OES). The office coordinates the responses of other agencies, including the California Environmental Protection Agency (CalEPA), the California Highway Patrol (CHP), regional water quality control boards, air quality management districts, and county disaster response offices.

California Public Resources Code

Sections 4201-4204

PRC Sections 4201 through 4204 require CAL FIRE to prepare FHSZ maps for all lands within SRAs, and to make recommendations for such zones in LRAs. Each zone is to embrace relatively homogeneous lands and is to be based on fuel loading, slope, fire weather, and other relevant factors present, including areas where winds have been identified as a major cause of wildfire spread. A discussion of the FHSZ maps is provided in the "Board of Forestry and Fire Protection."

Section 4427

PRC Section 4427 identifies appropriate fire suppression equipment and stipulates removal of flammable materials to a distance of 10 feet from any equipment that could produce a spark, fire, or flame on days when burning permits are required.

Section 4428

PRC Section 4428 requires that appropriate fire suppression equipment must be maintained during the highest fire danger period from April 1 to December 1.

SECTION 4431

PRC Section 4431 prohibits the use of portable tools powered by gasoline-fueled internal combustion engines within 25 feet of flammable materials when burning permits are required.

CALIFORNIA FIRE CODE

The 2022 California Fire Code establishes the minimum requirements consistent with nationally recognized good practices to safeguard the public health, safety, and general welfare for the hazards of fire, explosion, or dangerous conditions in new and existing buildings, structures and premises, and to provide safety and assistance to firefighters and emergency responders during emergency operations. The provisions of this code apply to some construction, alternation, movement, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal, and demolition of buildings or structures or any appurtenances connected or attached to such building structures throughout California.

LOCAL

SACRAMENTO COUNTY GENERAL PLAN

The Sacramento County General Plan includes the following policies in the Safety Element related to addressing wildfires and minimizing their risks:

SA-23. The County shall require that all new development meets the local fire district standards for adequate water supply and pressure, fire hydrants, and access to structures by firefighting equipment and personnel.

SA-26. The County and fire districts shall develop programs to provide citizens with self-preparedness and community readiness skills for large or extended accidental, natural, and terrorist emergencies/incidents.

SA-27. The County shall require, where appropriate, the use of fire resistant landscaping and building materials for new construction developments that are cost effective.

SA-28. The County shall encourage and require, to the maximum extent feasible, automatic fire sprinkler systems for all new commercial and industrial development to reduce the dependence on fire department equipment and personnel.

SA-30. The County, medical community, and fire districts shall work to improve EMS response system that includes first responder emergency care and transportation services.

SACRAMENTO COUNTY LOCAL HAZARD MITIGATION PLAN

The Sacramento County Local Hazard Mitigation Plan, as amended, includes a risk assessment of existing hazards such as severe weather, dam failure, flooding,

earthquakes, wildfire, drought, health hazards, landslides, and volcanoes, and a mitigation strategy. The plan includes countywide recommended action items to reduce the economic effects and the loss of life and property.

Sacramento County Operational Area Evacuation Annex

The Sacramento County Operational Area Evacuation Functional Annex provides evacuation strategies that would be implemented in an evacuation affected area, including public alerts and warnings, transportation, and evacuation triggers. The Annex outlines local government (cities and special districts), the Sacramento Operational Area, and State responsibilities for management of evacuation during an emergency situation (Sacramento County Office of Emergency Services 2021).

Sacramento County Code

Sacramento County Fire Prevention Ordinance

The Sacramento County Fire Prevention Ordinance (County Code Title 17, Fire Prevention) details fire break requirements, hazardous weed removal, and enforcement. The Fire Prevention Ordinance requires a firebreak area of at least 30 feet from all structures, combustible fences, vehicles, and combustible storage.

Sacramento County Zoning Code

The Sacramento County Zoning Code, Chapter 5 Development Standards, provides the following standards for residential development in the RD-10 through RD-40 zones related to fire access (Sacramento County 2015):

1. Street design and width shall be confirmed with the Fire Department.

2. For driveway access with 10 or fewer units, a T-shaped turnaround shall be allowed. A dimension of 20 feet by 80 feet will accommodate most vehicles.

3. Dead end driveways shall be less than 150 feet long, and have appropriate turnarounds as needed.

4. Circular cul-de-sacs shall be designed with a radius of 40 feet or less to the greatest extent possible.

5. The minimum widths for internal streets or driveways, per Fire Department Standards, shall be as follows:

    a. For uncurbed driveways with no parallel parking when a fire lane is not necessary: 16 feet.

    b. For curbed internal streets with no parallel parking: 19 feet.

    c. For curbed internal street with parallel parking on one side: 28 feet.

    d. For curbed internal street with parallel parking on both sides: 36 feet.

DISTINCT AREA PLANS

The County guides development using several distinct area plans such as SPAs, Specific Plans, Comprehensive Plans, Community Plans, Corridor Plans, and Neighborhood Preservation Area. As shown in Chapter 2, "Project Description," 13 candidate rezone sites are located in distinct area plans, specifically: Fair Oaks Boulevard Corridor Plan, North Watt Avenue Corridor Plan, and Old Florin Town SPA. These plans provide specific regulations that supplement the County Zoning Code and are created when the countywide zoning regulations do not adequately address local concerns (Sacramento County 2024). Fair Oaks Boulevard Corridor Plan, North Watt Avenue Corridor Plan, and Old Florin Town SPA do not contain applicable policies related to wildfire.

OTHER DISTINCT AREA PLANS

In addition to the distinct area plans described above, Stockton Boulevard NPA, Victory Avenue NPA, Greenback Lane SPA, and Downtown Rio Linda SPA also contain proposed candidate rezone sites. These distinct area plans do not have applicable policies related to wildfire.

SIGNIFICANCE CRITERIA AND METHODOLOGY

SIGNIFICANCE CRITERIA

Thresholds of significance are based on Appendix G of the State CEQA Guidelines. If located in or near SRAs or lands classified as Very High FHSZ, the Project would result in a significant impact related to wildfire if it would:

- impair an adopted emergency response plan or emergency evacuation plan;
- due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire;
- require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment; or
- expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage change.

METHODOLOGY

Impacts related to wildfire are analyzed qualitatively based on the Project's potential to result in physical changes to the environment from future Project buildout. Each issue area is analyzed in the context of existing laws and regulations, and the extent to which these existing regulations and policies adequately address and minimize the potential for impacts associated with the implementation of the Project.

IMPACT AND ANALYSIS

As discussed at the beginning of this chapter, Appendix G of the State CEQA Guidelines was updated in 2018 to include a separate section with new questions associated with evaluating a project's potential impact related to wildfire. Because the General Plan EIR, Fair Oaks Boulevard EIR, North Watt Avenue EIR, and Old Florin Town SPA EIR were certified prior to the 2018 update, these CEQA documents did not evaluate wildfire impacts. Therefore, no prior wildfire impact determinations were made in the General Plan EIR, Fair Oaks Boulevard EIR, North Watt Avenue EIR, or Old Florin Town SPA EIR. The following impact discussion is organized by wildfire thresholds of significance identified above, then by analysis of Project buildout, and finally by distinct planning areas. Mitigation is identified where applicable. An analysis of cumulative impacts is included at the end of the section.

IMPACT WF-1: IMPAIR AN ADOPTED EMERGENCY RESPONSE PLAN OR EMERGENCY EVACUATION PLAN

SACRAMENTO COUNTY GENERAL PLAN

The Project would increase the development density on the proposed candidate rezone sites. CAL FIRE published FHSZ maps for areas under the state's responsibility. The FHSZ maps show areas that are more susceptible to fires. As shown on Plate WF-2, none of the proposed candidate rezone sites are located near or within an SRA or Very High FHSZ. However, 13 proposed candidate rezone sites (Sites 3, 47 through 52, 54, 59, 65, 66, 68 and 69) are located in or near WUI as shown in Plate WF-1. Future development on sites that are located in or near WUI would be susceptible to wildfire and could require emergency response and/or evacuation.

Future development of the proposed candidate rezone sites would be required to comply with the County's Operational Area Evacuation Functional Annex and the General Plan Safety Element policy. The County's Operational Area Evacuation Functional Annex includes the agreed upon strategy for the County's response to emergencies. The Annex is consistent with the State's emergency plans and is applicable to all locations and to all agencies, organizations, and personnel with evaluation and evacuation support function responsibilities. Future development under the Project would be reviewed by the appropriate fire district to ensure development would not interfere or obstruct the evacuation strategies and protocols identified in the Annex. The General Plan Safety Element Policy SA-23 requires new development to meet the local fire district standards regarding access to structures by firefighting equipment and personnel. Future development would be required to comply with Policy SA-23 to provide adequate emergency access. Therefore, future development under the Project would not conflict with County emergency planning and evaluation plans. Additional discussion related to fire districts' availability to serve the proposed candidate rezone sites and conditions of approval related to access and emergency responses is provided under Impact PSR-1 in Chapter 9, "Public Services and Recreation."

Future development would be required to comply with the development standards established in the Sacramento County Zoning Code Chapter 5 Table 5.8.B, including providing street design that shall be confirmed with the Sacramento Metropolitan Fire District and Pacific Fruitridge Fire District and providing adequate widths for internal streets or driveway pursuant to Fire Department requirements. In addition, future development under the Project would be required to comply with the California Fire Code's specifications for access. The Project would not alter the development footprint identified in the General Plan EIR and would not significantly affect the existing or planned evacuation routes in the County. Compliance with existing General Plan policies, the County's Operational Area Evacuation Functional Annex, Sacramento County Zoning Code, and California Fire Code would ensure that the Project would not interfere with emergency responses and evacuation plans. Therefore, pursuant to State CEQA Guidelines Section 15162, implementation of the Project would not result in new or more severe significant impacts related to impairment of an adopted emergency response plan or emergency evacuation plan than would occur with implementation of the General Plan. The Project's contribution to impacts would not be substantial and overall impacts would be less than significant.

Mitigation Measures

Mitigation not required.

Distinct Area Plans

Fair Oaks Boulevard Corridor Plan

As shown on Plate WF-2, Site 67 is not located near or within an SRA or Very High FHSZ. The Fair Oaks Boulevard Corridor area is not located in or near WUI as shown in Plate WF-1. Therefore, Site 67 is not located in an area that is prone to wildfire. The proposed rezone on Site 67 would result in minor development capacity increase in the Fair Oaks Boulevard Corridor area. Development on Site 67 would be subject to the same General Plan policies and regulations as discussed above for the General Plan to ensure that interfering with emergency responses and evacuation plans would not occur. Therefore, pursuant to State CEQA Guidelines Section 15162, the proposed rezone on Site 67 would not result in new or more severe significant impacts related to impairment of an adopted emergency response plan or emergency evacuation plan than would occur with implementation of the Fair Oaks Boulevard Corridor Plan. The contribution to impacts from the proposed rezone on Site 67 would not be substantial and overall impacts would be less than significant.

Mitigation Measures

Mitigation not required.

North Watt Avenue Corridor Plan

As shown on Plate WF-2, Sites 68 through 72 are not located near or within an SRA or Very High FHSZ. However, Sites 68 and 69 are located near WUI Influence Zone as shown in Plate WF-1. Sites 68 and 69 are located in areas contain susceptible vegetation that are prone to wildfire. The proposed rezone on Sites 68 through 72 would result in

increased development capacity in the North Watt Avenue Corridor area. Development on candidate rezone sites within the North Watt Avenue Corridor area would be subject to the same General Plan policies and regulations as discussed above for the General Plan to ensure that interfering with emergency responses and evacuation plans would not occur. Therefore, pursuant to State CEQA Guidelines Section 15162, the proposed rezone on Sites 68 through 72 would not result in new or more severe significant impacts related to impairment of an adopted emergency response plan or emergency evacuation plan than would occur with implementation of the North Watt Avenue Corridor Plan. The contribution to impacts from the proposed rezone on Sites 68 through 72 would not be substantial and overall impacts would be less than significant.

Mitigation Measures

Mitigation not required.

Old Florin Town SPA

As shown on Plate WF-2, Sites 73 through 79 are not located near or within an SRA or Very High FHSZ. The Old Florin Town SPA is not located in or near WUI as shown in Plate WF-1. Therefore, Sites 73 through 79 are not located in areas that are prone to wildfire. The proposed rezone on Sites 73 through 79 would result in increased development capacity in the Old Florin Town SPA. Development on candidate rezone sites within the Old Florin Town SPA would be subject to the same General Plan policies and regulations as discussed above for the General Plan to ensure that interfering with emergency responses and evacuation plans would not occur. Therefore, pursuant to State CEQA Guidelines Section 15162, the proposed rezone on Sites 68 through 72 would not result in new or more severe significant impacts related to impairment of an adopted emergency response plan or emergency evacuation plan than would occur with implementation of the Old Florin Town SPA. The contribution to impacts from the proposed rezone on Sites 73 through 79 would not be substantial, and overall impacts would be less than significant.

Mitigation Measures

Mitigation not required.

Impact WF-2: Due to Slope, Prevailing Winds, and Other Factors, Exacerbate Wildfire Risks, and Thereby Expose Project Occupants to Pollutant Concentrations from a Wildfire or the Uncontrolled Spread of a Wildfire

Sacramento County General Plan

As discussed under Impact WF-1, none of the proposed candidate rezone sites are located near or within an SRA or Very High FHSZ. Thirteen proposed candidate rezone sites (Sites 3, 47 through 52, 54, 59, 65, 66, 68 and 69) are located in or near WUI as shown in Plate WF-1. Future development on sites that are located in or near WUI would be susceptible to wildfire. The County has a relatively flat and generally low-lying terrain.

Future buildout associated with the Project would be required to comply with the Sacramento County Fire Prevention Ordinance. The Ordinance requires removal of rubbish and weeds growing or accumulated on the property and adjacent streets in accordance with procedures and methods prescribed by the appropriate fire district. The Ordinance also requires at least a 30-foot firebreak from all structures to prevent the spread of fire. Violation of the Fire Prevention Ordinance is subject to a fine. Additionally, future development associated with the Project would be required to comply with General Plan policies related to fire protection, such as Policy SA-23, requiring new development to have adequate water supply and pressure, fire hydrants and access to structures for firefighting personnel, and Policy SA-27, requiring the use of fire-resistant landscaping and building materials for new construction development. Future development would also be required to comply with the California Fire Code's specifications for building materials such as tile or other fire-resistant roofing. Compliance with these General Plan policies and California Fire Code would reduce wildfire risk on and near the proposed candidate rezone sites.

Project buildout would increase development density in the proposed candidate rezone sites resulting in higher density residential uses. Studies suggest that fire spread, and structure loss is more likely to occur in low- to intermediate-density development located among flammable vegetation (Syphard et al. 2012). Therefore, because the candidate rezone sites are located in already dense development areas, the Project would not result in increased fire spread or structure loss. Compliance with existing regulations and General Plan policies would ensure that future development under the Project would not exacerbate wildfire risk due to slope, prevailing winds, or other factors and, thereby, would not expose future occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Therefore, pursuant to State CEQA Guidelines Section 15162, implementation of the Project would not result in new or more severe significant impacts related to exposing future occupants to pollutant concentrations from a wildfire than would occur with implementation of the General Plan. The Project's contribution to impacts would not be substantial and overall impacts would be less than significant.

Mitigation Measures

Mitigation not required.

Distinct Area Plans

Fair Oaks Boulevard Corridor Plan

Site 67 is not located near or within an SRA or Very High FHSZ (PLATE WF-2) or in a WUI (Plate WF-1). The topography across the Fair Oaks Boulevard Corridor area is generally flat. Therefore, Site 67 is not located in an area that is prone to wildfire. Site 67 is bounded by existing developments, such as roadways and residential housing. Future development on Site 67 would be subject to the same County Ordinance, General Plan policies, and California Fire Code as discussed above for the General Plan. Compliance with existing regulations and General Plan policies would ensure that future development on Site 67 would not exacerbate wildland fire risks and would not exacerbate the exposure of future occupants to pollutant concentrations from a wildfire or uncontrolled spread of a

wildfire. Therefore, pursuant to State CEQA Guidelines Section 15162, the proposed rezone on Site 67 would not result in new or more severe significant impacts related to exposing future occupants to pollutant concentrations from a wildfire than would occur with implementation of the Fair Oaks Boulevard Corridor Plan. The contribution to impacts from the proposed rezone on Site 67 would not be substantial and overall impacts would be less than significant.

MITIGATION MEASURES

Mitigation not required.

NORTH WATT AVENUE CORRIDOR PLAN

Sites 68 through 72 are not located near or within an SRA or Very High FHSZ (Plate WF-2). However, Sites 68 and 69 are located near WUI Influence Zone as shown in Plate WF-1. Sites 68 and 69 are located in areas containing susceptible vegetation that are prone to wildfire. These proposed candidate rezone sites are surrounded by existing and proposed development, including low density residential and industrial uses to the west in the "West of Watt" new growth area and residential housing to the east. Therefore, Sites 68 through 72 are not located in areas that are prone to wildfire. Future development on Sites 68 through 72 would be subject to the same County Ordinance, General Plan policies, and California Fire Code as discussed above for the General Plan. Compliance with existing regulations and General Plan policies would ensure that future development on Sites 68 through 72 would not exacerbate wildland fire risks and would not exacerbate the exposure of future occupants to pollutant concentrations from a wildfire or uncontrolled spread of a wildfire. Therefore, pursuant to State CEQA Guidelines Section 15162, the proposed rezone on Sites 68 through 72 would not result in new or more severe significant impacts related to exposing future occupants to pollutant concentrations from a wildfire than would occur with implementation of the North Watt Avenue Corridor Plan. The contribution to impacts from the proposed rezone on Sites 68 through 72 would not be substantial and overall impacts would be less than significant.

MITIGATION MEASURES

Mitigation not required.

OLD FLORIN TOWN SPA

As shown in Plate WF-1 and Plate WF-2, the Old Florin Town SPA is not located in an SRA, Very High FHSZ, or WUI. Therefore, Sites 73 through 79 are not located in areas that are prone to wildfire. The seven candidate rezone sites within the SPA are surrounded by residential, commercial, and industrial development. Future development on Sites 73 through 79 would be subject to the same County Ordinance, General Plan policies, and California Fire Code as discussed above for the General Plan. Compliance with existing regulations and General Plan policies would ensure that future development on Sites 73 through 79 would not exacerbate wildland fire risks and would not exacerbate the exposure of future occupants to pollutant concentrations from a wildfire or uncontrolled spread of a wildfire. Therefore, pursuant to State CEQA Guidelines Section 15162, the proposed rezone on Sites 73 through 79 would not result in new or more severe significant impacts related to exposing future occupants to pollutant

concentrations from a wildfire than would occur with implementation of the Old Florin Town SPA. The contribution to impacts from the proposed rezone on Sites 73 through 79 would not be substantial and overall impacts would be less than significant.

Mitigation Measures

Mitigation not required.

Impact WF-3: Require the Installation or Maintenance of Associated Infrastructure (such as Roads, Fuel Breaks, Emergency Water Sources, Power Lines, or Other Utilities) That Exacerbates Fire Risk or That May Result in Temporary or Ongoing Impacts to the Environment

Sacramento County General Plan

The proposed candidate rezone sites are located in infill and corridor areas that have been designated for development. As discussed under Impact WF-1, none of the proposed candidate rezone sites are located near or within an SRA or Very High FHSZ. Thirteen proposed candidate rezone sites (Sites 3, 47 through 52, 54, 59, 65, 66, 68 and 69) are located in or near WUI as shown in Plate WF-1. Future development on sites that are located in or near WUI would be susceptible to wildfire. Although the Project does not include infrastructure development, it is possible that utilities infrastructure improvements (e.g., power lines and power poles and underground water and wastewater infrastructure) may be required to accommodate the growth resulting from increased density as part of the Project.

Construction activities associated with future buildout of the Project, including new infrastructure improvements, would be required to comply with the California Fire Code's specifications for access and building materials, such as tile or other fire-resistant roofing. Construction of utilities infrastructure, if needed for development under the Project, would also be subject to PRC requirements related to fire safety and wildfire suppression, including PRC Sections 4427, 4428, and 4431. Adherence to applicable PRC requirements would ensure that wildfire risks associated with installation and maintenance of associated infrastructure are minimized.

Additionally, development under the Project would be required to comply with the Sacramento County Fire Prevention Ordinance, which requires installation of a firebreak around all structures, including combustible fences and storage associated with infrastructure installation, to reduce wildfire risk. Future water and wastewater infrastructure improvements would be underground and would not exacerbate fire risk or that may result in temporary or ongoing impacts to the environment. Routine maintenance of potential electrical infrastructure could involve vegetation removal around electrical infrastructure and fuel break to ensure all components of future projects are in proper condition, thereby minimizing accidents and potential fires. In addition, Public Utilities Code Section 8386 requires that each electrical corporation shall construct, maintain, and operate its electrical lines and equipment in a manner that will minimize the risk of

catastrophic wildfire posed by those electrical lines and equipment and provides statutory requirements for preparation a Wildfire Mitigation Plan. For example, Pacific Gas and Electric Company has prepared and is implementing the 2023-2025 Wildfire Mitigation Plan to reduce wildfire risk by undergrounding power lines, reducing ignition risks (through removing non-exempt equipment and expulsion fuse), and enhancing vegetation management. Therefore, while infrastructure to support future development under the Project may be required, implementation or maintenance of new infrastructure would not be expected to exacerbate fire risk due to compliance with existing fire prevention regulations.

Pursuant to State CEQA Guidelines Section 15162, implementation of the Project would not result in new or more severe significant impacts related to exacerbating wildfire due to installation or maintenance of infrastructure than would occur with implementation of the General Plan. The Project's contribution to impacts would not be substantial and overall impacts would be less than significant.

Mitigation Measures

Mitigation not required.

Distinct Area Plans

Fair Oaks Boulevard Corridor Plan

Site 67 is not located near or within an SRA or Very High FHSZ (Plate WF-2) or in a WUI (Plate WF-1). Site 67 is located in the Fair Oaks Boulevard Corridor area that has been previously designated for development. The Project would increase the development density on Site 67 but would not result in additional installation or maintenance of new infrastructure beyond that discussed in the Fair Oaks Boulevard EIR. Therefore, pursuant to State CEQA Guidelines Section 15162, the proposed rezone on Site 67 would not result in new or more severe significant impacts related to exacerbating wildfire due to installation or maintenance of infrastructure than would occur with implementation of the Fair Oaks Boulevard Corridor Plan. The contribution to impacts from the proposed rezone on Site 67 would not be substantial and overall impacts would be less than significant.

Mitigation Measures

Mitigation not required.

North Watt Avenue Corridor Plan

Sites 68 through 72 are not located near or within an SRA or Very High FHSZ (Plate WF-2). However, Sites 68 and 69 are located near WUI Influence Zone as shown in Plate WF-1. Sites 68 and 69 are located in areas containing susceptible vegetation that are prone to wildfire. The proposed rezone on Sites 68 through 72 does not include infrastructure improvements. Infrastructure improvements (e.g., underground water and wastewater infrastructure) associated with future development on Sites 68 through 72 would be subject to Mitigation Measures PS-1 (Public Service Infrastructure) and PS-2 (Water Supply/Infrastructure) identified in the North Watt Avenue EIR that require projects resulting in increased development over what was assumed in the EIR to prepare phasing

plans for public service infrastructure and water supply. Future infrastructure improvements associated with Sites 68 through 72 would be subject to the same County Ordinance and PRC requirements as discussed above for the General Plan. Therefore, pursuant to State CEQA Guidelines Section 15162, the proposed rezone on Sites 68 through 72 would not result in new or more severe significant impacts related to exacerbating wildfire due to installation or maintenance of infrastructure than would occur with implementation of the North Watt Avenue Corridor Plan. The contribution to impacts from the proposed rezone on Sites 68 through 72 would not be substantial and overall impacts would be less than significant.

MITIGATION MEASURES

Mitigation not required.

OLD FLORIN TOWN SPA

As shown in Plate WF-1 and Plate WF-2, the Old Florin Town SPA is not located in an SRA, Very High FHSZ, or WUI. These sites have been designated for development as part of the Old Florin Town SPA EIR. The proposed rezone on Sites 73 through 79 does not include infrastructure improvements. Infrastructure improvements associated (e.g., underground water and wastewater infrastructure) with future development on Sites 73 through 79 would be subject to Mitigation Measures PS-1 (Public Service Infrastructure) identified in the Old Florin Town SPA EIR that requires projects resulting in increased development over what was assumed in the EIR to prepare phasing plans for public service infrastructure. Future infrastructure improvements associated with Sites 73 through 79 would be subject to the same County Ordinance and PRC requirements as discussed above for the General Plan. Therefore, pursuant to State CEQA Guidelines Section 15162, the proposed rezone on Sites 73 through 79 would not result in new or more severe significant impacts related to exacerbating wildfire due to installation or maintenance of infrastructure than would occur with implementation of the Old Florin Town SPA. The contribution to impacts from the proposed rezone on Sites 73 through 79 would not be substantial and overall impacts would be less than significant.

MITIGATION MEASURES

Mitigation not required.

IMPACT WF-4: EXPOSE PEOPLE OR STRUCTURES TO POST-FIRE RISKS, INCLUDING DOWNSLOPE OR DOWNSTREAM FLOODING OR LANDSLIDES, AS A RESULT OF RUNOFF, POST-FIRE SLOPE INSTABILITY, OR DRAINAGE CHANGE

SACRAMENTO COUNTY GENERAL PLAN

As discussed under Impact WF-1, none of the proposed candidate rezone sites are located near or within an SRA or Very High FHSZ. Thirteen proposed candidate rezone sites (Sites 3, 47 to 52, 54, 59, 65, 66, 68, and 69) are located in or near WUI as shown in Plate WF-1. Future development on sites that are located in or near WUI would be susceptible to wildfire. The County has a relatively flat and generally low-lying terrain. In Sacramento County, only a narrow strip along the eastern boundary, from the Placer

County line to the Cosumnes Rivers, is considered to have landslide potential (Sacramento County 2022). The proposed candidate rezone sites are not located near this landslide prone area. Future buildout associated with the Project would be required to comply with the Sacramento County Floodplain Management Ordinance, which would ensure that residences are not placed within a flood hazard area, and that people or structures would not be exposed to a significant risk involving flooding. In addition, General Plan Safety Element Policy SA-22a requires the County to evaluate new development located within a defined flood hazard zone to ensure that the development is consistent with the appropriate flood protection standards; and Policy SA-22b requires all new development to be elevated as required by the applicable flood standards and be constructed to be resistant to flood damage. Compliance with these General Plan policies would ensure that future development associated with the Project would not expose people or structures to significant flood risk, including downslope or downstream flooding or landslides, as a result of runoff, post-fire instability, or drainage changes. Therefore, pursuant to State CEQA Guidelines Section 15162, implementation of the Project would not result in new or more severe significant impacts related to exposing people or structure to post-fire risks than would occur with implementation of the General Plan. The Project's contribution to impacts would not be substantial and overall impacts would be less than significant.

Mitigation Measures

Mitigation not required.

Distinct Area Plans

Fair Oaks Boulevard Corridor Plan

Site 67 is not located near or within an SRA or Very High FHSZ (PLATE WF-2) or in a WUI (Plate WF-1). In addition, Site 67 in the Fair Oaks Boulevard Corridor area is not located in an area prone to landslides (Sacramento County 2022). Future development on Site 67 would be subject to the same General Plan policies and County ordinances as discussed above for the General Plan. Therefore, pursuant to State CEQA Guidelines Section 15162, the proposed rezone on Site 67 would not result in new or more severe significant impacts related to exposing people or structure to post-fire risks than would occur with implementation of the Fair Oaks Boulevard Corridor Plan. The contribution to impacts from the proposed rezone on Site 67 would not be substantial and overall impacts would be less than significant.

Mitigation Measures

Mitigation not required.

North Watt Avenue Corridor Plan

Sites 68 through 72 are not located near or within an SRA or Very High FHSZ (Plate WF-2). However, Sites 68 and 69 are located near WUI Influence Zone as shown in Plate WF-1. Sites 68 and 69 are located in areas containing susceptible vegetation that are prone to wildfire. Sites 68 through 72 in the North Watt Avenue Corridor area are not located in an area prone to landslides (Sacramento County 2022). Future development

on Sites 68 through 72 would be subject to the same General Plan policies and County ordinances as discussed above for the General Plan. Therefore, pursuant to State CEQA Guidelines Section 15162, the proposed rezone on Sites 68 through 72 would not result in new or more severe significant impacts related to exposing people or structure to post-fire risks than would occur with implementation of the North Watt Avenue Corridor Plan. The contribution to impacts from the proposed rezone on Sites 68 through 72 would not be substantial and overall impacts would be less than significant.

Mitigation Measures

Mitigation not required.

Old Florin Town SPA

As shown in Plate WF-1 and Plate WF-2, the Old Florin Town SPA is not located in an SRA, Very High FHSZ, or WUI. In addition, Sites 73 through 79 in the Old Florin Town SPA are not located in an area prone to landslides (Sacramento County 2022). Future development on Sites 73 through 79 would be subject to the same General Plan policies and County ordinances as discussed above for the General Plan. Therefore, pursuant to State CEQA Guidelines Section 15162, the proposed rezone on Sites 73 through 79 would not result in new or more severe significant impacts related to exposing people or structure to post-fire risks than would occur within implementation of the Old Florin Town SPA. The contribution to impacts from the proposed rezone on Sites 63 through 79 would not be substantial and overall impacts would be less than significant.

Mitigation Measures

Mitigation not required.

Cumulative Wildfire

Cumulative Setting

The geographic scope of analysis for cumulative impacts related to wildfire is the Sacramento region. Due to the increased wildfire incidents in California, it is reasonable to assume that there is an existing significant cumulative impact related to wildfire in California, including the unincorporated Sacramento County and the three distinct planning areas (the Fair Oaks Boulevard Corridor area, the North Watt Avenue Corridor area, and the Old Florin Town SPA).

Impact WF-5: The Project, in Combination with Past, Present, and Reasonably Foreseeable Projects, Could Result in a Significant Cumulative Impact with Respect to Wildfires

Implementation of the Project, including the proposed rezone in the three distinct planning areas, would have the potential to increase wildfire risks by adding residential development capacity in the County. Although none of the proposed candidate rezone sites are located near an SRA or Very High FHSZ, 13 candidate rezone sites are located in or near WUI. As discussed above under Impact WF-1 through Impact WF-4, compliance with existing wildfire prevention and protection regulations would ensure that

impacts related to wildfire from implementing the Project and the proposed rezone in the three distinct planning areas would be less than significant. Additionally, development associated with the Project would comply with all applicable requirements of the California Fire Code's specifications for access and building materials, comply with fire protection policies in the County's General Plan; comply with Sacramento County Zoning Code related to fire access design, and comply with the County's Fire Prevention Ordinance for establishing fire break and removing hazardous weeds. Therefore, the Project's contribution (including the proposed rezones in the three distinct planning areas) to a significant cumulative wildfire impact would not be considerable and thus not significant.

14 SUMMARY OF IMPACTS AND OTHER CEQA CONSIDERATIONS

SUMMARY OF IMPACTS BY SIGNIFICANCE DETERMINATION

The following provides a summary of the conclusion reached in the evaluation of the Project in Chapters 4 through 13 of this Supplemental Environmental Impact Report (SEIR). For a tabulated summary of the effects of the Project, applicable mitigation, and significance determinations, refer to Table ES-2 in the Executive Summary.

SIGNIFICANT EFFECTS WHICH CANNOT BE AVOIDED

Section 15126.2(b) of the State CEQA Guidelines requires that an EIR describe any significant impacts that cannot be avoided, even with the implementation of feasible mitigation measures. The evaluation of resources in Chapters 4 through 13 of this SEIR includes discussion for the General Plan and the three distinct area plans (Fair Oaks Boulevard Corridor Plan, North Watt Avenue Corridor Plan, and Old Florin Town Special Planning Area [SPA]) and identifies significant impacts for each respective plan. Impacts associated with aesthetics (light and glare), air quality, climate change, noise, transportation, and utilities were determined to remain significant and unavoidable after mitigation.

AESTHETICS

GENERAL PLAN

The General Plan EIR concluded that it would not be possible to eliminate light and glare impacts resulting from implementation of the General Plan. Impacts were determined to be significant and unavoidable. The Project would not introduce new sources of substantial light or glare that were not considered and would not substantially worsen the impacts disclosed in the General Plan EIR. The proposed Project would not result in new substantial adverse physical impacts associated with the creation of a new source of substantial light or glare than would occur with implementation of the General Plan. The Project's contribution to impacts would not be substantial; however, overall impacts remain significant and unavoidable.

AIR QUALITY

GENERAL PLAN

Implementation of Mitigation Measures AQ-1 would reduce the daily emissions resulting from construction of additional residential development allowed under the Project to a less-than-significant level. Implementation of Tier 1 BMP 1 from Mitigation Measure CC-2 would reduce operational emissions associated with reactive organic gases (ROG) and nitrogen oxide (NOx). However, the operational emissions associated with ROG would not be reduced to a less-than-significant level. In addition, the General Plan EIR

concluded that construction and operation emissions of criteria pollutants associated with county-wide development of all land use types would be significant and unavoidable (at a cumulative level of analysis), and the proposed Project and other unmitigated construction occurring in the County would contribute to overall emissions in the air basin, air quality impacts would be more severe than what was accounted for in the General Plan EIR. Therefore, the Project would result in more severe air quality impacts than what were disclosed in the General Plan EIR. The Project's contribution to air quality impacts would be significant and unavoidable and the overall impacts would remain significant and unavoidable.

FAIR OAKS BOULEVARD CORRIDOR PLAN

Similar to the discussion above for General Plan, construction and operation of future development on Site 67 would not result in emissions exceeding SMAQMD's criteria pollutant thresholds with implementation of SMAQMD's dust-reducing BMPs at an individual candidate rezone site level. Implementation of Mitigation Measures AQ-1, FO-AQ-1, and FO-AQ-2 would further reduce emissions of criteria pollutants. However, the Fair Oaks Boulevard Corridor Plan EIR (Fair Oaks Boulevard EIR) determined that implementation of the Fair Oaks Boulevard Corridor Plan would result in significant and unavoidable impacts associated with of criteria pollutants during construction and operation. Even with mitigation implemented, the proposed rezone of Site 67 would result in emissions that were not accounted for in the Fair Oaks Boulevard EIR. Therefore, the proposed rezone of Site 67 would result in a more severe impact than what was disclosed in the Fair Oaks Boulevard EIR. Therefore, the Project's contribution to impacts from rezoning Site 67 would be significant and overall impacts would be significant and unavoidable.

NORTH WATT AVENUE CORRIDOR PLAN

Similar to the discussion above for General Plan, construction and operation of future development on Sites 68 through 72 would not result in emissions exceeding SMAQMD's criteria pollutant thresholds with implementation of SMAQMD's dust-reducing BMPs at an individual candidate rezone site level. At an aggregate level, implementation of Mitigation Measures AQ-1, NW-AQ-1, and NW-AQ-2 would reduce emissions of criteria pollutants associated with construction and operation of Sites 68 through 72 to below SMAQMD's thresholds of significance. However, the North Watt Avenue Corridor Plan EIR (North Watt Avenue EIR) determined that implementation of the North Watt Avenue Corridor Plan would result in significant and unavoidable impacts associated with criteria pollutants during construction and operation. Even with mitigation implemented, the proposed rezone of Sites 68 through 72 would result in emissions that were not accounted for in the North Watt Avenue EIR. Therefore, the proposed rezone of Sites 68 through 72 would result in a more severe impact than what was disclosed in the North Watt Avenue EIR. Therefore, the Project's contribution to impacts from rezoning Sites 68 through 72 would be significant and overall impacts would be significant and unavoidable.

OLD FLORIN TOWN SPA

Similar to the discussion above for General Plan, construction and operation of future development on Sites 73 through 79 would not result in emissions exceeding SMAQMD's

criteria pollutant thresholds with implementation of SMAQMD's dust-reducing BMPs at an individual candidate rezone site level. At an aggregate level, implementation of Mitigation Measures AQ-1, OFT-AQ-1, and OFT-AQ-2 would reduce emissions of criteria pollutants associated with construction and operation of Sites 73 through 79 to below SMAQMD's thresholds of significance. However, the Old Florin Town SPA EIR determined that implementation of the Old Florin Town SPA would result in significant and unavoidable impacts associated with criteria pollutants during construction and operation. Even with mitigation implemented, the proposed rezone of Sites 73 through 79 would result in emissions that were not accounted for in the Old Florin Town SPA EIR. Therefore, the proposed rezone of Sites 73 through 79 would result in a more severe impact than what was disclosed in the Old Florin Town SPA EIR. Therefore, the Project's contribution to impacts from rezoning Sites 73 through 79 would be significant and overall impacts would be significant and unavoidable.

CLIMATE CHANGE

GENERAL PLAN

At an individual candidate rezone site level, construction activities would not exceed the 1,100 metric tons of carbon dioxide equivalent per year ($MTCO_2e$) screening threshold. However, specific details of construction are unknown at this time, future projects will be reviewed to determine whether the project screens out for construction GHG emissions or if construction GHG BMPs would apply per Mitigation Measure CC-1. During operation, the individual candidate rezone site would have the potential to exceed the 1,100 $MTCO_2e$ screening threshold. Future development projects will be reviewed to determine whether the project screens out for operational GHG emissions and which BMPs apply (at a minimum Tier 1 BMPs 1 and 2 would apply to all projects) as detailed in Mitigation Measure CC-2. Development on individual candidate rezone sites would result in greater operational GHG emissions compared to the development capacity analyzed in the General Plan EIR. Thus, although some individual projects may screen out and result in less than significant impacts with BMPs 1 and 2, some will substantially increase impacts and result in significant operational GHG emissions impacts.

At an aggregate level, construction and operation activities would exceed the 1,100 $MTCO_2e$ screening threshold. Even with implementation of Mitigation Measures CC-1 and CC-2, the Project would result in GHG emissions that were not accounted for in the General Plan EIR. Because the General Plan EIR determined that implementation of the General Plan would result in significant and unavoidable impacts related to GHG emission. The Project's aggregate contribution to construction GHG emissions would be substantial and impacts would remain significant and unavoidable**.**

NORTH WATT AVENUE CORRIDOR PLAN

The North Watt Avenue EIR determined that implementation of Mitigation Measures CC-1 and CC-2 would reduce GHG emission impacts to a less-than-significant level. Similar to the discussion above for the General Plan, construction and operational emissions, at an individual candidate rezone site level, would not exceed the 1,100

$MTCO_2e$ screening threshold. Future development on Sites 68 through 72 would still require implementing Mitigation Measures CC-1and CC-2, because the proposed rezoning of Sites 68 through 72 would result in GHG emissions that were not accounted for in the North Watt Avenue EIR. At an aggregate level, construction and operation activities would exceed the 1,100 $MTCO_2e$ screening threshold. The impacts would remain significant after implementation of mitigation.

Old Florin Town SPA

The Old Florin Town SPA EIR determined that implementation of Mitigation Measures CC-1 and CC-2 would reduce GHG emission impacts to a less-than-significant level. Similar to the discussion above for the General Plan, construction and operational emissions, at an individual candidate rezone site level, would not exceed the 1,100 $MTCO_2e$ screening threshold. Future development on Sites 73 through 79 would still require implementing Mitigation Measures CC-1and CC-2, because the proposed rezoning of Sites 73 through 79 would result in GHG emissions that were not accounted for in the Old Florin Town SPA EIR. At an aggregate level, construction and operation activities would exceed the 1,100 $MTCO_2e$ screening threshold. The impacts would remain significant after implementation of mitigation.

Noise and Vibration

General Plan and Distinct Area Plans

Impacts related to construction noise and vibration were not discussed in the General Plan EIR or the district aera plan EIRs. Future development on the candidate rezone sites, including sites within the district planning areas would be required to implement Mitigation Measure NOI-1, which would reduce noise during nighttime hours by requiring a temporary solid barrier around construction at candidate rezone sites and staging areas and requiring the use of enclosures, shields, and noise curtains. Although noise reduction would be achieved with implementation of Mitigation Measures NOI-1, it cannot be assured at this time that nighttime construction would not be needed and that, if needed, the applicable noise standards could be met. Implementation of Mitigation Measure NOI-2 would serve to reduce potential vibration impacts from construction activities by requiring minimum setbacks to sensitive land uses, monitoring vibration levels during construction, use of alternative equipment when appropriate, and restrictions on hours of use to avoid impacts during more sensitive times of day. Potential impacts on sensitive land uses from pile driving and vibratory roller activity would be minimized through implementation of Mitigation Measure NOI-2. However, because of the programmatic nature of the Project it cannot be assured at this time that construction vibration could be reduced to levels that would not impact persons or buildings. Therefore, the proposed rezone would result in new significant noise and vibration impacts than what were disclosed in the General Plan EIR and distinct area plan EIRs. The Project's contribution to construction noise and vibration impacts would be significant and unavoidable and the overall impacts relative to the General Plan and distinct area plan EIRs would be significant and unavoidable.

The proposed rezone would not result in a new or substantially more severe traffic noise impact from new vehicle trips generated by the Project. However, the General Plan EIR and distinct area plan EIRs determined that implementation of the General Plan and distinct area plans would result in a significant and unavoidable impact related to operational traffic noise. Therefore, the Project's contribution to operational traffic noise impacts would not be substantial and overall impacts relative to the General Plan and distinct area plan EIRs would remain significant and unavoidable.

TRANSPORTATION

GENERAL PLAN

Implementation of the Project would require complying with General Plan policies, Active Transportation Plan policies, and all applicable County guidelines, standards, and specifications related to bicycle, pedestrian, and transit facilities. However, the General Plan EIR determined that there would not be adequate funding to support needed transportation facilities. The Project would result in an increase in residences in the unincorporated County; thus, associated transit ridership and demand for services would increase. The proposed Project would result in a more severe impact to transit than disclosed in the General Plan EIR. The Project's contribution to public transit impacts would be significant and unavailable and overall impacts would remain significant and unavoidable.

Implementation of the Project would result in significant VMT impacts on Sites 2, 4, 6, 13, 14, 17, 18, 24, 25, 26, 27, 28, 56, 57, 62, 63, 65, and 66. Implementation of Mitigation Measure TRAN-1 would require development on these sites to complete an analysis to determine if the individual development project would screen out of a VMT impact consistent with the County's Transportation Analysis Guidelines. However, at this time, it can neither be ensured when the County's VMT Mitigation Program identified in Mitigation Measure TRAN-1 would be adopted nor the extent to which the program would reduce Project VMT on an individual project by project basis. Because impacts related to VMT were not discussed in the General Plan EIR, the Project would result in a new significant impact. Project's contribution to VMT impact would be significant and unavoidable and the overall impacts would be significant and unavoidable.

NORTH WATT AVENUE CORRIDOR PLAN

There are five candidate rezone sites located within the North Watt Avenue Corridor Plan area, and two of the candidate rezone sites are located within the McClellan Overflight Zone (i.e., Site 68 and Site 69). Residential uses are identified as compatible uses within the Overflight Zone as identified in the McClellan Airport Comprehensive Land Use Plan (CLUP), and the County obtained a letter of determination that states that the Project, including Sites 68 and 69 are consist with the McClellan Airport CLUP and California Airport Land Use Planning Handbook. The proposed rezone of Sites 68 through 72 would not result in a new or substantially more severe impact from airport hazards. However, the North Watt Avenue EIR determined that implementation of the North Watt Avenue Corridor Plan would result in a significant and unavoidable impact associated with airport safety. The contribution to airport safety impact from the proposed rezone of Sites 68

through 72 would not be substantial, but the overall impacts would remain significant and unavoidable.

Utilities

General Plan

Implementation of the Project would result in candidate rezone site within the Rio Linda Elverta Community Water District (RLECWD) and the Florin County Water District (FCWD). RLECWD and FCWD rely upon groundwater wells as the primary source of water. It cannot be assumed that development within the RLECWD and FCWD jurisdiction would have sufficient water supply. Because water supply impacts were determined to be significant and unavoidable in the General Plan EIR, the Project would result in a more severe impact than disclosed in the General Plan EIR. The Project's contribution to water supply impacts would be significant and unavoidable and overall impacts would remain significant and unavoidable.

Old Florin Town SPA

The Old Florin Town SPA is located within FCWD's water service area. However, the Old Florin Town SPA EIR determined that FCWD would not have sufficient water supplies to serve the Old Florin Town SPA. The proposed rezone of Sites 73 through 79 would increase development density and could result in additional water demand. Therefore, the proposed rezone of Sites 73 through 79 would result in a more severe impact than what was disclosed in the Old Florin Town SPA EIR. The contribution to water supply impacts from the proposed rezone of Sites 73 through 79 would be significant and unavoidable and overall impacts would remain significant and unavoidable.

Significant Effects Which Could be Avoided with Implementation of Mitigation Measures

The following impacts were determined to be less than significant with mitigation upon being evaluated in the SEIR.

Air Quality

General Plan

Implementation of Mitigation Measure AQ-2 would require preparation of a site-specific construction health risk assessment (HRA) for development on proposed candidate rezone sites. The HRA will include recommendations to reduce emissions related to toxic air contaminants (TACs) to a less-than-significant level. The Project would not result in a new or more severe TACs impact than was evaluated in the General Plan ER. The Project's contribution to impacts would not be substantial with mitigation and overall impacts would be less than significant with mitigation.

FAIR OAKS BOULEVARD CORRIDOR PLAN

Similar to the discussion above for the General Plan, future development on Site 67 would require preparation of a site-specific construction HRA per Mitigation Measures AQ-2, which would reduce TACs emissions to a less-than-significant level. In addition, development within the Fair Oaks Boulevard Corridor Plan area would require implementation of the adopted Mitigation Measure FO-AQ-1, which includes measures to reduce emission of diesel particulate matter to a less-than-significant level. The rezone of Site 67 would not result in a new or substantially more severe impact than was evaluated in the Fair Oaks Boulevard EIR. The contribution to impacts from rezoning Site 67 would not be substantial with mitigation and overall impacts would be less than significant with mitigation.

NORTH WATT AVENUE CORRIDOR PLAN

Similar to the discussion above for the General Plan, future development on Sites 68 through 72 would require preparation of a site-specific construction HRA per Mitigation Measures AQ-2, which would reduce TACs emissions to a less-than-significant level. In addition, development within the North Watt Avenue Corridor Plan would require implementation of the adopted Mitigation Measure NW-AQ-1, which includes measures to reduce emission of diesel particulate matter to a less-than-significant level. The rezone of Sites 68 through 72 would not result in new or substantially more severe impact than was evaluated in the North Watt Avenue EIR. The contribution to impacts from rezoning Sites 68 through 72 would not be substantial with mitigation and overall impacts would be less than significant with mitigation.

OLD FLORIN TOWN SPA

Similar to the discussion above for the General Plan, future development on Sites 73 through 79 would require preparation of a site-specific construction HRA per Mitigation Measures AQ-2, which would reduce TACs emissions to a less-than-significant level. In addition, development within the Old Florin Town SPA would require implementation of the adopted Mitigation Measure OFT-AQ-1, which would reduce emission of diesel particulate matter to a less-than-significant level. The rezone of Sites 73 through 79 would not result in new or substantially more severe impact than was evaluated in the Old Florin Town SPA EIR. The contribution to impacts from rezoning Sites 73 through 79 would not be substantial with mitigation and overall impacts would be less than significant with mitigation.

CLIMATE CHANGE

FAIR OAKS BOULEVARD CORRIDOR PLAN

The Fair Oaks Boulevard EIR determined that implementation of Mitigation Measure CC-1 would reduce GHG emission impacts to a less-than-significant level. Construction and operation activities on Site 67 would not exceed the 1,100 $MTCO_2e$ screening threshold. However, the proposed rezoning of Site 67 would result in a new and more severe impact as compared to the impacts disclosed in the Fair Oaks Boulevard EIR. Implementation of Mitigation Measures CC-1 and CC-2 would be required to reduce GHG emissions to reduce the overall GHG emissions to a less-than-significant level.

Tribal Cultural Resources

General Plan and District Area Plans

Impacts related to tribal cultural resources were not discussed in the General Plan EIR or the district aera plan EIRs. Future development on the candidate rezone sites, including sites within the district planning areas would be required to implement Mitigation Measure TCR-1, which would require cease work within 100 feet of a find of tribal cultural resources. Work at the discovery location will not resume until all necessary investigation and evaluation of the discovery have been satisfied. Implementation of Mitigation Measure TCR-1 would ensure that no significant impacts related to inadvertent or unanticipated tribal cultural resources discoveries would occur. Therefore, the proposed rezone would not result in a new significant tribal cultural impact than what were disclosed in the General Plan EIR and distinct area plan EIRs. The contribution to impacts from the proposed rezone would not be substantial with mitigation and overall impacts relative to the General Plan and distinct area plan EIRs would be less than significant with mitigation.

Utilities

North Watt Avenue Corridor Plan

Implementation of Mitigation Measures UTL-1A and UTL-1B would require that development on Sites 68 through 72 shall not occur without adequate water infrastructure and water supply to serve the development. With implementation of mitigation, future development on Sites 68 through 72 would not result in significant impacts related to water infrastructure and water supply, consistent with the findings in the North Watt Avenue EIR.

Effects Found Not to be Significant

General Plan

Project impacts associated with the following resources topics would be less than significant and the overall impacts relative to the General Plan EIR would be less than significant:

- aesthetics (visual character),
- energy,
- public services and recreation, and
- wildfire.

Fair Oaks Boulevard Corridor Plan

Impacts resulting from the proposed rezone on Site 67 associated with the following resources topics would be less than significant and the overall impacts relative to the implementation of the Fair Oaks Boulevard EIR would be less than significant:

- aesthetics,
- energy,
- public services and recreation,
- transportation,
- utilities, and
- wildfire

North Watt Avenue Corridor Plan

Impacts resulting from the proposed rezone on Sites 68 through 72 associated with the following resources topics would be less than significant and the overall impacts relative to the implementation of the North Watt Avenue EIR would be less than significant:

- aesthetics,
- energy,
- public services and recreation, and
- wildfire

Old Florin Town SPA

Impacts resulting from the proposed rezone on Sites 73 through 79 associated with the following resources topics would be less than significant and the overall impacts relative to the implementation of the Old Florin Town SPA EIR would be less than significant:

- aesthetics,
- energy,
- public services and recreation,
- transportation, and
- wildfire

Cumulative Impacts

The State CEQA Guidelines Section 15355 defines a cumulative impact as “two or more individual effects which, when considered together, are considerable.” An individual effect need not itself be significant to result in significant cumulative effects; the impact is the result of the incremental effects of a project combined with the effects of “other closely related past, present, and reasonably foreseeable probable future projects.” CEQA does not define “closely related,” but the Code of Federal Regulations (40 CFR 1508.25) indicates that a “closely related” project is one which is automatically triggered by the project; one which cannot proceed without the project first proceeding (mutual dependency); one which requires the project for justification or is an interdependent part

of the same action; or one which is a similar action with common timing, geography, and other features.

The requirements for a cumulative analysis are described in State CEQA Guidelines Section 15130. A cumulative analysis "need not provide as great detail as is provided for the effects attributable to the project alone." The analysis should focus on analyzing the effects of the project to which other projects contribute, to the extent practical and reasonable. These other projects may be identified either through the provision of a list of cumulative projects, or via a summary of projections contained in an adopted General Plan or a certified EIR.

The significance criteria used for analysis are the same as those used throughout the topical chapters of the EIR. Section 15130(a)(3) states that a project's contribution to an impact is "less than cumulatively considerable if the project is required to implement or fund its fair share of a mitigation measure or measures."

CUMULATIVE IMPACT ANALYSIS METHODOLOGY

For purposes of this SEIR, the Project would have a significant cumulative effect if it meets either one of the following criteria:

- The cumulative effects of related projects (past, current, and probable future projects) without the Project are not significant but the Project's incremental impact is substantial enough, when added to the cumulative effects, to result in a significant impact; or
- The cumulative effects of related projects (past, current, and probable future projects) without the Project are already significant and the Project represents a considerable contribution to the already significant effect. The standards used herein to determine "considerable contribution" are that the impact either must be substantial or must exceed an established threshold of significance.

The analysis in Chapters 4 through 13 evaluate whether, after adoption of Project-specific mitigation, the residual impacts of the Project would cause a cumulatively significant impact or would contribute considerably to existing/anticipated (without the Project) cumulatively significant effects. Refer to Chapters 4 through 13 for discussion related to cumulative impacts.

IRREVERSIBLE ENVIRONMENTAL CHANGES

CEQA requires that EIRs assess whether a project would result in significant irreversible changes to the physical environment. The State CEQA Guidelines discuss three categories of significant irreversible changes that should be considered. Each is addressed below. Although the Project would require commitment of resources, these environmental changes are not considered significant for the purposes of this analysis. The primary irreversible environmental change associated with the Project involves the

permanent conversion of vacant infill lands, some with associated habitat values, to predominantly higher density multifamily residential uses.

Changes in Land Use Which Commit Future Generations

The Project would involve changes to existing zoning and General Plan land use designations for sites that are currently designated and zoned for development. Site preparation, construction, and operation of future development under the Project would irreversibly commit future generations to urban land uses on approximately 235 acres within the unincorporated County. However, development on the approximately 235 acres was already evaluated in the General Plan EIR and the distinct area plan EIRs. No change in the overall area of development under the Project.

Irreversible Damage from Environmental Accidents

No significant environmental damage, such as accidental spills or explosion of a hazardous material, is anticipated with future development under the Project. The use of hazardous materials beyond standard construction supplies and household hazardous waste is not proposed. Remediation of previously contaminated sites, if required, within the Project planning area would be completed prior to development, and materials would be properly disposed of in accordance with federal, State, and local regulations.

Consumption of Nonrenewable Resources

Consumption of nonrenewable resources would include increased energy consumption, conversion of agricultural lands, and lost access to mining reserves. Implementation of the Project would not change the extent or character of land disturbance from what was evaluated in the General Plan EIR and the distinct area plan EIRs (no change in the overall area of development). As discussed in Chapter 1, “Introduction,” future development under the Project may result in an increased development density on proposed candidate rezone sites that contain Farmland of Local Importance. Implementation of the Project would not have the potential to result in impacts that obstruct access to and remove mineral resources. The proposed candidate rezone sites that contain Farmland of Local Importance were analyzed in the General Plan EIR as being developed with single family residential or multifamily residential structures. Because impacts, including cumulative impacts, related to agriculture and forestry resources associated with the Project have been adequately addressed in the General Plan EIR, no new or more severe significant effects compared to the impacts identified in the General Plan EIR would occur.

Future development under the Project would consume fossil fuels and other non-renewable or slowly renewable resources through the operation of vehicles and equipment for site grading and construction activities. Other resources, including materials such as wood products, metals, cement, asphalt, and other products, would be used or consumed during construction or would be permanently committed as Project materials. Operation of the Project would also require additional electricity, water, and natural gas; however, the scale of such consumption would be typical for a mixed-use

residential development of this size. For further discussion of energy use, refer to Chapter 7, “Energy.”

Growth Inducement

Growth can be induced through the elimination of obstacles to growth, through the stimulation of economic activity within the region, or through the establishment of policies or other precedents that directly or indirectly encourage additional growth. An EIR must discuss ways in which a project could directly or indirectly foster economic or population growth, or result in the construction of additional housing (Section 15126.2[d] of the State CEQA Guidelines). Although growth inducement itself is not considered an environmental effect, it could potentially lead to adverse environmental effects. Examples of projects likely to have significant growth-inducing impacts include extensions or expansions of infrastructure systems beyond what is needed to serve project-specific demand, and development of new residential subdivisions or industrial parks in areas that are only sparsely developed or are underdeveloped.

The Project would result in growth by increasing development density on the proposed candidate rezone sites that are currently planned for development in the unincorporated Sacramento County, Fair Oaks Boulevard Corridor Plan, North Watt Avenue Corridor Plan, and Old Florin Town Special Planning Area (SPA). As discussed in Chapter 2, “Project Description,” the purpose of the Project is to meet the RHNA for the *Sacramento County Housing Element of 2021-2029* (Housing Element) approved by the State Department of Housing and Community Development. Therefore, the Project would accommodate growth projected in the Housing Element and would not induce substantial unplanned growth in the unincorporated Sacramento County. Because proposed candidate rezone sites are anticipated for future development in the 2030 General Plan, Fair Oaks Boulevard Corridor Plan, North Watt Avenue Corridor Plan, and Old Florin Town SPA, infrastructure (including roads) has been sized to accommodate buildout of these plans including the extension of utilities beyond what is currently planned in the near-term by the providers. Implementation of the Project may require improvements to the water and wastewater infrastructure. However, the water and wastewater infrastructure would be improved to accommodate the additional flows resulting from the Project. The Project would not include any oversized infrastructure or infrastructure extensions that would result in growth beyond what would be anticipated from the Project.

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CHAPTER 14, SUMMARY OF IMPACTS AND OTHER CEQA CONSIDERATIONS

There are no references for this chapter.

16 GLOSSARY OF ACRONYMS / ABBREVIATIONS

°C	degrees Celsius
°F	degrees Fahrenheit
AB	Assembly Bill
ACE	Affordable Clean Energy
ACHP	Advisory Council on Historic Preservation
AG-RES	Agricultural-Residential
ADA	Americans with Disabilities Act
ADT	Average Daily Traffic
afy	acre-feet per year
ALUC	Airport Land Use Commission
ALUCP	airport land use compatibility plans
APE	Area of Potential Effect
APPA	Airport Planning Policy Area
AQMP	Air Quality Mitigation Plan
ARA	Aggregate Resource Areas
ATCM	Asbestos Airborne Toxic Control Measure
AFV	alternative fuel vehicle
ACPD	Arcade Creek Recreation and Park District
ADU	accessory dwelling unit
AF	acre-feet
BAAMQD	Bay Area Air Quality Management District
Board	Board of Forestry and Fire Protection
BMO	Basin Management Objective
BMP	best management practices
BP	Business Professional Office
Btu	British thermal unit

C&D	Construction and Demolition
CA SDWA	California Safe Drinking Water Act
CAA	Clean Air Act
CAAQS	California ambient air quality standards
CAFE	Corporate Average Fuel Economy
CAL FIRE	California Department of Forestry and Fire Protection
Cal/EPA	California Environmental Protection Agency
Cal/OSHA	California Occupational Safety and Health Administration
CalAm	California American Water
CalEEMod	California Emissions Estimator Model
CalEPA	California EPA
Caltrans	California Department of Transportation
CAMx	Compressive Air Quality Model
CAP	Climate Action Plan
CAPCOA	California Air Pollution Control Officers Association
CAPD	Carmichael Recreation and Park District
CARB	California Air Resources Board
CBC	California Uniform Building Code
CCAA	California Clean Air Act
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CESA	California Endangered Species Act
CFC	California Fire Code
CFR	Code of Federal Regulations
CGS	California Geological Survey
CH_4	methane
CHP	California Highway Patrol
City	City of Sacramento
CJUSD	Center Joint Unified

CLOMR	Conditional Letter of Map Revision
CLUP	comprehensive land use plans
CNDDB	California Natural Diversity Database
CNEL	community noise equivalent level
CNG	compressed natural gas
CNPS	California Native Plant Society
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide-equivalent
COPD	Cordova Recreation and Park District
County DWMR	County of Sacramento, Department of Waste Management and Recycling
County	County of Sacramento
CPUC	California Public Utilities Commission
CPUC	California Public Utilities Commission
CRHR	California Register of Historical Resources
CSCGMP	Central Sacramento County Groundwater Management Plan
CSO	Combined Sewer Overflow
CSSIP	Combined Sewer System Improvement Plan
CSWMP	Comprehensive Stormwater Management Program
CVP	Central Valley Project
CWA	Clean Water Act
CWC	California Water Code
CWPP	Community Wildfire Protection Plan
CWTP	Combined Wastewater Treatment Plant
dB	decibel
diesel PM	diesel particulate matter
DOT	U.S. Department of Transportation
DU	dwelling units
du/ac	dwelling units per acre
DUE	dwelling unit equivalent
DWR	California Department of Water Resources

EAP	Energy Action Plan
EGU	electric generating units
EGUSD	Elk Grove Unified School District
EIR	environmental impact report
EMD	Environmental Management Department
EMFAC	EMissions FACtor
EO	Executive Order
EPA	U.S. Environmental Protection Agency
EPAct	Energy Policy Act of 1992
ESA	Environmental Site Assessment
ESA	federal Endangered Species Act
ESD	equivalent of single-family dwelling units
EV	electric vehicle
EWRRF	EchoWater Resource Recovery Facility
FAA	Federal Aviation Administration (
FACS	Focus Access and Circulation Studies
Fair Oaks Boulevard EIR	Fair Oaks Boulevard Corridor Plan EIR
FAR	floor area ratio
FCUSD	Folsom-Cordova Unified
FCWD	Florin County Water District
FECPD	Fulton/El Camino Recreation and Park District
FEIR	Final Environmental Impact Report
FEMA	Federal Emergency Management Agency
FHSZ	Fire Hazard Severity Zone
FHWA	Federal Highway Administration
FMMP	Farmland Mapping and Monitoring Program
FOPD	Fair Oaks Recreation and Park District
FR	Federal Register
FTA	Federal Transit Administration
FOWD	Fair Oaks Water District

GBV	Ground-borne Vibration
General Plan EIR	Sacramento County's 2030 General Plan EIR
GHG	greenhouse gas
GHGRP	greenhouse gas reduction plan
GPD/account	gallons per day per account
gpm	gallons per minute
GWh/year	gigawatt hours per year
HARP	Hotspots Analysis and Reporting Program
HCM	*Highway Capacity Manual*
HCD	State Department of Housing and Community Development
HCP	habitat conservation plan
HDR	High Density Residential
HOV	high-occupancy vehicle
HRI	heat rate improvement
HVAC	heating, ventilation, and air conditioning
Hz	hertz
I-5	Interstate 5
I-80	Interstate 80
ICM	integrated corridor management
IEPR	Integrated Energy Policy Report
IMP	infrastructure master plan
in/sec	inches per second
IPCC	Intergovernmental Panel on Climate Change
ITS	Caltrans intelligent transportation systems
kV	kilovolt
KOP	Key observation point
ksf	kilo square feet
L_{50}	Noise standards Median
LAFCo	local agency formation commission

lb/day	pounds per day
LCFS	Low Carbon Fuel Standard
L_{dn}	Day-Night Sound Level
LDR	low density residential
L_{eq}	Noise standards average
LID	Low Impact Design
LID	Low Impact Development
L_{max}	Maximum Sound Level
LOS	level of service
LRA	Local Responsible Area
LTA	Local Transportation Analyses
LTCP	long-term control plan
L_x	Percentile-Exceeded Sound Level
LZ	lighting zone
MDR	medium density residential
Metro Fire	Sacramento Metropolitan Fire District
mgd	million gallons per day
MMT	million metric tons
$MMTCO_2e$	million metric tons of CO_2 equivalents
mph	miles per hour
MPO	metropolitan planning organization
MRZ	Mineral Resource Zones
MS4	municipal separate storm sewer system
MSAT	Mobile Source Air Toxics
$MTCO_2e$/Ksf	$MTCO_2e$ per thousand square feet of floor space
MTIP	Metropolitan Transportation Improvement Program
MTP/SCS	*Metropolitan Transportation Plan/Sustainable Communities Strategy 2035*
MUC	Mixed Use Commercial
MUR	Mixed Use Residential
MWELO	California Model Water Efficient Landscape Ordinance
MWh	megawatt-hours

mPa	micro-Pascals
Manual	City's Water Study Design Manual
MCLs	Maximum Contaminant Levels
MOPD	Mission Oaks Recreation and Park District
N_2O	nitrous oxide
NAAQS	national ambient air quality standards
NAHC	Native American Heritage Commission
NFIP	National Flood Insurance Program
NHPA	National Historic Preservation Act
NHPD	North Highlands Recreation and Park District
NMFS	National Oceanic and Atmospheric Administration, National Marine Fisheries Service
NO	nitric oxide
NO_2	nitrogen dioxide
NOC	Notice of Completion
NOI	Notice of Intent
NOP	Notice of Preparation
North Watt Avenue EIR	North Watt Avenue Corridor Plan EIR
NO_X	nitrogen oxides
NPA	Neighborhood Preservation Areas
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
NSA	North Service Area
OEHHA	Office of Environmental Health Hazard Assessment
OES	California Office of Emergency Services
OPD	Orangevale Recreation and Park District
OPR	Governor's Office of Planning and Research
OSHA	federal Occupational Safety and Health Administration
OVWC	Orange Vale Water Company
ozone	photochemical smog

PCB	polychlorinated biphenyl
PEA	preliminary endangerment assessment
PER	Planning and Environmental Review
PG&E	Pacific Gas & Electric Company
PM_{10}	particulate matter
$PM_{2.5}$	Fine particulate matter
Porter-Cologne Act	Porter-Cologne Water Quality Control Act of 1969
PPV	peak particle velocity
PV	solar photovoltaic
PRC	Public Resources Code
PUPF	public utilities public facilities
RCCC	Rio Cosumnes Correctional Center
RCP	Representative Concentration Pathway
RCRA	Resource Conservation and Recovery Act
Regional San or SRCSD	Sacramento Regional County Sanitation District
RHNA	regional housing needs allocation
RLECWD	Rio Linda Elverta Water District
RLEPD	Rio Linda Elverta Recreation and Park District
RMS	root-mean-square
RMU-2	Residential Mixed-Use 2
ROG	reactive organic gases
ROW	required right-of-way
RPS	renewable portfolio standard
RWQCB	regional water quality control board
SacDOT	Sacramento County Department of Transportation
SacOES	Sacramento County Office of Emergency Services
SACOG	Sacramento area Council of Government
SacRT	Sacramento Regional Transit District
SacSewer	Sacramento Area Sewer District
SAF Plan	State Alternative Fuels Plan
SARA	Superfund Amendments and Reauthorization Act

SASD	Sacramento Area Sewer District
SB	Senate Bill
SCBMP	Sacramento County Bicycle Master Plan
SCGA	Sacramento Central Groundwater Authority
SCPMP	Sacramento County Pedestrian Master Plan
SCS	sustainable communities strategies
SCTDF	Sacramento County Transportation Development Fee
SCTMF	Sacramento Countywide Transportation Mitigation Fee
SCWA	Sacramento County Water Agency
SEIR	subsequent environmental impact report
SFNA	Sacramento Federal Nonattainment Area for ozone
SGMA	Sustainable Groundwater Management Act of 2014
SIPS	Site Improvement and Permits Section
SJWD Analysis	*SJWD's 25-Year Demand Forecast and Capacity Analysis*
SJWD	San Juan Water District
SMAQMD	Sacramento Metropolitan Air Quality Management District
SMFD	Sacramento Metropolitan Fire District
SMUD	Sacramento Metropolitan Utility District
SO_2	sulfur dioxide
SOI	sphere of influence
SPA	Special Planning Area
SPD	Sunrise Recreation and Park District
SPL	sound pressure level
SPLS	Sacramento Public Library System
SR	State Route
SRA	State Responsible Area
SRFECC	Sacramento Regional Fire/EMS Communications Center
SRWTP	Sacramento Regional Wastewater Treatment Plant
SSCA	South Sacramento Conservation Agency
SSD	Sacramento County Sheriff's Department
SSHCP	South Sacramento Habitat Conservation Plan
SSQP	Sacramento Stormwater Quality Partnership
SVAB	Sacramento Valley Air Basin

SVE	soil vapor extraction
SWA	Solid Waste Authority
SWPPP	stormwater pollution prevention plan
SWRCB-DDW	State Water Resources Control Board Division of Drinking Water
SWRCB	State Water Resource Control Board
TAC	toxic air contaminant
TCP	Traditional Cultural Properties
TCR	Caltrans' US 50 Transportation Concept Report
TDS	total dissolved solids
TMA	Transportation Management Association
tons/year	tons per year
Tool	Dynamic Implementation Tool
UAIC	United Auburn Indian Community
UBC	Uniform Building Code
ULOP	Urban level of flood protection
UPA	Urban Policy Area
USACE	U.S. Army Corps of Engineers
USB	Urban Services Boundary
USDA	U.S. Department of Agriculture
USDOT	U.S. Department of Transportation
USFWS	U.S. Fish and Wildlife Service
UWMP	urban water management plan
UPRR	Union Pacific Railroad
V/C	volume-to-capacity
VdB	vibration decibels
VMT	vehicle miles traveled
VMT Memo	*Sacramento County Residential Rezones VMT Analysis Memo*

VOC	volatile organic compounds
WCA	Wholesale Customer Agencies
WDR	waste discharge requirement
WRCC	Western Regional Climate Center
WSA	water supply assessment
WSMP	water supply master plan
WUI	wildland urban interface

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APPENDIX INTRO-1: NOTICES OF PREPARATION AND SCOPING COMMENTS

Todd Smith, Planning Director
Planning and Environmental Review

Troy Givans, Director
Department of Community Development

DEPARTMENT OF COMMUNITY DEVELOPMENT
Planning and Environmental Review Division
NOTICE OF PREPARATION

June 12, 2023

TO: ALL INTERESTED PARTIES

SUBJECT: NOTICE OF PREPARATION OF A DRAFT Subsequent ENVIRONMENTAL IMPACT REPORT FOR the Sacramento County Regional Housing Needs Allocation (RHNA) Rezone Project (PLNP2020-00042)

Sacramento County (County) will be the Lead Agency under the California Environmental Quality Act (CEQA) for preparation of a Subsequent Environmental Impact Report (SEIR), consistent with Section 15162 of the State CEQA Guidelines, for a project known as the SACRAMENTO COUNTY REGIONAL HOUSING NEEDS ALLOCATION (RHNA) REZONE PROJECT (Project). This Notice of Preparation has been sent to responsible and trustee agencies and involved federal agencies pursuant to Section 15082 of the State CEQA Guidelines. Agencies should comment on the scope and content of the environmental information that is germane to the agencies' statutory responsibilities in connection with the proposed project. Due to the time limits mandated by State law, your response must be sent at the earliest possible date, but not later than 31 days after receipt of this notice. Late comments received prior to 5:00 PM Thursday July 13, 2023, will be considered.

The project description, location, and the probable environmental effects are contained in the attached materials and may also be viewed online at:
https://planning.saccounty.gov/PlansandProjectsIn-Progress/Pages/Countywide-Rezone-Program.aspx

Please send your Agency's response to this Notice to:

Leanne Mueller, Senior Planner
Department of Community Development
Planning and Environmental Review Division
827 7th Street, Room 220, Sacramento, CA 95814
or via e-mail at: CEQA@saccounty.net

Your response should include the name of a contact person in your agency.

Two scoping meetings will be conducted in associated with this project; one will be tailored for the general public and one will be tailored for other agencies.

- The public meeting will take place at 6 PM on June 27, 2023; the zoom link is here: https://saccounty-net.zoomgov.com/j/1607749221?pwd=OURXb0NiT2lKN2Z4YW5IaHdmZVkvUT09
- The agency meeting will take place at 10 AM on June 27, 2023; the zoom link is here: https://saccounty-net.zoomgov.com/j/1616308719?pwd=SWN3a1IwT3NibWc1YUF6eGU3TXo1UT09

PROJECT TITLE

SACRAMENTO COUNTY REGIONAL HOUSING NEEDS ALLOCATION (RHNA) REZONE PROJECT

CONTROL NUMBER

PLNP2020-00042

PROJECT BACKGROUND

California Government Code Sections 65583 and 65583.2 require cities and counties to provide a parcel-specific inventory of appropriately zoned, available and suitable sites to provide housing opportunities for all income levels. The Regional Housing Needs Allocation (RHNA) for the County's 2021-2029 Housing Element includes 21,272 units, of which 7,158 units are lower-income extremely low income, very low income, and low income housing units (referred to collectively as lower-income units). While the County's 2021-2029 Housing Element demonstrates that the County has sufficient residential capacity to accommodate its RHNA for moderate and above moderate income housing units, there is a current shortfall of 142 acres to accommodate 2,884 lower-income units.

PROJECT DESCRIPTION AND LOCATION

To meet the RHNA for the County's 2021-2029 Housing Element, the County is required to rezone sufficient sites at 30 dwelling units per acre or greater for 2,884 lower income units for those with incomes ranging from $0 to $69,050 annually. To meet the RHNA requirements and provide a buffer to accommodate for the "no net loss" provisions of State law for residential units, the County would rezone 165 acres (142 acres and approximately a 15 percent buffer) for lower income units. In addition, the project includes parcels that would be rezoned to provide for moderate inventory opportunity sites. Fourteen parcels totaling 20.88-acres are proposed for rezoning to either the RD-10 or RD-15 designation to provide 211 units.

Plate 1 shows proposed rezone sites.

The Zoning Code would also be amended to ensure compliance with the provisions of Government Code Section 65583.2, in particular, for by-right development and default densities for lower income units by adding language to Chapter 2 (Zoning Districts), Chapter 3 (Use Regulations), and Chapter 5 (Development Standards). These amendments will ensure the Zoning Code allows developments in which 20 percent or more of the units are deed-restricted affordable to lower income households are allowed by-right on vacant sites, even if development exceeds 150 units, and default densities of at least 30 dwelling units per acre for lower income units are in place. Proposed changes to the County's Zoning Code are shown in Table 1 and Table 2.

Proposed changes to *Table 2.4 Table of Residential Zoning Districts of the Zoning Code*, as shown in Table 1, would remove the maximum permitted density for multiple family residential development. Program A1 of the 2021-2029 Housing Element provides a minimum density of 20 units per acre and a maximum density of at least 30 units per acre. Removal of the maximum density allows for additional housing density in accordance with State law, while still meeting the minimum requirements.

Table 1. Proposed Revisions to Table 2.4 Table of Residential Zoning Districts

Zoning District	Zoning District Abbreviation	Permitted Development
Multiple Family Residential 20	RD-20	Same as RD-15 except allowing a ~~maximum~~ density of 20 dwelling units.
Multiple Family Residential 25	RD-25	Same as RD-15 except allowing a ~~maximum~~ density of 25 dwelling units.
Multiple Family Residential 30	RD-30	Same as RD-15 except allowing a ~~maximum~~ density of 30 dwelling units.
Multiple Family Residential 40	RD-40	Same as RD-15 except allowing a ~~maximum~~ density of 40 dwelling units.

Note: For Densities and provisions to exceed densities refer to Section 5.2.3

Proposed revisions to Zoning Code *Table 5.8.A Lot Standards-Multifamily Residential*, shown in Table 2, include addition of a footnote to refer to Section 3.5.1 of the County's Zoning Code for the most recent information regarding additional development allowances for lower-income multifamily development, such as, provision for by-right development and density bonus provisions.

Additionally, Section 3.5.1.F of the Zoning Code would be updated to clarify the maximum densities listed in Section 3.5.1 B-E (Residential Use Standards) of the Zoning Code may be increased pursuant to Section 5.2.3. (Density Bonuses and Intensity Increases) further clarifying required densities and densities for lower-income projects. Proposed changes are shown below:

Table 2. Proposed Revisions to Table 5.8.A for Multifamily Residential Lot Standards

Standard	RD-10	RD-15	RD-20	RD-25	RD-30	RD-40	All other Zones where Permitted
Allowed Density [1]							
Maximum Density (dwelling units/net acre)[1]	10	15	20	25	30	40	[2]

[1] New lots created with Parcel Maps shall use the density calculation methodology of Section 7.1.13
[2] See Section 3.5.1.B through 3.5.1.J for allowed densities for residential product types in all other zones, where allowed

3.5.1.F Density Increases

The maximum densities listed in 3.5.1 B-E may be increased pursuant to Section 5.2.3 (Density Bonuses and Intensity Increases)

Parcels located in Special Planning Areas (SPA) and other comprehensive planning efforts are also identified as candidate rezone sites. Some SPAs or planning effort provide a maximum density or specific density ranges that are not consistent with the Zoning Code Update or

rezone effort. The following SPAs would include proposed rezone sites: Fair Oaks Fair Oaks Boulevard Corridor Plan Main Street District:

- Old Florin Town
- Downtown Rio Linda SPA
- North Watt SPA
- Greenback Lane SPA
- North Highland Town Center
- Folsom Boulevard SPA
- Victory Avenue SPA
- Stockton Boulevard SPA

Amendments to ensure consistency with the proposed Zoning Code amendments and State requirements for density (30 units per acre) allowing sites in SPAs to be classified as available affordable housing sites are proposed.

The project would require amendments to the County's General Plan to ensure consistency between the General Plan land use designations and Zoning Districts. Parcels with proposed land use amendments are shown in Plate 1. The project would include the following General Plan amendments:

1. Amend the General Plan designation of 46 parcels totaling 207 acres from Low Density Residential to Medium Density Residential for consistency with the proposed RD-30 Zoning District.
2. Amend the General Plan designation of five parcels totaling 34.4 acres from Low Density Residential to High Density Residential for consistency with proposed RD-40 Zoning District.
3. Amend the General Plan designation of five parcels totaling 21.87 acres from Low Density Residential to High Density Residential for consistency with proposed RD-40 Zoning District.
4. Amend the General Plan designation of two parcels totaling 11 acres from Medium Density Residential to High Density Residential for consistency with proposed RD-40 Zoning District.
5. Amend the General Plan designation of ten parcels totaling 16.59 acres from Low Density Residential to Medium Density Residential for consistency with the proposed RD-15 Zoning District.
6. Amend the General Plan designation of one parcel totaling 2.9 –acres from Intensive Industrial to Medium Density Residential for consistency with the proposed RD-30 Zoning District.
7. Amend the General Plan designation of one parcel totaling 5.28 –acres from Intensive Industrial to High Density Residential for consistency with the proposed RD-40 Zoning District.
8. Further an additional three parcels totaling 12.38 acres will have their current General Plan designations changed from Agricultural –Residential (AG-Res) to Medium Density Residential (MDR).
9. Land Use Element Program LU-5 will be amended to read: All residential projects involving three or more units, shall not have an average overall density of less than

75% of the zoned maximums or, if subject to a density range, less than the minimum listed density. The appropriate hearing body may approve a lesser density if they can make a finding that, unless physical or environmental constraints make achieving the minimum required densities impractical.

PROJECT OBJECTIVES:

The primary objectives for the project are outlined below:

1. Compliance with California Government Code Sections 65583 and 6553.2.
2. Implement Housing Action Plan Program A1 to increase the vacant land inventory and facilitate development.
3. Provide zoning and land use designations for at least 3,300 lower-income housing units to meet the RHNA and a buffer to accommodate the "no net loss" provision requirements.
4. Provide zoning and land use designations for moderate income housing units.

ENVIRONMENTAL/LAND USE SETTING:

The project covers all of Sacramento County, which lies within the Central Valley of California. The County includes 14 community areas within the unincorporated County and seven incorporated cities. Most of the communities are located in the urbanized core in the western, northwestern, and northern portions of the County. The southwestern, eastern, and southern portions of the County include more agricultural and rural residential development. The County includes SPAs and comprehensive planning areas for established areas to allow use, regulations, and standards that would not be allowed under the countywide regulations. The proposed revisions to land use designations and site zoning are located throughout the County and within several established SPAs and comprehensive planning areas. Plate 1 shows the County limits, SPA and comprehensive planning areas boundaries, and parcels proposed for land use and zoning changes.

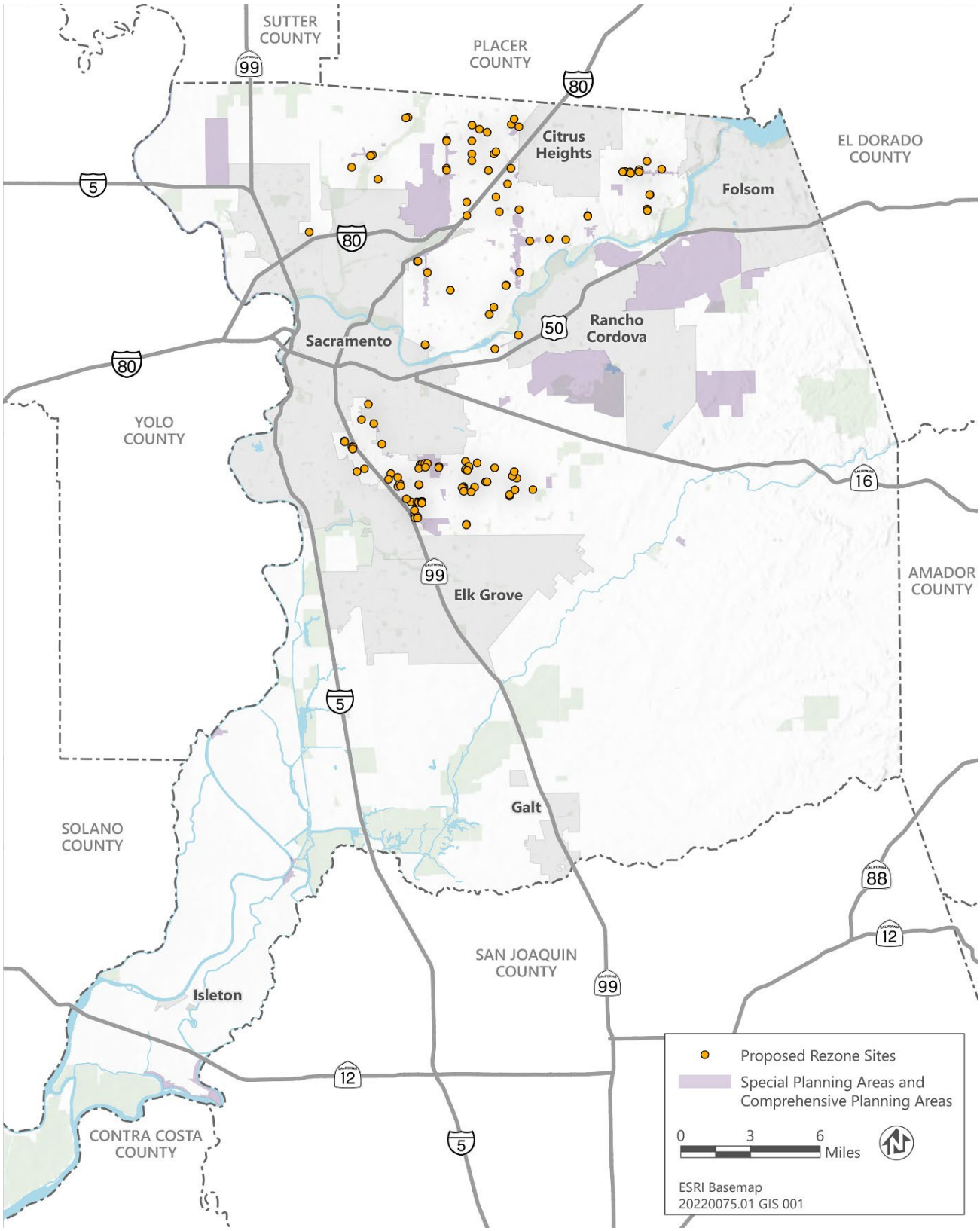
PROBABLE ENVIRONMENTAL EFFECTS/SEIR FOCUS:

The analysis in the SEIR will describe conditions as compared to the General Plan EIR, describe the legal and regulatory framework relevant to the project, describe standards of significance to be used in the analysis, and describe analysis methodologies. The SEIR will evaluate whether implementing the project would potentially result in one or more new or more severe significant environmental effects compared to the impacts identified in the General Plan EIR. The following issue areas will be addressed in the SEIR: transportation, air quality, climate change, energy, land use, noise and vibration, tribal cultural resources, population and housing, public services/recreation, utilities, and wildfire. Because the project involves changes to existing General Plan designations and zoning for sites that are currently designated and zoned for development, original General Plan EIR sections that evaluated the potential for ground disturbance to result in physical adverse effects to natural resources would not alter the EIR's evaluation of impacts associated with ground disturbance. The County anticipates that the project would not alter the analysis and conclusions of the General Plan EIR on the following environmental issue areas: agriculture and forestry resources, aesthetics, biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, mineral resources, and. These issue areas will be discussed in a "Effects Adequately Addressed in the General Plan EIR" section.

INTENDED USES OF THE SEIR:

The Sacramento County Planning Commission and the Board of Supervisors will use the information contained in the SEIR to evaluate the project and render a decision to approve or deny the requested land use and zoning changes.

Plate NOP-1 Rezone Sites



SACRAMENTO COUNTY

827 7th Street, Room 225 • Sacramento, California 95814 • phone (916) 874-7914 • fax (916) 874-8343 • www.saccounty.net

11 July 2023

Joelle Inman
Sacramento County Planning
827 7th Street, Suite 225
Sacramento, CA 95814
inmanj@saccounty.net

COMMENTS TO REQUEST FOR REVIEW FOR THE NOTICE OF PREPARATION FOR THE DRAFT ENVIRONMENTAL IMPACT REPORT, SACRAMENTO COUNTY REGIONAL HOUSING NEEDS ALLOCATION (RHNA) REZONE PROJECT, SCH#2023060304, SACRAMENTO COUNTY

Pursuant to the State Clearinghouse's 9 June 2023 request, the Central Valley Regional Water Quality Control Board (Central Valley Water Board) has reviewed the *Request for Review for the Notice of Preparation for the Draft Environmental Impact Report* for the Sacramento County Regional Housing Needs Allocation (RHNA) Rezone Project, located in Sacramento County.

Our agency is delegated with the responsibility of protecting the quality of surface and groundwaters of the state; therefore, our comments will address concerns surrounding those issues.

I. Regulatory Setting

Basin Plan

The Central Valley Water Board is required to formulate and adopt Basin Plans for all areas within the Central Valley region under Section 13240 of the Porter-Cologne Water Quality Control Act. Each Basin Plan must contain water quality objectives to ensure the reasonable protection of beneficial uses, as well as a program of implementation for achieving water quality objectives with the Basin Plans. Federal regulations require each state to adopt water quality standards to protect the public health or welfare, enhance the quality of water and serve the purposes of the Clean Water Act. In California, the beneficial uses, water quality objectives, and the Antidegradation Policy are the State's water quality standards. Water quality standards are also contained in the National Toxics Rule, 40 CFR Section 131.36, and the California Toxics Rule, 40 CFR Section 131.38.

The Basin Plan is subject to modification as necessary, considering applicable laws, policies, technologies, water quality conditions and priorities. The original Basin Plans were adopted in 1975, and have been updated and revised periodically as required, using Basin Plan amendments. Once the Central Valley Water Board has

adopted a Basin Plan amendment in noticed public hearings, it must be approved by the State Water Resources Control Board (State Water Board), Office of Administrative Law (OAL) and in some cases, the United States Environmental Protection Agency (USEPA). Basin Plan amendments only become effective after they have been approved by the OAL and in some cases, the USEPA. Every three (3) years, a review of the Basin Plan is completed that assesses the appropriateness of existing standards and evaluates and prioritizes Basin Planning issues. For more information on the *Water Quality Control Plan for the Sacramento and San Joaquin River Basins*, please visit our website:
http://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/

Antidegradation Considerations

All wastewater discharges must comply with the Antidegradation Policy (State Water Board Resolution 68-16) and the Antidegradation Implementation Policy contained in the Basin Plan. The Antidegradation Implementation Policy is available on page 74 at:
https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/sacsjr_201805.pdf

In part it states:

Any discharge of waste to high quality waters must apply best practicable treatment or control not only to prevent a condition of pollution or nuisance from occurring, but also to maintain the highest water quality possible consistent with the maximum benefit to the people of the State.

This information must be presented as an analysis of the impacts and potential impacts of the discharge on water quality, as measured by background concentrations and applicable water quality objectives.

The antidegradation analysis is a mandatory element in the National Pollutant Discharge Elimination System and land discharge Waste Discharge Requirements (WDRs) permitting processes. The environmental review document should evaluate potential impacts to both surface and groundwater quality.

II. Permitting Requirements

Construction Storm Water General Permit

Dischargers whose project disturb one or more acres of soil or where projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit), Construction General Permit Order No. 2009-0009-DWQ. Construction activity subject to this permit includes clearing, grading, grubbing, disturbances to the ground, such as stockpiling, or excavation, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility. The Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP). For more information on the Construction General Permit, visit the

State Water Resources Control Board website at:
http://www.waterboards.ca.gov/water_issues/programs/stormwater/constpermits.shtml

Phase I and II Municipal Separate Storm Sewer System (MS4) Permits[1]

The Phase I and II MS4 permits require the Permittees reduce pollutants and runoff flows from new development and redevelopment using Best Management Practices (BMPs) to the maximum extent practicable (MEP). MS4 Permittees have their own development standards, also known as Low Impact Development (LID)/post-construction standards that include a hydromodification component. The MS4 permits also require specific design concepts for LID/post-construction BMPs in the early stages of a project during the entitlement and CEQA process and the development plan review process.

For more information on which Phase I MS4 Permit this project applies to, visit the Central Valley Water Board website at:
http://www.waterboards.ca.gov/centralvalley/water_issues/storm_water/municipal_permits/

For more information on the Phase II MS4 permit and who it applies to, visit the State Water Resources Control Board at:
http://www.waterboards.ca.gov/water_issues/programs/stormwater/phase_ii_municipal.shtml

Clean Water Act Section 404 Permit

If the project will involve the discharge of dredged or fill material in navigable waters or wetlands, a permit pursuant to Section 404 of the Clean Water Act may be needed from the United States Army Corps of Engineers (USACE). If a Section 404 permit is required by the USACE, the Central Valley Water Board will review the permit application to ensure that discharge will not violate water quality standards. If the project requires surface water drainage realignment, the applicant is advised to contact the Department of Fish and Game for information on Streambed Alteration Permit requirements. If you have any questions regarding the Clean Water Act Section 404 permits, please contact the Regulatory Division of the Sacramento District of USACE at (916) 557-5250.

Clean Water Act Section 401 Permit – Water Quality Certification

If an USACE permit (e.g., Non-Reporting Nationwide Permit, Nationwide Permit, Letter of Permission, Individual Permit, Regional General Permit, Programmatic General Permit), or any other federal permit (e.g., Section 10 of the Rivers and Harbors Act or Section 9 from the United States Coast Guard), is required for this project due to the disturbance of waters of the United States (such as streams and

[1] Municipal Permits = The Phase I Municipal Separate Storm Water System (MS4) Permit covers medium sized Municipalities (serving between 100,000 and 250,000 people) and large sized municipalities (serving over 250,000 people). The Phase II MS4 provides coverage for small municipalities, including non-traditional Small MS4s, which include military bases, public campuses, prisons and hospitals.

wetlands), then a Water Quality Certification must be obtained from the Central Valley Water Board prior to initiation of project activities. There are no waivers for 401 Water Quality Certifications. For more information on the Water Quality Certification, visit the Central Valley Water Board website at: https://www.waterboards.ca.gov/centralvalley/water_issues/water_quality_certification/

Waste Discharge Requirements – Discharges to Waters of the State

If USACE determines that only non-jurisdictional waters of the State (i.e., "non-federal" waters of the State) are present in the proposed project area, the proposed project may require a Waste Discharge Requirement (WDR) permit to be issued by Central Valley Water Board. Under the California Porter-Cologne Water Quality Control Act, discharges to all waters of the State, including all wetlands and other waters of the State including, but not limited to, isolated wetlands, are subject to State regulation. For more information on the Waste Discharges to Surface Water NPDES Program and WDR processes, visit the Central Valley Water Board website at:https://www.waterboards.ca.gov/centralvalley/water_issues/waste_to_surface_water/

Projects involving excavation or fill activities impacting less than 0.2 acre or 400 linear feet of non-jurisdictional waters of the state and projects involving dredging activities impacting less than 50 cubic yards of non-jurisdictional waters of the state may be eligible for coverage under the State Water Resources Control Board Water Quality Order No. 2004-0004-DWQ (General Order 2004-0004). For more information on the General Order 2004-0004, visit the State Water Resources Control Board website at: https://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2004/wqo/wqo2004-0004.pdf

Dewatering Permit

If the proposed project includes construction or groundwater dewatering to be discharged to land, the proponent may apply for coverage under State Water Board General Water Quality Order (Low Threat General Order) 2003-0003 or the Central Valley Water Board's Waiver of Report of Waste Discharge and Waste Discharge Requirements (Low Threat Waiver) R5-2018-0085. Small temporary construction dewatering projects are projects that discharge groundwater to land from excavation activities or dewatering of underground utility vaults. Dischargers seeking coverage under the General Order or Waiver must file a Notice of Intent with the Central Valley Water Board prior to beginning discharge.

For more information regarding the Low Threat General Order and the application process, visit the Central Valley Water Board website at: http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2003/wqo/wqo2003-0003.pdf

For more information regarding the Low Threat Waiver and the application process, visit the Central Valley Water Board website at:

https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/waivers/r5-2018-0085.pdf

Limited Threat General NPDES Permit

If the proposed project includes construction dewatering and it is necessary to discharge the groundwater to waters of the United States, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. Dewatering discharges are typically considered a low or limited threat to water quality and may be covered under the General Order for *Limited Threat Discharges to Surface Water* (Limited Threat General Order). A complete Notice of Intent must be submitted to the Central Valley Water Board to obtain coverage under the Limited Threat General Order. For more information regarding the Limited Threat General Order and the application process, visit the Central Valley Water Board website at: https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2016-0076-01.pdf

NPDES Permit

If the proposed project discharges waste that could affect the quality of surface waters of the State, other than into a community sewer system, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. A complete Report of Waste Discharge must be submitted with the Central Valley Water Board to obtain a NPDES Permit. For more information regarding the NPDES Permit and the application process, visit the Central Valley Water Board website at: https://www.waterboards.ca.gov/centralvalley/help/permit/

If you have questions regarding these comments, please contact me at (916) 464-4684 or Peter.Minkel2@waterboards.ca.gov.

Peter Minkel

Peter Minkel
Engineering Geologist

cc: State Clearinghouse unit, Governor's Office of Planning and Research, Sacramento

STATE OF CALIFORNIA Gavin Newsom, Governor

NATIVE AMERICAN HERITAGE COMMISSION

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NAHC HEADQUARTERS
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June 13, 2023

Leanne Mueller
County of Sacramento
827 7th St, Rm. 225
Sacramento, CA 95814

Re: 2023060304, Sacramento County Regional Housing Needs Allocation (RNHA) Rezone Project (PLNP2020-00042), Sacramento County

Dear Ms. Mueller:

The Native American Heritage Commission (NAHC) has received the Notice of Preparation (NOP), Draft Environmental Impact Report (DEIR) or Early Consultation for the project referenced above. The California Environmental Quality Act (CEQA) (Pub. Resources Code §21000 et seq.), specifically Public Resources Code §21084.1, states that a project that may cause a substantial adverse change in the significance of a historical resource, is a project that may have a significant effect on the environment. (Pub. Resources Code § 21084.1; Cal. Code Regs., tit.14, §15064.5 (b) (CEQA Guidelines §15064.5 (b)). If there is substantial evidence, in light of the whole record before a lead agency, that a project may have a significant effect on the environment, an Environmental Impact Report (EIR) shall be prepared. (Pub. Resources Code §21080 (d); Cal. Code Regs., tit. 14, § 5064 subd.(a)(1) (CEQA Guidelines §15064 (a)(1)). In order to determine whether a project will cause a substantial adverse change in the significance of a historical resource, a lead agency will need to determine whether there are historical resources within the area of potential effect (APE).

CEQA was amended significantly in 2014. Assembly Bill 52 (Gatto, Chapter 532, Statutes of 2014) (AB 52) amended CEQA to create a separate category of cultural resources, "tribal cultural resources" (Pub. Resources Code §21074) and provides that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment. (Pub. Resources Code §21084.2). Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource. (Pub. Resources Code §21084.3 (a)). **AB 52 applies to any project for which a notice of preparation, a notice of negative declaration, or a mitigated negative declaration is filed on or after July 1, 2015.** If your project involves the adoption of or amendment to a general plan or a specific plan, or the designation or proposed designation of open space, on or after March 1, 2005, it may also be subject to Senate Bill 18 (Burton, Chapter 905, Statutes of 2004) (SB 18). **Both SB 18 and AB 52 have tribal consultation requirements.** If your project is also subject to the federal National Environmental Policy Act (42 U.S.C. § 4321 et seq.) (NEPA), the tribal consultation requirements of Section 106 of the National Historic Preservation Act of 1966 (154 U.S.C. 300101, 36 C.F.R. §800 et seq.) may also apply.

The NAHC recommends consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of your proposed project as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources. Below is a brief summary of portions of AB 52 and SB 18 as well as the NAHC's recommendations for conducting cultural resources assessments.

Consult your legal counsel about compliance with AB 52 and SB 18 as well as compliance with any other applicable laws.

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JUN 15 2023
County of Sacramento
Department of Community Development
Planning and Environmental Review Division

AB 52

AB 52 has added to CEQA the additional requirements listed below, along with many other requirements:

1. Fourteen Day Period to Provide Notice of Completion of an Application/Decision to Undertake a Project: Within fourteen (14) days of determining that an application for a project is complete or of a decision by a public agency to undertake a project, a lead agency shall provide formal notification to a designated contact of, or tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, to be accomplished by at least one written notice that includes:

- **a.** A brief description of the project.
- **b.** The lead agency contact information.
- **c.** Notification that the California Native American tribe has 30 days to request consultation. (Pub. Resources Code §21080.3.1 (d)).
- **d.** A "California Native American tribe" is defined as a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of Statutes of 2004 (SB 18). (Pub. Resources Code §21073).

2. Begin Consultation Within 30 Days of Receiving a Tribe's Request for Consultation and Before Releasing a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report: A lead agency shall begin the consultation process within 30 days of receiving a request for consultation from a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project. (Pub. Resources Code §21080.3.1, subds. (d) and (e)) and prior to the release of a negative declaration, mitigated negative declaration or Environmental Impact Report. (Pub. Resources Code §21080.3.1(b)).

- **a.** For purposes of AB 52, "consultation shall have the same meaning as provided in Gov. Code §65352.4 (SB 18). (Pub. Resources Code §21080.3.1 (b)).

3. Mandatory Topics of Consultation If Requested by a Tribe: The following topics of consultation, if a tribe requests to discuss them, are mandatory topics of consultation:

- **a.** Alternatives to the project.
- **b.** Recommended mitigation measures.
- **c.** Significant effects. (Pub. Resources Code §21080.3.2 (a)).

4. Discretionary Topics of Consultation: The following topics are discretionary topics of consultation:

- **a.** Type of environmental review necessary.
- **b.** Significance of the tribal cultural resources.
- **c.** Significance of the project's impacts on tribal cultural resources.
- **d.** If necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend to the lead agency. (Pub. Resources Code §21080.3.2 (a)).

5. Confidentiality of Information Submitted by a Tribe During the Environmental Review Process: With some exceptions, any information, including but not limited to, the location, description, and use of tribal cultural resources submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with Government Code §6254 (r) and §6254.10. Any information submitted by a California Native American tribe during the consultation or environmental review process shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public. (Pub. Resources Code §21082.3 (c)(1)).

6. Discussion of Impacts to Tribal Cultural Resources in the Environmental Document: If a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document shall discuss both of the following:

- **a.** Whether the proposed project has a significant impact on an identified tribal cultural resource.
- **b.** Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to Public Resources Code §21082.3, subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource. (Pub. Resources Code §21082.3 (b)).

7. Conclusion of Consultation: Consultation with a tribe shall be considered concluded when either of the following occurs:

a. The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or

b. A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. (Pub. Resources Code §21080.3.2 (b)).

8. Recommending Mitigation Measures Agreed Upon in Consultation in the Environmental Document: Any mitigation measures agreed upon in the consultation conducted pursuant to Public Resources Code §21080.3.2 shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring and reporting program, if determined to avoid or lessen the impact pursuant to Public Resources Code §21082.3, subdivision (b), paragraph 2, and shall be fully enforceable. (Pub. Resources Code §21082.3 (a)).

9. Required Consideration of Feasible Mitigation: If mitigation measures recommended by the staff of the lead agency as a result of the consultation process are not included in the environmental document or if there are no agreed upon mitigation measures at the conclusion of consultation, or if consultation does not occur, and if substantial evidence demonstrates that a project will cause a significant effect to a tribal cultural resource, the lead agency shall consider feasible mitigation pursuant to Public Resources Code §21084.3 (b). (Pub. Resources Code §21082.3 (e)).

10. Examples of Mitigation Measures That, If Feasible, May Be Considered to Avoid or Minimize Significant Adverse Impacts to Tribal Cultural Resources:

a. Avoidance and preservation of the resources in place, including, but not limited to:

i. Planning and construction to avoid the resources and protect the cultural and natural context.

ii. Planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.

b. Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:

i. Protecting the cultural character and integrity of the resource.

ii. Protecting the traditional use of the resource.

iii. Protecting the confidentiality of the resource.

c. Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.

d. Protecting the resource. (Pub. Resource Code §21084.3 (b)).

e. Please note that a federally recognized California Native American tribe or a non-federally recognized California Native American tribe that is on the contact list maintained by the NAHC to protect a California prehistoric, archaeological, cultural, spiritual, or ceremonial place may acquire and hold conservation easements if the conservation easement is voluntarily conveyed. (Civ. Code §815.3 (c)).

f. Please note that it is the policy of the state that Native American remains and associated grave artifacts shall be repatriated. (Pub. Resources Code §5097.991).

11. Prerequisites for Certifying an Environmental Impact Report or Adopting a Mitigated Negative Declaration or Negative Declaration with a Significant Impact on an Identified Tribal Cultural Resource: An Environmental Impact Report may not be certified, nor may a mitigated negative declaration or a negative declaration be adopted unless one of the following occurs:

a. The consultation process between the tribes and the lead agency has occurred as provided in Public Resources Code §21080.3.1 and §21080.3.2 and concluded pursuant to Public Resources Code §21080.3.2.

b. The tribe that requested consultation failed to provide comments to the lead agency or otherwise failed to engage in the consultation process.

c. The lead agency provided notice of the project to the tribe in compliance with Public Resources Code §21080.3.1 (d) and the tribe failed to request consultation within 30 days. (Pub. Resources Code §21082.3 (d)).

The NAHC's PowerPoint presentation titled, "Tribal Consultation Under AB 52: Requirements and Best Practices" may be found online at: http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation_CalEPAPDF.pdf

SB 18

SB 18 applies to local governments and requires local governments to contact, provide notice to, refer plans to, and consult with tribes prior to the adoption or amendment of a general plan or a specific plan, or the designation of open space. (Gov. Code §65352.3). Local governments should consult the Governor's Office of Planning and Research's "Tribal Consultation Guidelines," which can be found online at: https://www.opr.ca.gov/docs/09_14_05_Updated_Guidelines_922.pdf.

Some of SB 18's provisions include:

1. Tribal Consultation: If a local government considers a proposal to adopt or amend a general plan or a specific plan, or to designate open space it is required to contact the appropriate tribes identified by the NAHC by requesting a "Tribal Consultation List." If a tribe, once contacted, requests consultation the local government must consult with the tribe on the plan proposal. **A tribe has 90 days from the date of receipt of notification to request consultation unless a shorter timeframe has been agreed to by the tribe.** (Gov. Code §65352.3 (a)(2)).
2. No Statutory Time Limit on SB 18 Tribal Consultation. There is no statutory time limit on SB 18 tribal consultation.
3. Confidentiality: Consistent with the guidelines developed and adopted by the Office of Planning and Research pursuant to Gov. Code §65040.2, the city or county shall protect the confidentiality of the information concerning the specific identity, location, character, and use of places, features and objects described in Public Resources Code §5097.9 and §5097.993 that are within the city's or county's jurisdiction. (Gov. Code §65352.3 (b)).
4. Conclusion of SB 18 Tribal Consultation: Consultation should be concluded at the point in which:
    a. The parties to the consultation come to a mutual agreement concerning the appropriate measures for preservation or mitigation; or
    b. Either the local government or the tribe, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached concerning the appropriate measures of preservation or mitigation. (Tribal Consultation Guidelines, Governor's Office of Planning and Research (2005) at p. 18).

Agencies should be aware that neither AB 52 nor SB 18 precludes agencies from initiating tribal consultation with tribes that are traditionally and culturally affiliated with their jurisdictions before the timeframes provided in AB 52 and SB 18. For that reason, we urge you to continue to request Native American Tribal Contact Lists and "Sacred Lands File" searches from the NAHC. The request forms can be found online at: http://nahc.ca.gov/resources/forms/.

NAHC Recommendations for Cultural Resources Assessments

To adequately assess the existence and significance of tribal cultural resources and plan for avoidance, preservation in place, or barring both, mitigation of project-related impacts to tribal cultural resources, the NAHC recommends the following actions:

1. Contact the appropriate regional California Historical Research Information System (CHRIS) Center (https://ohp.parks.ca.gov/?page_id=30331) for an archaeological records search. The records search will determine:
    a. If part or all of the APE has been previously surveyed for cultural resources.
    b. If any known cultural resources have already been recorded on or adjacent to the APE.
    c. If the probability is low, moderate, or high that cultural resources are located in the APE.
    d. If a survey is required to determine whether previously unrecorded cultural resources are present.

2. If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
    a. The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum and not be made available for public disclosure.
    b. The final written report should be submitted within 3 months after work has been completed to the appropriate regional CHRIS center.

3. Contact the NAHC for:
    a. A Sacred Lands File search. Remember that tribes do not always record their sacred sites in the Sacred Lands File, nor are they required to do so. A Sacred Lands File search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with the geographic area of the project's APE.
    b. A Native American Tribal Consultation List of appropriate tribes for consultation concerning the project site and to assist in planning for avoidance, preservation in place, or, failing both, mitigation measures.

4. Remember that the lack of surface evidence of archaeological resources (including tribal cultural resources) does not preclude their subsurface existence.
    a. Lead agencies should include in their mitigation and monitoring reporting program plan provisions for the identification and evaluation of inadvertently discovered archaeological resources per Cal. Code Regs., tit. 14, §15064.5(f) (CEQA Guidelines §15064.5(f)). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American with knowledge of cultural resources should monitor all ground-disturbing activities.
    b. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the disposition of recovered cultural items that are not burial associated in consultation with culturally affiliated Native Americans.
    c. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the treatment and disposition of inadvertently discovered Native American human remains. Health and Safety Code §7050.5, Public Resources Code §5097.98, and Cal. Code Regs., tit. 14, §15064.5, subdivisions (d) and (e) (CEQA Guidelines §15064.5, subds. (d) and (e)) address the processes to be followed in the event of an inadvertent discovery of any Native American human remains and associated grave goods in a location other than a dedicated cemetery.

If you have any questions or need additional information, please contact me at my email address: Pricilla.Torres-Fuentes@nahc.ca.gov

Sincerely,

Pricilla Torres-Fuentes

Pricilla Torres-Fuentes
Cultural Resources Analyst

cc: State Clearinghouse

Todd Smith, Planning Director
Planning and Environmental Review

Troy Givans, Director
Department of Community Development

COUNTY OF SACRAMENTO
DEPARTMENT OF COMMUNITY DEVELOPMENT
PLANNING AND ENVIRONMENTAL REVIEW DIVISION
NOTICE OF PREPARATION

DECEMBER 22, 2023

TO: **ALL INTERESTED PARTIES**

SUBJECT: **REVISED NOTICE OF PREPARATION OF A DRAFT SUBSEQUENT ENVIRONMENTAL IMPACT REPORT FOR THE SACRAMENTO COUNTY REGIONAL HOUSING NEEDS ALLOCATION (RHNA) REZONE PROJECT (SCH# 2023060304; COUNTY CONTROL NO. PLNP2020-00042)**

Sacramento County (County) will be the Lead Agency under the California Environmental Quality Act (CEQA) for preparation of a Subsequent Environmental Impact Report (SEIR), consistent with Section 15162 of the State CEQA Guidelines, for a project known as the Sacramento County Regional Housing Needs Allocation (RHNA) Rezone Project (Project). The SEIR will address new information or changes not included in the previously certified environmental documents for which candidate rezone sites are located in. This Notice of Preparation (NOP) has been sent to responsible and trustee agencies and involved federal agencies pursuant to Section 15082 of the CEQA Guidelines. Agencies should comment on the scope and content of the environmental information that is germane to the agencies' statutory responsibilities in connection with the proposed project. Due to the time limits mandated by State law, your response must be sent at the earliest possible date, but not later than 30 days after receipt of this notice (by January 22, 2024).

An NOP for the Project was issued on June 12, 2023. Given Project refinements, specifically the adjustment in acreages proposed for rezone as described in detail below, there is a need to reissue the NOP. As such, this NOP supersedes the prior NOP released on June 12, 2023.

The Project description, location, and the probable environmental effects are contained in the attached materials and may also be viewed online at:

https://planning.saccounty.gov/PlansandProjectsIn-Progress/Pages/Countywide-Rezone-Program.aspx

Please send your agency's response to this notice to:

Jessie Shen, Senior Planner
Department of Community Development
Planning and Environmental Review Division
827 7th Street, Room 225, Sacramento, CA 95814
or via e-mail at: CEQA@saccounty.net

Your response should include the name of a contact person in your agency.

A scoping meeting tailored to agencies for the Project will be held on Thursday, January 4, 2024 from 10:00 AM to 12:00 PM (noon) virtually via Zoom at:

https://saccounty-net.zoomgov.com/j/1615249340?pwd=K3pLbE1LOFV0dTRsM0c0c2tGbUZTQT09

Agencies with specific questions about the Project should contact Jessie Shen, Senior Planner, at 916.875.3711 or shenj@saccounty.gov for further information.

PROJECT TITLE: SACRAMENTO COUNTY REGIONAL HOUSING NEEDS ALLOCATION (RHNA) REZONE PROJECT

CONTROL NUMBER: PLNP2020-00042

PROJECT BACKGROUND:

California Government Code Sections 65583 and 65583.2 require cities and counties to provide a parcel-specific inventory of appropriately-zoned, available, and suitable sites to provide opportunities for housing at all income levels. The RHNA identified in the *Sacramento County Housing Element of 2021-2029* (Housing Element) for unincorporated Sacramento County is 21,272 new housing units. Table 1 identifies the RHNA allocation of the new housing units and projected supply by income category (i.e., income category the units are required to be affordable for).

Table 1. 2021-2029 Regional Housing Needs Allocation and Projected Supply for Unincorporated Sacramento County by Income Category

Income Category (Income Level)	RHNA	Projected Supply[1]	Oversupply / Shortfall
Lower Income ($0 - $69,050)[2]	7,158 units	4,274 units	-2,884 units
Moderate Income ($69,051 - $103,550)	4,186 units	7,658 units	+3,472 units
Above Moderate Income ($103,550+)	9,928 units	12,121 units	+2,189 units
Total	*21,272 units*	*23,653 units*	

Notes: [1] Projected supply includes accessory dwelling units (ADUs).

[2] The lower income category includes Extremely Low Income ($0 - $25,900), Very Low Income ($25,901 - $43,150), and Low Income ($43,151 - $69,050) levels.

Source: Sacramento County Housing Element of 2021-2029.

As summarized in Table 1, the Housing Element demonstrates that the County has sufficient residential capacity to accommodate its RHNA for moderate and above moderate income category units, but has a shortfall of sites to accommodate the lower income category units. The County has appropriately-zoned sites to accommodate 4,274 lower income category units, compared to a RHNA of 7,158 lower income category units. Therefore, there is a shortfall of 2,884 lower income category units. Program A1 of the Housing Element identifies the Countywide Rezone Program (Project) as the means to accomplish accommodating the shortfall of lower income category units.

PROJECT DESCRIPTION AND LOCATION:

As described in Program A1 of the Housing Element, to meet the shortfall identified for the lower income category (2,884 units), the County is required to rezone sufficient sites to allow multifamily residential uses by-right, at 30 dwelling units per acre or greater. The County intends to rezone additional sites beyond those needed to meet the RHNA obligation for the lower income category in order to provide a buffer of lower-income sites in the event those sites are lost from the inventory (i.e., lower-income sites

are developed units for moderate or above moderate income categories). Additionally, the County also intends to rezone sites to increase the buffer for the moderate income category.

The Project entails the rezone of 83 candidate rezone sites, totaling ±248.33 acres, resulting in a potential development capacity (realistic capacity) of ±4,081 lower income category units and ±156 moderate income category units. The addition of ±4,081 lower income category units exceeds the County's unmet RHNA of 2,884 lower income category units by 1,197 units. Plate NOP-1 shows the locations of the candidate rezone sites.

Table 2 provides a summary of the total acreage and net increase in residential units resulting from the Project by community planning area. The net increase in residential units is the difference between a candidate rezone site's existing zoning designation maximum density permitted and the proposed zoning designation maximum density permitted. For example, a 1-acre site currently zoned RD-20 (maximum density of 20 units per acre) with a proposed zoning of RD-30 (maximum density of 30 units per acre) nets 10 additional units with the Project.

Table 2. Summary of Rezone Acreage and Associated Net Increase in Units by Community Planning Area

Community Planning Area	Rezone Acreage		Net Increase in Units[1]	
	Lower Income	Moderate Income	Lower Income	Moderate Income
Antelope	35.43	0.00	701	0
Arden Arcade	1.98	0.00	20	0
Carmichael/Old Foothill Farms	10.10	6.52	209	68
Cordova	13.90	0.00	278	0
Fair Oaks	2.89	0.00	51	0
North Highlands	41.55	0.97	531	0[2]
Orangevale	5.71	2.22	144	19
Rio Linda/Elverta	18.77	0.00	321	0
South Sacramento	91.97	11.51	1,747	115
Vineyard	4.81	0.00	141	0
Subtotal	*227.11*	*21.22*	*4,143*	*202*
Total	*±248.33 acres*		*±4,345 units*	

Notes: [1] The net increase in units is the difference between a candidate rezone site's existing zoning designation maximum density permitted and the proposed zoning designation maximum density permitted.

[2] There is no net increase in units as the maximum density (from existing to proposed zoning) is unchanged; however, minimum density with the proposed zoning would increase compared to existing zoning.

As shown in Table 2, a total of ±248.33 acres within 10 community planning areas would be rezoned with ±227.11 acres accommodating the lower income category and ±21.22 acres accommodating the moderate income category. The Project would result in a net increase of 4,345 units, of which ±4,143 units are lower income and ±202 units are moderate income.

The Project does not propose to construct new residential or other development on the ±248.33 acres proposed to be rezoned; rather, it provides capacity for future development of housing units to meet the County's remaining unmet RHNA of 2,884 lower income category units, consistent with State law. Of the total ±248.33 acres proposed to be rezoned, ±161.90 acres (65 percent) currently allows for (either by-right or with a discretionary entitlement) multifamily residential development. The Project would increase residential density on these sites and does not change the development footprint. The horizon year for the Project is 2029.

Analysis of the Project tiers from the *Sacramento County General Plan of 2005-2030* (General Plan) and three distinct area plans (Fair Oaks Boulevard Corridor Plan, North Watt Avenue Corridor Plan, and Old Florin Town SPA). Table 3 summarizes the Project's resultant net increase in residential units for each plan.

Table 3. Summary of Project's Net Increase in Residential Units By Land Use Plan

Land Use Plan	Project's Net Increase in Residential Units
General Plan	±3,829 units
Fair Oaks Boulevard Corridor Plan	±12 units
North Watt Avenue Corridor Plan	±230 units
Old Florin Town SPA	±274 units
Total	*±4,345 units*

In addition to the required Community Plan Amendment and corresponding Rezone for the Project, the Project would require amendments to the County's General Plan to ensure consistency between the General Plan land use designations and proposed zoning districts. Of the total ±248.33 acres proposed to be rezoned with the Project, ±115.23 acres would be amended to the Medium Density Residential (MDR) land use designation and ±71.72 acres would be amended to the High Density Residential (HDR) land use designation. The remaining ±61.38 acres would not require a General Plan land use designation amendment.

Additionally, the Sacramento County Zoning Code (Zoning Code) would be amended to ensure compliance with State housing law. Distinct area plans (i.e., special planning areas [SPAs], Corridor Plan areas, and neighborhood preservation areas [NPAs]), which are an extension of the Zoning Code, that contain candidate rezone sites would also be amended to ensure consistency with State requirements for density and classifying sites within these distinct area plans as available affordable housing sites.

PROJECT OBJECTIVES:

The purpose of the Project is to address the housing needs of the County and to meet the requirements of State law. The objectives of the Project are to:

- Comply with California Government Code Sections 65583 and 65583.2;
- Implement Program A1 to increase the vacant land inventory and facilitate development;
- Provide zoning and land use designations for at least 3,300 lower-income housing units to meet the RHNA and a buffer to accommodate the "no net loss" provision requirements; and
- Provide zoning and land use designations for moderate income housing units.

ENVIRONMENTAL/LAND USE SETTING:

The Project is located in Sacramento County, which lies within the Central Valley of California. The County includes 7 incorporated cities, and the remaining unincorporated portions of the County is divided into 14 community planning areas. Most of these community planning areas are in the urbanized core in the western, northwestern or northern portion of the County, where the majority of the candidate rezone sites are proposed (Plate NOP-1). The southwestern, eastern and southern portions of the County are more agricultural and rural residential. Many portions of the developed County are within the historic floodplains of the three major rivers (Sacramento, American, and Cosumnes Rivers) and are protected by a system of levees.

PROBABLE ENVIRONMENTAL EFFECTS/SEIR FOCUS:

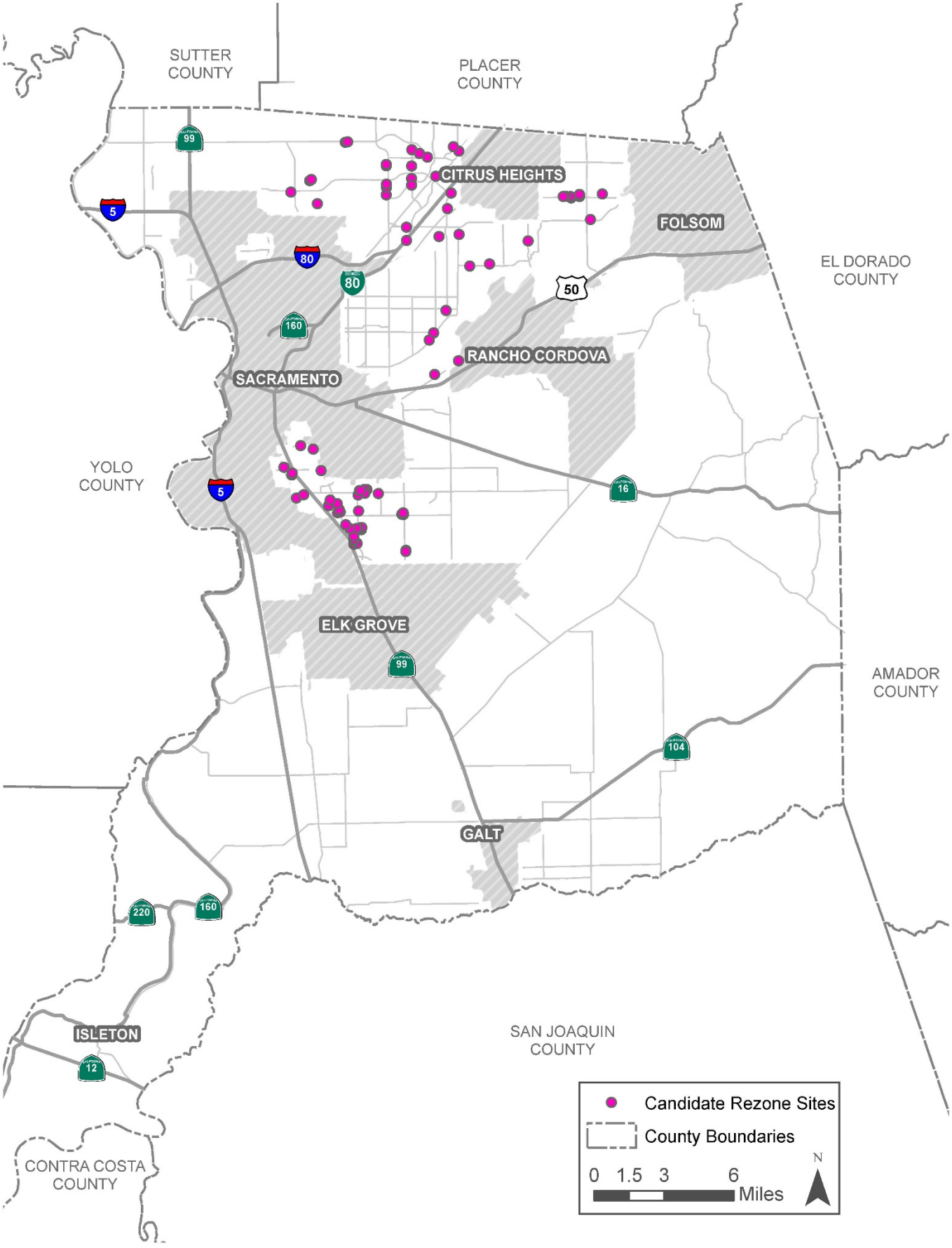
The analysis in the SEIR will describe conditions as compared to the *Sacramento County General Plan Update Final Environmental Impact Report* (General Plan FEIR), *Fair Oaks Boulevard Corridor Plan and Roadway Project Final Environmental Impact Report* (Fair Oaks Boulevard Corridor Plan FEIR), *North Watt Avenue Corridor Plan Final Environmental Impact Report* (North Watt Avenue Corridor Plan FEIR), and *Old Florin Town Special Planning Area Final Environmental Impact Report* (Old Florin Town SPA FEIR) (collectively referred to as prior FEIRs), describe the legal and regulatory framework relevant to the Project, describe standards of significance to be used in the analysis, and describe analysis methodologies. The SEIR will evaluate whether implementing the Project would potentially result in one or more new or more severe significant environmental effects compared to the impacts identified in the prior FEIRs. The following issue areas will be addressed in the SEIR: transportation, air quality, climate change, energy, land use, aesthetics, noise and vibration, tribal cultural resources, population and housing, public services/recreation, utilities, and wildfire.

Because the Project involves changes to existing General Plan designations and zoning for sites that are currently designated and zoned for development, the prior FEIRs sections that evaluated the potential for ground disturbance to result in physical adverse effects to natural resources would not alter the prior FEIR's evaluation of impacts associated with ground disturbance. The County anticipates that the Project would not alter the analysis and conclusions of the prior FEIRs on the following environmental issue areas: agriculture and forestry resources, biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, and mineral resources. These issue areas will be discussed in an "Effects Adequately Addressed in the Prior FEIRs" section.

INTENDED USES OF THE SEIR:

The Sacramento County Planning Commission and the Board of Supervisors will use the information contained in the SEIR to evaluate the Project and render a decision to approve or deny the requested land use and zoning changes.

Plate NOP-1: Candidate Rezone Sites



Todd Smith, Planning Director
Planning and Environmental Review

Troy Givans, Director
Department of Community Development

COUNTY OF SACRAMENTO
DEPARTMENT OF COMMUNITY DEVELOPMENT
PLANNING AND ENVIRONMENTAL REVIEW DIVISION
AGENCY SCOPING MEETING

DECEMBER 22, 2023

TO: **ALL INTERESTED PARTIES**

SUBJECT: **AGENCY SCOPING MEETING FOR THE DRAFT SUBSEQUENT ENVIRONMENTAL IMPACT REPORT FOR THE SACRAMENTO COUNTY REGIONAL HOUSING NEEDS ALLOCATION (RHNA) REZONE PROJECT (SCH# 2023060304; COUNTY CONTROL NO. PLNP2020-00042)**

Sacramento County (County) will be the Lead Agency under the California Environmental Quality Act (CEQA) for preparation of a Subsequent Environmental Impact Report (SEIR), consistent with Section 15162 of the State CEQA Guidelines, for a project known as the Sacramento County Regional Housing Needs Allocation (RHNA) Rezone Project (Project). The SEIR will address new information or changes not included in the previously certified environmental documents for which candidate rezone sites are located in.

The Project description, location, and the probable environmental effects are contained in the attached materials and may also be viewed online at:

https://planning.saccounty.gov/PlansandProjectsIn-Progress/Pages/Countywide-Rezone-Program.aspx

The Notice of Preparation (NOP) was sent to responsible and trustee agencies and involved federal agencies, pursuant to Section 15082 of the CEQA Guidelines, on December 22, 2023. The 30-day public comment period ends on January 22, 2024. Written comments can be submitted via mail (Attn: Jessie Shen, Senior Planner; Department of Community Development, Planning and Environmental Review Division; 827 7th Street, Room 225, Sacramento, CA 95814), electronic mail (CEQA@saccounty.net), or oral comment during the scoping meeting (information follows). Agencies should comment on the scope and content of the environmental information that is germane to the agencies' statutory responsibilities in connection with the proposed project.

A scoping meeting tailored to agencies for the Project will be held on Thursday, January 4, 2024 from 10:00 AM to 12:00 PM (noon) virtually via Zoom. Interested parties can join the meeting at:

https://saccounty-net.zoomgov.com/j/1615249340?pwd=K3pLbE1LOFV0dTRsM0c0c2tGbUZTQT09

Agencies with specific questions about the Project should contact Jessie Shen, Senior Planner, at 916.875.3711 or shenj@saccounty.gov for further information.

APPENDIX INTRO-2: SOUTH SACRAMENTO HABITAT CONSERVATION PLAN PROJECT SPECIFIC AVOIDANCE AND MINIMIZATION MEASURES

Project Name:

SSHCP Project Specific Avoidance and Minimization Measures

Based upon review of the SSHCP Permit Application, the Project must be constructed in compliance with the Avoidance and Minimization Measures (AMMs) listed below. The applicant will be responsible for reporting compliance with AMMs as applicable. Please submit all required reporting documents to SSHCP@saccounty.net and reference the project Control Number in the correspondence.

Instructions: For each Condition and AMM outlined below, indicate how the Project has or will comply with each provision in the 'Project Compliance' box. If a condition is not applicable to your project, indicate such in the 'Project Compliance' box.

Condition 1. Avoid and Minimize Urban Development Impacts to Watershed Hydrology and Water Quality	
Avoidance and Minimization Measure	**Project Compliance**
LID-1 (Stormwater Quality): When the size of a project exceeds the thresholds established by the State Water Resources Control Board (SWRCB) (see the most recent Stormwater Quality Design Manual for the Sacramento and South Placer Regions, or future SWRCB-approved design manuals applicable to the Plan Area), incorporate stormwater management into site design to satisfy the requirements outlined in the most recent Stormwater Quality Design Manual for the Sacramento and South Placer Regions. Stormwater management may include groundwater recharge (LID-2) and natural site features (LID-3).	
LID-2 (Groundwater Recharge): When siting SSHCP Preserves containing Riparian, Open Water, or Freshwater Marsh SSHCP land cover types, the Implementing Entity will prioritize locations that are suitable for groundwater recharge.	
LID-3 (Natural Site Features): Incorporate preservation of a site's natural aquatic features (such as creeks and streams) into project design to retain natural hydrologic patterns and to retain habitat that might be used by Covered Species.	
Condition 2. Avoid and Minimize Urban Development Direct and Indirect Impacts to Existing Preserves and SSHCP Preserves AMMs associated with Condition 2 must be applied to all UDA Covered Activities that border an existing Preserve or planned SSHCP Preserve1.	
Avoidance and Minimization Measure	**Project Compliance**
EDGE-1 (Compatible Land Uses): To the maximum extent practicable, development project Covered Activities will locate compatible land uses (e.g., designated open space such as parks and ball fields, detention basins, and other land uses with less-intensive human activity) in areas immediately adjacent to existing or planned Preserve boundaries. The compatible land use will provide additional buffering of Preserves from potential indirect effects of adjacent urban development. The soil surfaces in a compatible land use area may be re-contoured provided that the soil restrictive layer remains undamaged and most of the soil profile above the restrictive layer remains intact. The Land Use Authority will determine when it is not practicable to locate a compatible land use adjacent to existing or planned Preserve boundaries.	

[1] Additional AMMs specific to the Cordova Hills Master Plan are described in the December 8, 2016 "on-ramp" Biological Opinion (Corps File Number SPK-2004-00116), as discussed in Section 5.2.1.2 and in Appendix K.

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EDGE-2 (Single-Loaded Streets): To the maximum extent practicable, the design of Urban Development Covered Activities will locate single-loaded streets adjacent to existing or planned Preserve. The Land Use Authority will determine when single-loaded streets are not practicable.	
EDGE-3 (Preserve Setbacks): Urban Development Covered Activities constructed adjacent to existing or planned Preserves must establish a minimum 50-foot-wide setback outward from the boundary of any existing Preserve or planned SSHCP Preserve. This minimum 50-foot-wide setback will function as a transition between Urban Development and the Preserve, and must be managed to maintain the natural community of vegetation present in the adjacent Preserve. As much of the setback as possible should remain in the same natural habitat as the Preserve. However, as discussed in Section 5.2.5, Covered Activities in Preserve Setbacks in the UDA, where an existing or planned Preserve is adjacent to an existing roadway (e.g., collectors, arterials, thoroughfares), the 50-foot Preserve Setback will not be required, and any bicycle or pedestrian trail will be established in the road right-of-way. In addition, where a planned roadway crosses an existing or planned Preserve, no Preserve Setback will be required, and any bicycle or pedestrian trail will be established in the road right-of-way. **EDGE-3a (Setback Recreational Trails**): Trails are best suited outside of the setback; however, certain types of recreational trails or facilities (e.g., benches, trash receptacles, shade structures, fencing) that can be constructed with minimum ground disturbance and in compliance with EDGE-7 may be allowed within a Preserve Setback, as specified in Section 5.2.5, Covered Activities in Preserve Setbacks in the UDA. Preserve Setback design must locate trails on the side nearest development, away from the Preserve boundary. Trails may be permeable or semi-permeable hiking trails or paved community trials. The maximum trail width will be 16 feet total, including 2-foot-wide shoulders. Post and cable fencing, split rail, or other open fencing will be installed adjacent to recreation trails to keep pedestrians on the trail. **EDGE-3b (Setback Firebreaks**): If approved by the local authorities, the Preserve Setback trail may also be used as a firebreak. In instances where a trail cannot act as a firebreak, the firebreak will be located between the trail and the Preserve boundary (see Section 5.2.7). Firebreaks allowed inside the setbacks must be created by methods that will not disturb the soil's restrictive layer, such as mowing, minor scraping of surface vegetation, or shallow tilling, to comply with EDGE-7. Firebreak width within Preserve Setbacks is the minimum width needed to comply with applicable local codes. **EDGE-3c (Setback Shade Trees and Landscaping**): To prevent potential impacts from irrigation water or from accumulation of leaf litter onto the grasslands or vernal pools of a Preserve, planting of shade trees or landscaping vegetation will be limited to the area of the Preserve Setback located between the recreation trail and the adjacent urban development (i.e., away from Preserves). Only drought-tolerant plant species will be planted. The planting pallet used for Preserve Setback landscaping will not include invasive plant species listed in the California Invasive Plant Council's (Cal-IPC) California Invasive Plant Inventory Database or listed in the Cal-IPC California Invasive Plant Watch List (see http://www.cal-ipc.org/paf/). Any shade trees planted along Preserve Setback trails will be native species that are found in California grasslands and that can survive in the Vernal Pool–Grassland border without long-term irrigation or fertilization (e.g., valley oak, black oak, blue oak, oracle oak). In general, no more than 30% of any 1,000-foot-long segment of a Preserve Setback trail will have canopy cover from tree plantings (to be consistent with maximum tree densities naturally found within native California grasslands and savanna).	

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Drip irrigation will be allowed for a maximum of 5 years to establish shade trees or landscape vegetation between the recreation trail and adjacent urban development. The Implementing Entity has the discretion to allow irrigation to continue past 5 years if extenuating circumstances necessitate it (e.g., during a drought) and the continuance of irrigation will not affect the Preserve. Any irrigation systems located within Preserve Setbacks will be inspected quarterly to determine if such systems are affecting soils or vegetation not part of the intended plantings. Irrigation system repairs will be completed immediately if it is determined that the irrigation system is affecting vegetation or soil moisture not part of the intended tree planting. If, during annual monitoring of the adjacent Preserve (see Chapter 8), adverse indirect effects (e.g., leaf litter accumulation, irrigation runoff, plant encroachment) of the Preserve Setback's planted vegetation are detected, then the SSHCP Implementing Entity, the Preserve Manager, and the entity responsible for the Preserve Setback will identify appropriate adaptive management of the Preserve Setback tree or landscape plantings in accordance with the Preserve Setback Easement (see Section 5.2.5 and Chapter 9).	
EDGE-4 (Locate Stormwater Control Outside Preserves): Roads, sidewalks, and other impermeable surfaces of Urban Development Covered Activities adjacent to existing or planned Preserves will slope away from Preserves and Preserve Setbacks or intercept drainage with swales or curbs and gutters to preclude drainage from entering Preserves and Preserve Setbacks. Stormwater flows must be directed away from Preserves and Preserve Setbacks and directed into stormwater control facilities inside the development (outside Preserves and Preserve Setbacks)2 (see EDGE-6 for exception to EDGE-4 in certain SSHCP Linkage Preserves).	
EDGE-5 (Stormwater Control in Preserve Setbacks): If trails are established in any Preserve Setback in compliance with EDGE-3, the trail must be sloped away from the Preserve, and rainwater leaving the trail surface must flow into an adjacent low-velocity bio-retention swale or cell to keep rainwater runoff and trail contaminants from entering the Preserve. Low-velocity bio-retention swales or cells are typically small linear features placed on one or both sides of a trail. As required by EDGE-3, trails and their adjacent bio-retention swales or cells must be located on the side of the Preserve Setback nearest development.	
EDGE-6 (Detention Basins in Linkage Preserves): Because planned SSHCP Linkage Preserves L1, L2, L4, L7, L8, L9, and L10 (see Section 7.5) surround natural creeks or streams that must receive stormwater from planned adjacent Urban Development Covered Activities, a limited number of stormwater detention basins will be allowed on those Linkage Preserves. Detention basins within Linkage Preserves (see Section 5.2.7) will be designed and constructed with fill material to build up the perimeter of the detention basin so as not to impact the soil restrictive layer (duripan or hardpan) and function of the soil perched aquifer. Detention basins within Linkage Preserves will capture stormwater flows and runoff, and will discharge water to the stream/creek or percolate collected water to the soil perched aquifer. Detention basin structures that collect stormwater entering the basin or convey stormwater leaving the basin must be designed to avoid and minimize effects to Covered Species habitat in the Linkage Preserve.	
EDGE-7 (Hardpan/Duripan Protection): To protect the soil perched aquifer and the micro-watersheds supporting existing vernal pool hydrology, activities that have the potential to cut into, disrupt, or remove the soil's restrictive layer (hardpan or duripan) will not occur within Preserves or Preserve Setbacks.	

[2] Detention basins are allowed in some Linkage Preserves consistent with the requirements of EDGE-6. At the time of SSHCP preparation, seven Linkage Preserves with drainages are planned SSHCP Preserves: L1, L2, L4, L7, L8, L9, and L10 (see Section 5.2.7 and Section 7.5). Also see project-specific measures in Section 5.5.1.

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However, in certain circumstances, the Covered Activities defined in Section 5.2.6, Covered Activities in Stream Setbacks in the UDA, and Section 5.2.8, Covered Activities in the Laguna Creek Wildlife Corridor of the Preserve System, may result in punctures[3] or other minor disruptions of the soil hardpan or duripan if approved by the Implementing Entity and the Technical Advisory Committee according to the process described in Chapter 9 of the SSHCP. If a Covered Activity on a Preserve or Preserve Setback results in a puncture or other disruption to the soil hardpan or duripan, the puncture will be sealed using bentonite clay or other material that maintains the functionality of the soil's restrictive layer and associated perched aquifer.	
EDGE-8 (Outdoor Lighting): All outdoor lighting in Urban Development Covered Activity projects will be designed to minimize light pollution into existing and planned Preserves, except where a Land Use Authority Permittee determines lighting is necessary for public safety or security. Minimization measures may include light fixture placement (e.g., as low to the ground as possible), lamp designs (e.g., shielding, low glare, or no lighting), directing light away from Preserves, or other means to avoid or minimize light pollution. The Third-Party Project Proponent will use the best information available at the time of project design to minimize effects of light pollution on target SSHCP Covered Species (e.g., western spadefoot (*Spea hammondii*), Valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*), and Ricksecker's water scavenger beetle (*Hydrochara ricksecker*i)).	
EDGE-9 (Livestock Access to Preserves): Urban Development Covered Activity projects that include on-site Preserves will include in their design an adequate number of access points and facilities for delivery and pick up of grazing animals (livestock), such that these activities will not significantly alter the Preserve's habitat and are consistent with the protection of livestock and protection of adjacent public property, and include adequate public safety measures.	
EDGE-10 (Prevent Invasive Species Spread): Completed Covered Activities (including roads) will be maintained in a manner that avoids the spread of invasive species into Preserve and Open Space areas. Such maintenance measures will include the following: • To prevent the transport of non-native invasive species onto Preserves, before bringing any equipment onto an SSHCP Preserve or Preserve Setback, equipment must be cleaned of mud, dirt, and plant material. Cleaning will occur in the infested area or another appropriate location as approved by a Plan Permittee. • Mowing rotation will start in un-infested areas and move to infested areas. • Invasive plant prevention techniques will be incorporated into maintenance plans. • The SSHCP Implementing Entity will survey road shoulders, ditches, and rights-of-way that border SSHCP Preserves for invasive weeds or other exotic plant species. Where roadside weed infestations have reached a critical control point, the Implementing Entity or Land Use Authority Permittee will apply the appropriate manual, mechanical, or chemical treatment.	
Condition 3. Implement Construction Best Management Practices Condition 3 applies to all Covered Activities	
Avoidance and Minimization Measure	**Project Compliance**
BMP-1 (Construction Fencing): Orange construction fencing will be installed to ensure that ground disturbance does not extend beyond the allowed construction footprint (i.e., the limit of project	

[3] Punctures may include small holes that penetrate the soil hardpan or duripan such as might occur when digging or drilling holes for the installation of fence posts, sign posts, or trees.

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construction plus equipment staging areas and access roads). Plan Permittees and Third-Party Project Proponents implementing ground-disturbing Covered Activities will mark the outer boundary of any Preserve Setback or Stream Setback adjacent to or within the project site with orange construction fencing prior to ground disturbance. This fencing will remain in place until project completion, as identified by the Plan Permittee.	
BMP-2 (Erosion Control): Plan Permittees and Third-Party Project Proponents implementing ground-disturbing Covered Activities will install temporary control measures for sediment, stormwater, and pollutant runoff as required by the Plan Permittee to protect water quality and species habitat. Silt fencing or other appropriate sediment control device(s) will be installed downslope of any Covered Activity that disturbs soils. Fiber rolls and seed mixtures used for erosion control will be certified as free of viable noxious weed seed. As discussed in Section 5.4.2, Covered Species Take Avoidance and Minimization Measures, erosion controls installed in or adjacent to Plan Area modeled habitat for giant gartersnake (*Thamnophis gigas*), western pond turtle (*Actinemys marmorata*), California tiger salamander (California tiger salamander), or western spadefoot (see Chapter 3) must be of appropriate design and materials that will not entrap the species (e.g., not contain mesh netting). Regular monitoring and maintenance of the project's erosion control measures will be conducted until project completion to ensure effective operation of erosion control measures.	
BMP-3 (Equipment Storage and Fueling): Plan Permittees and Third-Party Project Proponents implementing ground-disturbing Covered Activities will ensure that equipment storage and staging will occur in the development footprint only (not sited in any existing on-site Preserve, planned on-site Preserve, Preserve Setback, Stream Setback, or aquatic land cover type). Fuel storage and equipment fueling will occur away from waterways, stream channels, stream banks, and other environmentally sensitive areas within the development footprint. However, certain equipment storage and fueling activities can be allowed on Preserves within habitat re-establishment/establishment sites (refer to Section 5.2.7) if no location outside of the site is available. If a Covered Activity results in a spill of fuel, hydraulic fluid, lubricants, or other petroleum products, the spill will be absorbed and waste disposed of in a manner to prevent pollutants from entering a waterway, Preserve, Preserve Setback, or Stream Setback.	
BMP-4 (Erodible Materials): Plan Permittees and Third-Party Project Proponents implementing Covered Activities must not deposit erodible materials into waterways. Vegetation clippings, brush, loose soils, or other debris material will not be stockpiled within stream channels or on adjacent banks. Erodible material must be disposed of such that it cannot enter a waterway, Preserve, Preserve Setback, Stream Setback, or aquatic land cover type. If water and sludge must be pumped from a subdrain or other structure, the material will be conveyed to a temporary settling basin to prevent sediment from entering a waterway.	
BMP-5 (Dust Control): Plan Permittees and Third-Party Project Proponents implementing ground-disturbing Covered Activities will water active construction sites regularly, if warranted, to avoid or minimize impacts from construction dust on adjacent vegetation and wildlife habitats. No surface water will be used from aquatic land covers; water will be obtained from a municipal source or existing groundwater well.	
BMP-6 (Construction Lighting): Plan Permittees and Third-Party Project Proponents implementing ground-disturbing Covered Activities will direct all temporary construction lighting (e.g., lighting	

used for security or nighttime equipment maintenance) away from adjacent natural habitats, and particularly Riparian and Wetland habitats and wildlife movement areas.	
BMP-7 (Biological Monitor): If a Covered Activity includes ground disturbance within Covered Species modeled habitat, an approved biologist will be on site during the period of ground disturbance, and may need to be on site during other construction activities depending on the Covered Species affected. After ground-disturbing project activities are complete, the approved biologist will train an individual to act as the on-site construction monitor for the remainder of construction, with the concurrence of the Permitting Agencies. The on-site monitor will attend the training described in BMP-8. The approved biologist and the on-site monitor will have oversight over implementation of Avoidance and Minimization Measures, and will have the authority to stop activities if any of the requirements associated with those measures are not met. If the monitor requests that work be stopped, the Wildlife Agencies will be notified within one working day by email. The approved biologist and/or on-site monitor will record all observations of listed species on California Natural Diversity Database field sheets and submit them to the California Department of Fish and Wildlife. The approved biologist or on-site monitor will be the contact source for any employee or contractor who might inadvertently kill or injure a Covered Species or who finds a dead, injured or entrapped individual. The approved biologist and on-site monitor's names and telephone numbers will be provided to the Wildlife Agencies prior to the initiation of ground-disturbing activities. Refer to species-specific measures for details on requirements for biological monitors.	
BMP-8 (Training of Construction Staff): A mandatory Worker Environmental Awareness Program will be conducted by an approved biologist for all construction workers, including contractors, prior to the commencement of construction activities. The training will include how to identify Covered Species that might enter the construction site, relevant life history information and habitats, SSHCP and statutory requirements and the consequences of non-compliance, the boundaries of the construction area and permitted disturbance zones, litter control training (SPECIES-2), and appropriate protocols if a Covered Species is encountered. Supporting materials containing training information will be prepared and distributed by the approved biologist. When necessary, training and supporting materials will also be provided in Spanish. Upon completion of training, construction personnel will sign a form stating that they attended the training and understand all of the Avoidance and Minimization Measures. Written documentation of the training must be submitted to the Implementing Entity within 30 days of completion of the training, and the Implementing Entity will provide this information to the Wildlife Agencies.	
BMP-9 (Soil Compaction): After construction is complete, all temporarily disturbed areas will be restored similar to pre-project conditions, including impacts relating to soil compaction, water infiltration capacity, and soil hydrologic characteristics.	
BMP-10 (Revegetation): Plan Permittees and Third-Party Project Proponents implementing ground-disturbing Covered Activities will revegetate any cut-and-fill slopes with native or existing non-invasive, non-native plants (e.g., non-native grasses) suitable for the altered soil conditions and in compliance with EDGE-2 and EDGE-8, if applicable.	
BMP-11 (Speed Limit): Project-related vehicles will observe the posted speed limits on paved roads and a 10-mile-per-hour speed limit on unpaved roads and during travel in project areas. Construction crews will be given weekly tailgate instruction to travel only on designated and marked existing, cross-country, and project-only roads.	

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Condition 4. Avoid and Minimize Impacts that May Result from Implementation of Covered Transportation Projects Note: This Condition only applies to projects that include road improvements.	
Avoidance and Minimization Measure	**Project Compliance**
ROAD-1 (Road Project Location): Road projects will be located in the least environmentally sensitive area to avoid, to the maximum extent practicable, impacts on Covered Species, Covered Species habitat, and waters of the United States. Road project alignments will follow existing roads, road easements, and rights-of-way, or be sited in disturbed areas to minimize habitat loss and additional habitat fragmentation.	
ROAD-2 (Wildlife Crossing Structures): Road projects that are Urban Development Covered Activities (see Section 5.2.1) (including the Capital Southeast Connector, see Section 5.2.1.1) or are Rural Transportation Covered Activities (see Section 5.2.3) will include an adequate number of wildlife crossing structures, as depicted in Figure 5-10. An adequate number of wildlife crossing structures within the Urban Development Area (UDA) and outside the UDA will provide for continued dispersal and movement of native wildlife throughout the SSHCP Plan Area, as required by the SSHCP Biological Goals and Objectives (see Chapter 7). The Plan defines "wildlife crossing structure" as a physical structure specifically designed or retrofitted to facilitate undercrossing for target wildlife species. The Plan further classifies wildlife crossings as hydrologic crossings and dry crossings. Hydrologic crossings are built where there is an existing stream, creek, or intermittent drainage to maintain existing hydrologic connectivity within the Plan Area. As described below, hydrologic crossings require specialized features to be built into the crossing structure, such as elevated platforms to allow wildlife to pass under a crossing structure when it is inundated with water. Dry wildlife crossings are built where there is no hydrologic feature but where a crossing is needed to provide for overland connectivity. SSHCP wildlife crossing structures may include structures such as bridges, arches, or box and pipe culverts. Plan Permittees expect that future wildlife movement and dispersal within the UDA will occur almost entirely within the boundaries of the future interconnected SSHCP Preserve System (see Section 7.5). Therefore, wildlife crossings are needed wherever a roadway crosses (bisects) the conceptual SSHCP Preserve System (see Figure 5-10). Wildlife crossing structures inside the UDA will be sized to accommodate movement of a highly mobile native indicator species (i.e., coyote (Canis latrans)). By designing UDA wildlife crossing structures to meet the movement and dispersal requirements of coyote, the Plan Permittees anticipate that the crossing structure will also accommodate most native wildlife species that currently occupy the UDA (see Chapter 3). The Plan Permittees expect that most of the Plan Area outside of the UDA will remain as Open Space over the 50-year Permit Term (see Chapter 4). Therefore, the Plan Permittees expect that the Rural Transportation Project Covered Activities proposed outside the UDA will have a relatively small effect on the movement and dispersal of larger or more mobile native wildlife species, including coyote. Consequently, the Plan Permittees anticipate that the design of Rural Transportation Project Covered Activities outside the UDA will need to include wildlife crossing structures primarily where the Rural Transportation Project Covered Activities occur within California tiger salamander modeled habitat (see CTS-3 and also Chapter 3, Figure 3-16). The design and location of wildlife crossing structures both inside the UDA and outside the UDA will be determined by collaboration between the Third-Party Project Proponent, the Land Use Authority, and the Implementing Entity. Crossing design will use the best available scientific and	

commercial information for the target species. The design of crossing structures will be based on demonstrated effectiveness of design for the target species when such information is available, or will be designed with a high level of certainty of success based on studies of similar taxa in similar environmental settings. The proposed wildlife crossing structures designs will be reviewed and approved by the Implementing Entity prior to final design.

The Implementing Entity will develop a Wildlife Crossing Maintenance Manual to be provided to the entity responsible for maintaining the wildlife crossing. The Wildlife Crossing Maintenance Manual will identify vegetation management, clearing of obstructions, and other techniques to maintain the desired movement and hydrologic connectivity, and to avoid effects to adjacent Preserves.

All SSHCP wildlife crossing structures in the UDA will include the following design elements:

- Open-bottom bridges or arches where the roadway crosses a river or stream. Where an open-bottom bridge or arch is used, the span of the crossing will be at least 1.2 times the bankfull width of the stream and span the banks to allow for dry wildlife passage along each side of the stream and to avoid or minimize piers or footings within the stream. (Bankfull width refers to the width of a stream channel at the point where over-bank flow begins during a flood event.)
- Any wildlife crossing structure that also maintains hydrologic connectivity will be designed to maintain pre-construction water capacity, depth, and velocity. The crossing structure will not restrict or impede normal flows or flood flows, unless a primary purpose of the structure is to manage such flow(s). Wildlife crossing structures must be designed to provide a dry passage (e.g., a platform ledge) higher than flows for a 10-year storm event to allow wildlife to pass through an inundated crossing structure.
- Wildlife crossing structures in the UDA will be designed and sized to accommodate movement of at least medium-sized mammals (e.g., coyote). The opening must be at least 3 feet high and the crossing structure must have a minimum openness ratio of at least 0.4.
- Vegetation leading up to the entrance of a crossing structure and the substrate leading into and within the crossing structure will be natural and appropriate to provide for continuity of habitat, attract the target animal species for which the crossing is designed, and facilitate use of the crossing structure.
- A wildlife crossing under six-lane roads or larger will be designed to provide ambient light and temperature in the longer crossing structures (e.g., either by providing a larger opening or a grate at the top of the structure to improve the attractiveness of the crossing to certain Covered Species and wildlife that may hesitate to cross through dark, confined structures or one with a temperature gradient (Jackson and Griffin 2000)). If a road is less than six lanes in width, these designs will be optional.
- Lighting will not be placed at or near the entrance of a wildlife crossing structure to maintain natural ambient light conditions at night and to increase chances of wildlife use. However, a Land Use Authority Permittees may allow lighting if necessary for human health or safety.

Outside the UDA, wildlife crossing structures may be required for California tiger salamander (refer to CTS-1), and could also be required for other native species. For example, for all rural transportation Covered Activity projects located in giant gartersnake modeled aquatic habitat, certain design features must be implemented to improve opportunities for giant gartersnake passage and dispersal. In addition, rural transportation Covered Activity projects in PPU-6 that are not within giant gartersnake modeled aquatic habitat, but are located between areas of mapped giant gartersnake modeled habitat (e.g. some Bruceville Road improvements) will also be required to implement such project design features. Appropriate project design features shall be incorporated when the rural transportation project includes the replacement or the modification of

an existing drainage feature, and/or the project crosses a stream, creek, ditch, or other drainage. The South Sacramento Conservation Agency and the appropriate Land Use Authority Permittee shall collaborate with the proponents of each rural transportation Covered Activity to determine the need for, the design, and appropriate locations of snake passage structures. Acceptable giant gartersnake passage structures and design features for rural transportation Covered Activities shall be determined by the South Sacramento Conservation Agency in collaboration with the USFWS, CDFW, and TAC species experts, using the best available scientific and commercial information. The SSHCP Wildlife Crossing Maintenance Manual shall identify techniques for the maintenance and the management of structures and aquatic habitat that provide passage opportunities for the giant gartersnake. **<u>This AMM has been revised to reflect USFWS and/or CDFW permit conditions</u>**	
ROAD-3 (Roadside Pesticide Use): If pesticide use is necessary along roadsides, the appropriate SSHCP Permittee will ensure that the pesticide application strictly complies with the pesticide label and all other applicable federal, state, and local authorities pertaining to the use, safety, storage, disposal, and reporting of the pesticide. Where roadside weed infestations have reached a critical control point, the Implementing Entity or a Land Use Authority Permittee will apply the appropriate manual, mechanical, or chemical treatment. In addition, the Implementing Entity or appropriate Land Use Authority Permittee will post signs along road shoulders adjacent to sensitive areas that are within the SSHCP Preserve System (e.g., California tiger salamander breeding ponds, endemic plant populations, vertebrates that rely on insects for part of their diet). The signs will identify pesticide use restrictions or other roadside maintenance restrictions.	
Condition 5. Avoid and Minimize Impacts that Result from Public Use of Low-Impact Nature Trails in Preserves AMMs associated with Condition 5 must be applied to all UDA Covered Activities that border or contain an existing Preserve or planned SSHCP Preserve	
Avoidance and Minimization Measure	**Project Compliance**
NATURE TRAIL-1 (Nature Trail Plan): A nature trail plan must be prepared for each Preserve where a trail is allowed by the Preserve Management Plan. Nature trails will be unpaved trails that vary in width depending on terrain and existing constraints, but will never exceed 4 feet in width. Where a trail crosses a swale, wooden walkways elevated to a height no greater than 2 feet will be installed. Trail improvements may include mowing vegetation to create or maintain a trail, minor grading to remove trip hazards, and signs providing directional and educational information. Public access to land acquired for preservation will be prohibited until a trail plan can be prepared by the Implementing Entity and approved by the Permitting Agencies. A trail plan will include the following: • Maps identifying areas that contain sensitive habitats or species occurrences. • Maps that show the location and footprint of proposed trails. • Methods used to control public access. • Trail and use monitoring methods, schedules, and responsibilities. • Trail operation and maintenance guidelines and responsibilities. • Clear triggers for use restrictions or closure based on sensitive biological indicators (e.g., seasonal closures of some trails on the basis of activity periods of Covered Species or sensitive species).	

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NATURE TRAIL-2 (Nature Trail Protection of Duripan): Nature trails will be sited and constructed so as not to interfere with existing soil duripan and the perched aquifer that support the existing hydrologic regime of the Vernal Pool–Grassland, and will not interfere with existing pool hydrology. Trails within Preserves will not be paved.	
NATURE TRAIL-3 (Nature Trail Location): Nature trails will be located away from sensitive natural resources (e.g., vernal pools, riparian habitat, woodland habitat, Covered Species occurrences, raptor nesting sites, tricolored blackbird (*Agelaius tricolor*) colony sites). The Wildlife Agencies will determine the distance necessary to avoid impacts to sensitive natural resources.	
NATURE TRAIL-4 (Biological Studies Prior to Nature Trail Design): Biological studies will be conducted within the area being considered for nature trail construction prior to project design. The studies will include land cover type mapping and focused species surveys and/or wetland delineations. The biological studies will include assessments of potential effects of trail construction on Preserve System resources, and recommendations for avoidance and minimization that may be incorporated into project siting, design, construction, and operation.	
NATURE TRAIL-5 (Monitoring of Nature Trail Impacts): Impacts that could result from use of a nature trail within a Preserve will be monitored according to the Preserve Management Plan (Chapter 8) to ensure that uses do not conflict with the individual Preserve Management Plan. If use of a trail is found to conflict with the individual Preserve Management Plan, use of that trail will be discontinued until adjustments in the use can be made to reduce or eliminate conflicts. The Implementing Entity will make decisions about discontinuing or modifying use of a trail in consultation with the Preserve Manager or other applicable Preserve management agency or organization.	
Condition 6. Avoid and Minimize Impacts When Re-Establishing or Establishing Wetlands	
Avoidance and Minimization Measure	**Project Compliance**
RE-ESTABLISHMENT/ESTABLISHMENT-1 (Vernal Pool): Re-establish or establish Vernal Pool Wetland according to the following guidelines: • Re-establishment will always take priority over establishment of vernal pools. Establishment will be permitted only after it has been determined that sites with the potential to re-establish vernal pools no longer exist in the Plan Area or cannot be acquired through a willing seller/buyer agreement. • When possible, re-established or established sites will be located adjacent to an existing Preserve(s) to maximize connectivity and Preserve area. • Re-establishment or establishment will not result in direct or indirect adverse impacts to the hydrologic regime of existing vernal pools. Vernal pool re-establishment or establishment actions will not remove more than 10% of any existing vernal pool watershed, as defined by the SSHCP LIDAR analysis (see Section 3.3 and Conservation Action VPI1.2 in Table 7.1). • Vernal pool re-establishment will attempt to restore the historical density and range of vernal pool sizes to the maximum extent feasible using historical aerial photography of the site, if available. Where aerial photography of the site's historical conditions is not available, vernal pool re-establishment will include a range of pool sizes (area and depth) to accommodate the different habitat needs and life history characteristics of the vernal pool invertebrate Covered Species.	

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• Established vernal pools must be located on sites with vernal pool soils, defined as any Plan Area soil type where vernal pools currently exist. • Established vernal pool sites will include a range of pool sizes to accommodate the different habitat needs and life history characteristics of the three vernal pool invertebrate Covered Species. • The total density of vernal pools will not exceed 10% of the suitable soil areas in any vernal pool re-establishment and/or establishment site, unless it can be shown that the suitable areas of that site historically supported greater densities. • Re-establishment or establishment may include inoculation when it is likely that no seed or cyst bank of vernal pool species remains at a site. Vernal Pool inocula will come from nearby vernal pools that are on the same geologic formation and soil type. Each SSHCP vernal pool re-establishment/establishment project is required to achieve the SSHCP Performance Standards for Vernal Pool Re-Establishment or Establishment, (which will be developed by the South Sacramento Conservation Agency within 18 months of Permit issuance). **<u>This AMM has been revised to reflect USFWS and/or CDFW permit conditions</u>**	
RE-ESTABLISHMENT/ESTABLISHMENT-3 (Re-Establishment/Establishment of Freshwater Marsh or Open Water Near Airports): During review of proposed re-establishment/establishment projects for freshwater marsh or open water on SSHCP Preserves, the Implementing Entity shall consider the potential for the location of the re-establishment/establishment projects to increase the risk of wildlife strikes or generation of ground fog at airports. If a re-establishment/ establishment project would result in (1) a net increase in open water or freshwater marsh acreage over baseline conditions4 within 5 miles of Mather Field, Sacramento Executive Airport, or Franklin Field; or (2) replacement of open water/freshwater marsh habitat that is located 2 or more miles from Mather Field or Sacramento Executive Airport with open water/freshwater marsh habitat that is located less than 2 miles from those airports, a qualified biologist shall prepare a concise letter report. The letter report shall summarize the biologist's findings regarding (1) the species likely to use the re-established/established habitat, (2) a rough order of magnitude estimate on the peak number of birds that might use the re-established/established habitat, and (3) potential movement patterns for birds using the re-established/established habitat and whether they might cross through the airport safety zones (e.g., to reach foraging habitat or another wildlife attractant). The letter report will also provide recommendations to the Implementing Entity on how they could reduce any of the identified wildlife hazards if there are any feasible means to do so that would not conflict with the biological goals and measurable objectives of the Conservation Plan. **<u>This AMM has been revised to reflect USFWS and/or CDFW permit conditions</u>**	
Condition 7. Avoid and Minimize Impacts to Streams and Creeks AMMs associated with Condition 7 must be applied to all Covered Activities where a stream or creek is located within a project footprint.	
Avoidance and Minimization Measure	**Project Compliance**

[4] For purposes of establishing SSHCP land cover baseline conditions (including the baseline conditions of the Freshwater Marsh and Open Water land covers), baseline acreages will be calculated using the final SSHCP Land Cover Baseline Map (see discussions in Sections 3.3.1 and Section 10.4.2.3)..

Project Name:

SSHCP Project Specific Avoidance and Minimization Measures

STREAM-1 (Laguna Creek Wildlife Corridor): A 150-foot setback measured from the top of the bank on both sides of the stream will be applied to Laguna Creek within the Urban Development Area (minimum 300-foot corridor width). If trails are located within the Laguna Creek Wildlife Corridor, the nearest edge of the trail will be located at least 80 feet from the top of the bank.

Stream Setback Minimum Requirements in the Urban Development Area

Stream	Minimum Setback (from the Top of Bank Measured in Aerial Perspective) on Both Sides of the Stream
Elder Creek	100 feet
Frye Creek	100 feet or as depicted as part of the NewBridge development project hardline Preserve (see Appendix K)
Gerber Creek	100 feet
Morrison Creek	100 feet
Central Paseo	100 feet or as depicted as part of the Cordova Hills development project hardline Preserve (Appendix K)
Sun Creek	100 feet or as depicted as part of the Sun Creek development project hardline Preserve (see Appendix K)

STREAM-2 (UDA Stream Setbacks): A 100-foot setback measured from the top of the bank on both sides of the stream channel will be applied to all streams listed in Table 5-2 (see also Figure 2-4). If a stream reach supports woody riparian vegetation, the setback will be equal to the riparian edge plus 25 feet or will be the setback defined above, whichever is greater. If trails are located within the Stream Setback, the nearest edge of the trail will be located at least 50 feet from the top of the bank.

STREAM-3 (Minor Tributaries to UDA Streams): A 25-foot setback measured from the top of the bank on both sides of the stream channel will be applied to all avoided first and second order tributaries to the streams listed in Table 5-2 and Laguna Creek. Refer to Objective W6 in Chapter 7 (Table 7-1) regarding avoided first and second order tributaries. Trails are not permitted within headwater ephemeral Stream Setbacks.

STREAM-4 (Minimize Effects from Temporary Channel Re-Routing): When an Urban Development Covered Activity temporarily re-routes a stream, creek, or drainage, the re-routing will be completed in a manner that minimizes impacts to beneficial uses and habitat. The following measures will be employed to minimize disturbances that will adversely impact water quality:

- No equipment will be operated in areas of flowing or standing water.
- Construction materials and heavy equipment must be stored outside of the active flow of any waters.
- When work within waters is necessary, the entire stream flow will be diverted around the work area.
- In the event of rain, the disturbed in-water work area will be temporarily stabilized before water body flow exceeds the capacity of the diversion structure. The disturbed water body will be stabilized so that the disturbed areas will not come in contact with the flow.
- Once construction is complete, all project-introduced material (e.g., pipes, gravel, cofferdam, sandbags) must be removed, leaving the water as it was before construction. Excess materials will be disposed of at an appropriate disposal site.

Project Name:

SSHCP Project Specific Avoidance and Minimization Measures

• All work areas will be effectively isolated from stream flows using suitable control measures before commencement of any in-water work. The diverted stream flow will not be contaminated by construction activities. Structures for isolating the in-water work area and/or diverting the stream flow (e.g., cofferdam, geo-textile silt curtain) will not be removed until all disturbed areas are cleaned and stabilized. • Any flow diversion used during construction will be designed in a manner to prevent pollution and minimize siltation, and will provide flows to downstream reaches. Flows will be maintained to support existing aquatic life, riparian wetlands, and habitat that may be located upstream and downstream from any temporary diversion. • All surface waters, including ponded waters, will be diverted away from areas undergoing grading, construction, excavation, vegetation removal, and/or any other activity that may result in a discharge to waters. • All temporary dewatering methods will be designed to have the minimum necessary impacts to waters to isolate the immediate work area. All dewatering methods will be installed such that natural flow is maintained upstream and downstream of the diversion area. Any temporary dams and diversions will be installed such that the diversion does not cause sedimentation, siltation, or erosion upstream or downstream of the diversion area. All dewatering methods will be removed immediately upon completion of diversion activities. • A method of containment must be used below any bridge, boardwalk, and/or temporary crossing to prevent debris from falling into the waters through the entire duration of a project. • If temporary surface water diversions and/or dewatering are anticipated, the Third-Party Project Proponent will develop and maintain on site a surface water diversion and/or dewatering plan. The plan(s) must be developed prior to initiation of any water diversions and will include the proposed method and duration of diversion activities. The plan(s) must be made available to Central Valley Water Board staff upon request. • When work in a flowing stream is unavoidable and any dam or other artificial obstruction is being constructed, maintained, or placed in operation, sufficient water will be allowed at all times to pass downstream to maintain beneficial uses of waters below the dam. Construction, dewatering, and removal of temporary cofferdams will not violate the turbidity, settle-able matter, pH, temperature, or dissolved oxygen requirements of any Water Quality Control Plan. • Any temporary dam or other artificial obstruction will only be built from clean materials such as sandbags, gravel bags, water dams, or clean/washed gravel that will cause little or no siltation. Stream flow will be temporarily diverted using gravity flow through temporary culverts or pipes, or pumped around the work site with the use of hoses.	
STREAM-5 (Design for Stream Channel Re-Routing, Widening, or Deepening): When an Urban Development Covered Activity alters a stream, creek, or drainage by re-routing, widening, or deepening a channel, the project design will include the following: • The main channel of a re-routed channel will be free to migrate laterally over its active and terrace floodplain. • Channel geometry (plan, profile, and cross-section) of the site will be appropriate for the watershed location and physical/hydrologic condition. • Local, native materials will be used as fill material to the extent practicable. • Bioengineering techniques will be used for construction and maintenance of bank stabilization. Bioengineered bank stabilization structures will use vegetation in combination with bank reshaping; biodegradeable geotextile materials; and, in some cases, a minimal amount of rock or wood to the extent practicable to dissipate erosive energy. Third-Party Project Proponents will consult a professional engineer when considering using bioengineering techniques.	

SSHCP Project Specific Avoidance and Minimization Measures

• All re-routed, widened, or deepened streams are required to establish Stream Setbacks with minimum widths required under STREAM-1, STREAM-2, or STREAM-3. All re-routed, widened, or deepened streams must re-establish/ establish and maintain native Woody Riparian land cover and/or native Grassland Riparian land cover in the entire Stream Setback.	
Condition 8. Avoid and Minimize Impacts to Covered Species from Utility and Utility Maintenance Covered Activities Note: AMMs associated with Condition 8 must be applied to all Covered Activities associated with construction and maintenance of infrastructure projects.	
Avoidance and Minimization Measure	**Project Compliance**
UTILITY-1 (Avian Collision Avoidance): Installation of new, or relocation of existing, utility poles, lines, and cell towers located within the Preserve System or within 1,000 feet of a Preserve boundary will be coordinated with the U.S. Fish and Wildlife Service and California Department of Fish and Wildlife. The applicant or relevant utility/service provider will install utility poles, lines, and cell towers in conformance with Avian Powerline Interaction Committee (APLIC) standards for collision-reducing techniques, as outlined in Reducing Avian Collisions with Power Lines: State of the Art in 2012 (APLIC 2012), or any superseding document issued by the APLIC.	
UTILITY-2 (Utility Maintenance on Preserves): Utility maintenance inside SSHCP Preserves and SSHCP Preserve Setbacks containing vernal pools will occur only when vernal pools have been dry for 30 days, except in emergency situations related to human health and safety.	
UTILITY-3 (Trenchless Construction Methods): Where a pipeline or conduit crosses an existing or planned Preserve or will be located between adjacent Preserves (e.g., under a roadway that has a Preserve on both sides), trenchless construction methods will be used to minimize impacts to the existing soil profile (including impacts to a hardpan or duripan) to maintain the perched aquifer in Vernal Pool Grassland land cover type.	
UTILITY-4 (Siting of Entry and Exit Location): The entry and exit locations for the trenchless construction method (see Utility-3) will be sited to avoid impacts to vernal pools and Riparian Woodland, and to avoid direct take of SSHCP Covered Species.	
Condition 9. Avoid and Minimize Impacts That Might Result From Removing or Breaching Levees to Establish or Re-establish Riparian Habitat	
Avoidance and Minimization Measure	**Project Compliance**
LEVEE-1 (Preparation of Hydrologic Analysis): Prior to approving a draft Preserve Management Plan that includes (1) modifying or breaching an existing levee, or (2) would place a potential impedance to high-water event flood-flows on the water side of an existing levee (including new riparian vegetation plantings or other new Preserve facilities), a hydrologic analysis will be conducted. The Preserve activity will only be implemented if the hydrologic analysis concludes that the activity will not result in a substantial increase in flood stage elevations or flood risk on lands outside the Preserve.	
Condition 10. Avoid and Minimize Impacts That Might Result From Potential Residual Contamination of Preserves and Related Exposure of People to Such Hazardous Materials	

Project Name:

SSHCP Project Specific Avoidance and Minimization Measures

Avoidance and Minimization Measure	Project Compliance
HAZARDOUS MATERIALS-1 (Preparation of Phase I Environmental Site Assessment): Prior to the acquisition of a preserve site or implementation of a stream or riparian restoration project, a Phase I Environmental Site Assessment shall be conducted in general accordance with the American Society for Testing and Materials Standard Practice E1527-05. The purpose of this Environmental Site Assessment is to identify, to the extent feasible pursuant to the American Society for Testing and Materials Standard, recognized environmental conditions in connection with the potential site. The term "recognized environmental condition" means the presence or likely presence of hazardous substances or petroleum products on the property under conditions that may indicate an existing release, a past release, or a material threat of release of these substances to the property. If the Phase 1 Environmental Site Assessment indicates the presence of a recognized environmental condition, the Implementing Entity shall consider the following options. • Determine that the acquisition/project can proceed on the basis that the Habitat Plan goals and objectives can be met on the site even with the presence of a recognized environmental condition. • Conduct a Phase II Environmental Site Assessment, including soil and groundwater testing, to further study the potential for contamination to limit the Implementing Entity's management activities. • If the results of the Phase I (or Phase II) Environmental Site Assessment indicate that the Habitat Plan goals and objectives cannot be met on the site, the Implementing Entity should not acquire the site.	
HAZARDOUS MATERIALS-2 (Contingency Plan): As part of each Preserve Management Plan or site restoration plan, a Contingency Plan shall be prepared to address the actions that would be taken during construction in the event that unexpected contaminated soil or groundwater is discovered. The Contingency Plan shall include health and safety considerations, handling and disposal of wastes, reporting requirements, and emergency procedures. The Contingency Plan shall include a requirement that if evidence of contaminated materials is encountered during construction, construction would cease immediately and applicable requirements of the Comprehensive Environmental Release Compensation and Liability Act and the California Code of Regulations Title 22 regarding the disposal of waste would be implemented.	
Covered Species Take Avoidance and Minimization Measures Note: These AMMs apply to all Projects that contain modeled species habitat.	
Avoidance and Minimization Measure	**Project Compliance**
SPECIES-1 (Litter Removal Program): A litter control program will be instituted for the entire project site. All workers will ensure that their food scraps, paper wrappers, food containers, cans, bottles, and other trash are deposited in covered or closed trash containers. All garbage will be removed from the project site at the end of each work day, and construction personnel will not feed or otherwise attract wildlife to the area where construction activities are taking place.	
SPECIES-2 (No Pets in Construction Areas): To avoid harm and harassment of native species, workers and visitors will not bring pets onto a project site.	
SPECIES-3 (Take Report): If accidental injury or death of any Covered Species occurs, workers will immediately inform the approved biologist or on-site monitor and site supervisor. The approved	

biologist or on-site monitor will phone the appropriate contact person at the Implementing Entity. The Implementing Entity will immediately contact the Wildlife Agencies by telephone. A memorandum will be provided to the Implementing Entity and Wildlife Agencies within 1 working day of the incident. The report will provide the date and location of the incident, number of individuals taken, the circumstances resulting in the take, and any corrective measures taken to prevent additional take.	
SPECIES-4 (Post-Construction Compliance Report): A post-construction compliance report will be submitted to the SSHCP Implementing Entity within 30 calendar days of completion of construction activities or within 30 calendar days of any break in construction activity that lasts more than 30 days. The report will detail the construction start and completion dates, any information about meeting or failing to meet species take Avoidance and Minimization Measures (AMM), effectiveness of each AMM that was applied at the project site, and any known project effects to Covered Species.	
PLANT-1 (Rare Plant Surveys): If a Covered Activity project site contains modeled habitat for Ahart's dwarf rush (Juncus leiospermus var. ahartii), Bogg's Lake hedge-hyssop (Gratiola heterosepala), dwarf downingia (Downingia pusilla), Legenere (Legenere limosa), pincushion navarretia (Navarretia myersii), or Sanford's arrowhead (Sagittaria sanfordii), the Covered Activity project site will be surveyed for the rare plant by an approved biologist and following the California Department of Fish and Wildlife (CDFW) Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities dated March 20, 2018or the most recent CDFW rare plant survey protocols. An approved biologist will conduct the field surveys and will identify and map plant species occurrences according to the protocols. See Chapter 10 for the process to submit survey information to the Plan Permittee and the Permitting Agencies. The appropriate timing of surveys and use of reference populations is applicable to all covered rare plant species, as described in the 2018 CDFW survey protocol referenced above. For Bogg's Lake hedge-hyssop which is an annual plant with seed banks that may not germinate every year , the project proponent may be required to survey a project site for more than one year to substantiate negative findings if the previous year was either extremely dry or extremely wet (which may be found in the Department of Water Resources Water Supply Index Bulletin (http://cdec.water.ca.gov/reportapp/javareports?name=WSI). However, if local reference populations of the species are detectable at the time of survey and none of the species are observed on a project site, a negative finding will be made. **<u>This AMM has been revised to reflect USFWS and/or CDFW permit conditions</u>**	
PLANT-2 (Rare Plant Protection): If a rare plant listed in AMM PLANT-1 is detected within an area proposed to be disturbed by a Covered Activity or is detected within 250 feet of the area proposed to be disturbed by a Covered Activity, the Implementing Entity will assure one unprotected occurrence of the species is protected within a SSHCP Preserve before any ground disturbance occurs a the project site.	
ORCUTT-1 (Orcutt Grass Surveys): If a Covered Activity project site is located within or adjacent to (within 1 mile of) the Mather Core Recovery Area and contains the Vernal Pool land cover type, the project site will be surveyed for Sacramento and slender Orcutt grass by an approved biologist following California Department of Fish and Wildlife (CDFW) Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities dated March 20, 2018 or most recent CDFW guidelines to determine if Sacramento and/or slender Orcutt grass is	

present. An approved biologist will conduct the field investigation to identify and map occurrences. See Chapter 10 for the process to conduct and submit survey information. **This AMM has been revised to reflect USFWS and/or CDFW permit conditions**	
ORCUTT-2 (Orcutt Grass Protection): Where known or new Sacramento or slender Orcutt grass occurrences are found, they will be protected within an SSHCP Preserve that is at least 50 acres. The occurrence will be located interior to the Preserve at a distance of no less than 300 feet from the edge of the Preserve boundary. If a Third-Party Project Proponent encounters a previously undiscovered occurrence of Sacramento or slender Orcutt grass on a Covered Activity project site, the Third-Party Project Proponent will contact the Implementing Entity or Land Use Authority Permittee with authority over the project, who will coordinate with the Wildlife Agencies for written concurrence of avoidance to ensure that the project does not cause take of the species.	
Valley Elderberry Longhorn Beetle	
Avoidance and Minimization Measure	**Project Compliance**
VELB-1 (Valley Elderberry Longhorn Beetle Avoidance): If a Covered Activity is planned within modeled habitat for valley elderberry longhorn beetle, project proponents will conduct a survey for presence of elderberry shrubs within 100 feet of the project area. If elderberry shrubs are found, protocol level surveys will be conducted. Direct impacts (within 20 feet of construction, shall be avoided as much as possible. Indirect impacts (shrubs between 20-100 feet of construction) shall also be avoided as much as possible. Any direct loss of elderberry shrubs shall be compensated for according to *USFWS Conservation Guidelines for the Valley Elderberry Longhorn Beetle* (USFWS 1999b). **This AMM has been revised to reflect USFWS and/or CDFW permit conditions**	
California Tiger Salamander	
Avoidance and Minimization Measure	**Project Compliance**
CTS-1 (California Tiger Salamander Daily Construction Schedule): Ground-disturbing Covered Activities within California tiger salamander modeled habitat (Figure 3-16) will occur outside the breeding and dispersal season (occur after July 31 and before October 15), to the maximum extent practicable. If Covered Activities must be implemented in modeled habitat (Figure 3-16) during the breeding and dispersal season (after October 15 and before July 31), construction activities will not start until 30 minutes after sunrise and must be complete 30 minutes prior to sunset.	
CTS-2 (California Tiger Salamander Exclusion Fencing): If a Covered Activity must be implemented in modeled habitat (Figure 3-16) during the breeding and dispersal season (after October 15 and before July 31), exclusion fencing will be installed around the project footprint before October 15. Temporary high-visibility construction fencing will be installed along the edge of work areas, and exclusion fencing will be installed immediately outside of the temporary high-visibility construction fencing to exclude California tiger salamanders from entering the construction area or becoming entangled in the construction fencing. Exclusion fencing will be at least 1 foot tall and be buried at least 6 inches below the ground to prevent salamanders from going under the fencing. Fencing will remain in place until all construction activities within the construction area are complete. No project activities will occur outside the delineated project footprint. An approved biologist must inspect the exclusion fencing and project site every morning before 7:00 a.m. for integrity and for any entrapped California tiger salamanders. If a California tiger salamander is encountered, refer to	

CTS-5, below. (However, the Implementing Entity may, with approval of the U.S. Fish and Wildlife Service (USFWS) and California Department of Fish and Wildlife (CDFW), determine that it is appropriate for a Covered Activity project to not implement CTS-2 for certain long and linear roadway Covered Activity projects if it appears that the exclusion fencing will likely trap individuals or cause more take of California tiger salamander than it would prevent.)	
CTS-3 (California Tiger Salamander Monitoring): If Covered Activities must be implemented in modeled habitat (Figure 3-16), an approved biologist experienced with California tiger salamander identification and behavior will monitor the project site, including the integrity of any exclusion fencing. The approved biologist will be on site daily while construction-related activities are taking place, and will inspect the project site for California tiger salamander every morning before 7:00 a.m., or prior to construction activities. As required by BMP-8 (Training of Construction Staff), the approved biologist will also train construction personnel on the required California tiger salamander avoidance procedures, exclusion fencing, and correct protocols in the event that a California tiger salamander enters an active construction zone. If a California tiger salamander is encountered, refer to CTS-5, below.	
CTS-4 (Avoid California Tiger Salamander Entrapment): If Covered Activities must be implemented in modeled habitat, all excavated steep-walled holes or trenches more than 6 inches deep will be provided with one or more escape ramps constructed of earth fill or wooden planks at the end of each work day or 30 minutes prior to sunset, whichever occurs first. All steep-walled holes or trenches will be inspected by the approved biologist each morning to ensure that no wildlife has become entrapped. All construction pipes, culverts, similar structures, construction equipment, and construction debris left overnight within California tiger salamander modeled habitat will be inspected for California tiger salamanders by the approved biologist prior to being moved. If a California tiger salamander is encountered, refer to CTS-5, below.	
CTS-5 (California Tiger Salamander Encounter Protocol): If a California tiger salamander is encountered during construction activities, the approved biologist will notify the Wildlife Agencies immediately (California Department of Fish and Wildlife (CDFW) and U.S. Fish and Wildlife Service (USFWS)). Construction activities will be suspended in a 100-foot radius of the animal until the animal is relocated (as described in the Relocation Plan, AMM CTS-8) by an approved biologist with appropriate handling permits from the Wildlife Agencies. Prior to relocation, the approved biologist will notify the Wildlife Agencies to determine the appropriate procedures related to relocation. If the animal is handled, a report will be submitted, including date(s), location(s), habitat description, and any corrective measures taken to protect the salamander, within 1 business day to the Wildlife Agencies. The biologist will report any take of listed species to USFWS and CDFW immediately. Any worker who inadvertently injures or kills a California tiger salamander or who finds dead, injured, or entrapped California tiger salamander(s) must immediately report the incident to the approved biologist. **<u>This AMM has been revised to reflect USFWS and/or CDFW permit conditions</u>**	
CTS-6 (Erosion Control Materials in California Tiger Salamander Habitat): If erosion control (BMP-2) is implemented within California tiger salamander modeled habitat (Figure 3-16), non-entangling erosion control material will be used to reduce the potential for entrapment. Tightly woven fiber netting (mesh size less than 0.25 inch) or similar material will be used to ensure that salamanders are not trapped (no monofilament). Coconut coir matting and fiber rolls with burlap are examples of acceptable erosion control materials. This limitation will be communicated to the contractor through use of special provisions included in the bid solicitation package.	

SSHCP Project Specific Avoidance and Minimization Measures

CTS-7 (Rodent Control): CTS-7 only applies to projects that are within California tiger salamander modeled habitat (Figure 3-16) and on Covered Activities. Rodent control will be allowed only in developed portions of a Covered Activity project site. Where rodent control is allowed, the method of rodent control will comply with the methods of rodent control discussed in the 4(d) Rule published in the U.S. Fish and Wildlife Service's (2004) final listing rule for tiger salamander. **<u>This AMM has been revised to reflect USFWS and/or CDFW permit conditions</u>**	
The following California tiger salamander AMMs are conditions of the CDFW Incidental Take Permit and are in addition to the previous AMMs. For example, relocation may not occur without notification and discussion with USFWS, as described in CTS-5 above.	
CTS-8 (California Tiger Salamander Relocation Plan): Project proponents shall prepare a California tiger salamander Relocation Plan (Relocation Plan) for Covered Activities occurring in California tiger salamander modeled habitat. The Relocation Plan shall include the name(s) of the approved biologists(s) who will relocate California tiger salamander; pre-construction habitat assessment methodology; measures to minimize temporary impacts to California tiger salamander habitat outside the permanent impact area; capture, handling, and relocation methods; a map and description of the relocation area(s) for captured California tiger salamander, including relative location, quality of habitat, non-native species or the potential for California tiger salamander-barred tiger salamander hybrids to be present, identified upland burrows determined to be suitable for California tiger salamander placement, distance to aquatic habitat, and potential barriers for movement; written permission from the landowner to use their land as a relocation site; and identification of a wildlife rehabilitation center or veterinary facility that routinely evaluates or treats amphibians. Project proponents shall submit the Relocation Plan to the Land Use Authority Permittee or Implementing Entity, who will send it CDFW for written approval at least 15 days prior to the beginning of any Covered Activities, including preconstruction surveys. If California tiger salamander is found within a construction site or 200 feet beyond the construction site (200-foot boundary), Project personnel shall notify the approved biologist(s) immediately. If California tiger salamander is encountered within a construction site, is directly threatened by Covered Activities, and is unable to move to a safe area on its own, the approved biologist(s) shall relocate California tiger salamander to a safe area in accordance with the Relocation Plan. Otherwise, California tiger salamander may only be captured and handled by the Approved Biologist(s). The Permittees or Authorized Party shall notify CDFW within 24 hours of each time California tiger salamander is relocated. Notification to CDFW shall be via telephone or email, followed by a written incident report. Notification shall include the date, time, location, and circumstances of the incident. **<u>This AMM has been revised to reflect USFWS and/or CDFW permit conditions</u>**	
CTS-9. (California Tiger Salamander Pre-Construction Surveys). The approved biologist(s) shall complete a visual survey in each of the construction sites located within suitable upland habitat and within a 200-foot boundary, including access roads. The approved biologist(s) shall pay particular attention to suitable California tiger salamander habitat features and search beneath woody debris. If California tiger salamander is found within the construction site, access roads, or the 200-foot boundary, the approved biologist(s) shall delay installation of the exclusion barrier until the approved biologist(s) relocate(s) the California tiger salamander out of the Project Area and 200-foot boundary in accordance with AMM CTS-8. The approved biologist(s) shall visually inspect all potential burrow within suitable upland habitat in the construction site, access roads, and 200-foot boundary, prior to installing exclusionary fencing.	

Project Name:

SSHCP Project Specific Avoidance and Minimization Measures

This AMM has been revised to reflect USFWS and/or CDFW permit conditions	
Western Spadefoot	
Avoidance and Minimization Measure	**Project Compliance**
WS-1 (Western Spadefoot Work Window): Ground-disturbing Covered Activities within western spadefoot modeled habitat (Figure 3-17) will occur outside the breeding and dispersal season (after May 15 and before October 15), to the maximum extent practicable.	
WS-2 (Western Spadefoot Exclusion Fencing): If Covered Activities must be implemented in modeled habitat (Figure 3-17) after October 15 and before May 15, exclusion fencing will be installed around the project footprint before October 15, and the project site must be monitored by an approved biologist following rain events. Temporary high-visibility construction fencing will be installed along the edge of work areas, and silt fencing will be installed immediately behind the temporary high-visibility construction fencing to exclude western spadefoot from entering the construction area. Fencing will remain in place until all construction activities within the construction area are completed. No project activities will occur outside the delineated project footprint. If a western spadefoot is encountered, refer to WS-6, below.	
WS-3 (Western Spadefoot Monitoring): If Covered Activities must be implemented in modeled habitat (Figure 3-17) in the breeding and dispersal season (after October 15 and before May 15), an approved biologist experienced with western spadefoot identification and behavior will monitor the project site, including the integrity of any exclusion fencing. The approved biologist will be on site daily while construction-related activities are taking place, and will inspect the project site daily for western spadefoot prior to construction activities. The approved biologist will also train construction personnel on the required avoidance procedures, exclusion fencing, and protocols in the event that a western spadefoot enters an active construction zone (i.e., outside the buffer zone). If a western spadefoot is encountered, refer to WS-6, below.	
WS-4 (Avoid Western Spadefoot Entrapment): If a Covered Activity occurs in western spadefoot modeled habitat (Figure 3-17), all excavated steep-walled holes and trenches more than 6 inches deep will be covered with plywood (or similar material) or provided with one or more escape ramps constructed of earth fill or wooden planks at the end of each work day or 30 minutes prior to sunset, whichever occurs first. All steep-walled holes and trenches will be inspected by the approved biologist each morning to ensure that no wildlife has become entrapped. All construction pipes, culverts, similar structures, construction equipment, and construction debris left overnight within western spadefoot modeled habitat will be inspected for western spadefoot by the approved biologist prior to being moved. If a western spadefoot is encountered, refer to WS-6, below.	
WS-5 (Erosion Control Materials in Western Spadefoot Habitat): If erosion control (BMP-2) is implemented within western spadefoot modeled habitat (Figure 3-17), non-entangling erosion control material will be used to reduce the potential for entrapment. Tightly woven fiber netting (mesh size less than 0.25 inch) or similar material will be used to ensure that western spadefoots are not trapped (no monofilament). Coconut coir matting and fiber rolls containing burlap are examples of acceptable erosion control materials.	
WS-6 (Western Spadefoot Encounter Protocol): If Covered Activities must be implemented in modeled habitat (Figure 3-17) during the breeding and dispersal season (after October 15 and before May 15), and a western spadefoot is encountered during construction activities, the approved biologist will notify the Wildlife Agencies immediately. Construction activities will be	

suspended in a 100-foot radius of the animal until the animal leaves the project site on its own volition. If necessary, the approved biologist will notify the Wildlife Agencies to determine the appropriate procedures related to relocation. If the animal is handled, a report will be submitted, including date(s), location(s), habitat description, and any corrective measures taken to protect the western spadefoot within 1 business day to the Wildlife Agencies. The biologist will report any take of listed species to the U.S. Fish and Wildlife Service and California Department of Fish and Wildlife immediately. Any worker who inadvertently injures or kills a western spadefoot or who finds dead, injured, or entrapped western spadefoot(s) must immediately report the incident to the approved biologist.	
Giant Garter Snake	
Avoidance and Minimization Measure	**Project Compliance**
GGS-1 (Giant Gartersnake Surveys): If the SSHCP giant gartersnake modeled habitat maps (Figure 3-18) show that modeled habitat for giant gartersnake is present within a Covered Activity's project footprint or within 300 feet of a project footprint, then an approved biologist will conduct a field investigation to delineate giant gartersnake aquatic habitat within the project footprint and adjacent areas within 300 feet of the project footprint. In addition to the SSHCP land cover types shown in Figure 3-18, giant gartersnake aquatic habitat includes, but is not limited to, low-gradient streams and creeks, open water, freshwater marsh, agricultural ditches, and rice fields. Adjacent parcels under different land ownership will be surveyed only if access is granted or if the parcels are visible from authorized areas. The Third-Party Project Proponent will map all existing or potential sites and provide these maps to the Local Land Use Permittees and the Implementing Entity. Locations of delineated giant gartersnake habitat must also be noted on plans that are submitted to a Local Land Use Permittee. The applicant will use this information to finalize project design. Covered Activities may occur throughout the year as long as giant gartersnake habitat is identified and fully avoided. Otherwise, Covered Activities must comply with GGS-2 through GGS-8, below. See Chapter 10 for the process to conduct and submit survey information.	
GGS-2 (Giant Gartersnake Work Window): Covered Activities that do not fully avoid giant gartersnake modeled habitat (Figure 3-18) will be conducted during the snake's active season. Construction and ground-disturbing activities will be initiated after May 1 and will end prior to September 15. If it appears that these activities may go beyond September 15, the Third-Party Project Proponent or Plan Permittee will contact the Land Use Authority Permittee and the Implementing Entity as soon as possible, but not later than September 1. The Land Use Authority Permittee and the Implementing Entity will discuss with the Wildlife Agencies additional measures necessary to minimize take. The additional measures would vary depending on where the work is occurring. For example, if the work outside the giant gartersnake active season is a continuation of work within a dewatered channel or within a disturbed area where no more than two days have passed without ground-disturbing activities, burrows are no longer expected to be occupied by giant gartersnake, therefore no additional measures may be necessary. However, if ground disturbing work will occur outside the giant gartersnake active season in an area that was not previously disturised in the active season, or there has been no ground disturbance for more than two days, an approved biologist may be necessary on-site during earth moving activities, to monitor for giant gartersnake presence. **<u>This AMM has been revised to reflect USFWS and/or CDFW permit conditions</u>**	
GGS-3 (Giant Gartersnake Monitoring): If a Covered Activity is occurring in giant gartersnake modeled habitat (Figure 3-18), an approved biologist experienced with giant gartersnake	

identification and behavior will monitor the project site, including the integrity of any exclusion fencing. The approved biologist will be on site daily while construction-related activities are taking place in aquatic habitat or within 300 feet of aquatic habitat, and will inspect the project site daily for giant gartersnake prior to construction activities. If a giant gartersnake is encountered, refer to GGS-7. The approved biologist will also train construction personnel on the required avoidance procedures, exclusion fencing, and protocols in the event that a giant gartersnake enters an active construction zone (i.e., outside the buffer zone).	
GGS-4 (Giant Gartersnake Habitat Dewatering and Exclusion): If construction activities will occur in giant gartersnake aquatic habitat, aquatic habitat will be dewatered and then remain dry and absent of aquatic prey (e.g., fish and tadpoles) for 15 days prior to initiation of construction activities. If complete dewatering is not possible, the Implementing Entity will be contacted to determine what additional measures may be necessary to minimize effects to giant gartersnake. After aquatic habitat has been dewatered 15 days prior to construction activities, exclusion fencing will be installed extending a minimum of 300 feet into adjacent uplands to isolate both the aquatic and adjacent upland habitat. Exclusionary fencing will be erected 36 inches above ground and buried at least 6 inches below the ground to prevent snakes from attempting to move under the fence into the construction area. In addition, high-visibility fencing will be erected to identify the construction limits and to protect adjacent habitat from encroachment of personnel and equipment. Giant gartersnake habitat outside construction fencing will be avoided by all construction personnel. The fencing and the work area will be inspected by the approved biologist to ensure that the fencing is intact and that no snakes have entered the work area before the start of each work day. The fencing will be maintained by the contractor until completion of the project. If giant gartersnake is encountered, refer to GGS-7, below.	
GGS-5 (Avoid Giant Gartersnake Entrapment): If a Covered Activity occurs in giant gartersnake modeled habitat (Figure 3-18), all excavated steep-walled holes and trenches more than 6 inches deep will be covered with plywood (or similar material) or provided with one or more escape ramps at an angle of no more than 30 degrees constructed of earth fill or wooden planks at the end of each work day or 30 minutes prior to sunset, whichever occurs first. All steep-walled holes and trenches will be inspected by the approved biologist each morning to ensure that no wildlife has become entrapped. All construction pipes, culverts, similar structures, construction equipment, and construction debris left overnight within giant gartersnake modeled habitat will be inspected for giant gartersnake by the approved biologist prior to being moved. If a giant gartersnake is encountered, refer to GGS-7. **<u>This AMM has been revised to reflect USFWS and/or CDFW permit conditions</u>**	
GGS-6 (Erosion Control Materials in Giant Gartersnake Habitat): If erosion control (BMP-2) is implemented within giant gartersnake modeled habitat (Figure 3-18), non-entangling erosion control material will be used to reduce the potential for entrapment. Tightly woven fiber netting (mesh size less than 0.25 inch) or similar material will be used to ensure snakes are not trapped (no monofilament). Coconut coir matting and fiber rolls containing burlap are examples of acceptable erosion control materials.	
GGS-7 (Giant Gartersnake Encounter Protocol): If a giant gartersnake is encountered during construction activities, the approved biologist will notify the Wildlife Agencies immediately. Construction activities will be suspended in a 100-foot radius of the animal until the animal leaves the project site on its own volition. If necessary, the approved biologist will notify the Wildlife Agencies to determine the appropriate procedures related to relocation. If the animal is handled, a	

report will be submitted, including date(s), location(s), habitat description, and any corrective measures taken to protect the giant gartersnake within 1 business day to the Wildlife Agencies. The biologist will report any take of listed species to the U.S. Fish and Wildlife Service and CDFW immediately. Any worker who inadvertently injures or kills a giant gartersnake or who finds one dead, injured, or entrapped must immediately report the incident to the approved biologist. Any giant gartersnake observed during Covered Activities will be allowed to move away from danger on its own or be moved by the approved biologist with CDFW and USFWS approval to handle the snake and in accordance with the CDFW-approved Giant Gartersnake Relocation Plan detailed in AMM GGS-9. **<u>This AMM has been revised to reflect USFWS and/or CDFW permit conditions</u>**	
GGS-8 (Giant Gartersnake Post-Construction Restoration): After completion of ground-disturbing Covered Activities, the applicant will remove any temporary fill and construction debris and will restore temporarily disturbed areas to pre-project conditions. Restoration work includes such activities as re-vegetating the banks and active channels with an appropriate native seed mix. Appropriate methods and plant species used to re-vegetate such areas will be determined on a site-specific basis in consultation with the Implementing Entity. Restoration work may include replanting emergent aquatic vegetation. Refer to the U.S. Fish and Wildlife Service's (USFWS) Guidelines for the Restoration and/or Replacement of Giant Gartersnake Habitat (USFWS 1997), or the most current USFWS guidelines at the time of the activity. A photo documentation report showing pre- and post-project conditions will be submitted to the Implementing Entity 1 month after implementation of the restoration. **<u>This AMM has been revised to reflect USFWS and/or CDFW permit conditions</u>**	
GGS-9 (Giant Gartersnake Relocation Plan): Project proponents shall prepare a Giant Gartersnake Relocation Plan (Relocation Plan) for Covered Activities occurring in giant gartersnake modeled habitat. Project proponents shall submit the Relocation Plan to the Land Use Authority Permittee or Implementing Entity, who will send it CDFW for written approval at least 30 days prior to the beginning of any Covered Activities. The Relocation Plan shall include, at a minimum, the proposed giant gartersnake capture and handling technique; a quantification of the amount, relative location, and quality of suitable habitat (aquatic and upland) within proposed relocation site(s) including invasive and non-native species present, available upland burrows for aestivation and high-water refugia, suitable prey items, and potential barriers for movement; written permission from the landowner to use their land as a relocation site; and identification of a wildlife rehabilitation center or veterinary facility that routinely evaluates or treats snakes and is permitted to handle giant gartersnake. **<u>This AMM has been revised to reflect USFWS and/or CDFW permit conditions</u>**	
GGS-10 (Giant Gartersnake Pre-construction Surveys): If Covered Activities will occur within 200 feet of modeled giant gartersnake aquatic habitat, the approved biologist(s) shall conduct one pre-construction survey within 24 hours prior to beginning ground disturbing activities. The approved biologist(s) shall investigate all small mammal burrows within suitable upland habitat. The Project Area will be resurveyed whenever there is a lapse in construction activity of two weeks or more. **<u>This AMM has been revised to reflect USFWS and/or CDFW permit conditions</u>**	
Western Pond Turtle	

Project Name:

SSHCP Project Specific Avoidance and Minimization Measures

Avoidance and Minimization Measure	Project Compliance
WPT-1 (Western Pond Turtle Surveys): If the SSHCP western pond turtle modeled habitat maps (Figure 3-19) show that modeled habitat for western pond turtle is present within a Covered Activity's project footprint or within 300 feet of a project footprint, then an approved biologist will conduct a field investigation to delineate western pond turtle aquatic habitat within the project footprint and within 300 feet of the project footprint. In addition to the SSHCP land cover types shown in Figure 3-19, western pond turtle aquatic habitat includes, but is not limited to, low-gradient streams and creeks, open water, freshwater marsh, and rice fields. Adjacent parcels under different land ownership will be surveyed only if access is granted or if the parcels are visible from authorized areas. The Third-Party Project Proponent will map all existing or potential sites and provide those maps to the Local Land Use Permittees and the Implementing Entity. Locations of delineated western pond turtle habitat must also be noted on plans that are submitted to a Local Land Use Permittee. The applicant will use this information to finalize project design. Covered Activities may occur throughout the year as long as western pond turtle habitat is identified and fully avoided. Otherwise, Covered Activities must comply with WPT-2 through WPT-9. See Chapter 10 for the process to conduct and submit survey information.	
WPT-2 (Western Pond Turtle Work Window): Maintenance and improvements to existing structures may occur throughout the year as long as western pond turtle habitat is identified and avoided, and movement of equipment is confined to existing roads. Otherwise, construction and ground-disturbing Covered Activities must be conducted outside of western pond turtle's active season. Covered Activities will be initiated after May 1 and will commence prior to September 15. If it appears that these activities may go beyond September 15, the appropriate Plan Permittee will contact the Land Use Authority Permittee and the Implementing Entity as soon as possible, but not later than September 1, to determine if additional measures are necessary to minimize take. **<u>This AMM has been revised to reflect USFWS and/or CDFW permit conditions</u>**	
WPT-3 (Western Pond Turtle Monitoring): If a Covered Activity is occurring in western pond turtle modeled habitat (Figure 3-19), an approved biologist experienced with western pond turtle identification and behavior will monitor the project site, including the integrity of any exclusion fencing. The approved biologist will be on site daily while Covered Activities are taking place in aquatic habitat or within 300 feet of aquatic habitat, and will inspect the project site daily for western pond turtle prior to these activities. The approved biologist will also train construction or maintenance personnel on the required avoidance procedures, exclusion fencing, and protocols in the event that a western pond turtle enters an active construction or maintenance zone (i.e., outside the buffer zone). **<u>This AMM has been revised to reflect USFWS and/or CDFW permit conditions</u>**	
WPT-4 (Western Pond Turtle Habitat Dewatering and Exclusion): If Covered Activities will occur in western pond turtle aquatic habitat, aquatic habitat for the turtle will be dewatered and then remain dry and absent of aquatic prey (e.g., crustaceans and other aquatic invertebrates) for 15 days prior to the initiation of construction activities. If complete dewatering is not possible, the Implementing Entity will be contacted to determine what additional measures may be necessary to minimize effects to western pond turtle. After aquatic habitat has been dewatered 15 days prior to Covered Activities, exclusion fencing will be installed extending a minimum of 300 feet into adjacent uplands to isolate both the aquatic and adjacent upland habitat. Exclusionary fencing will be erected 36 inches above ground and buried at least 6 inches below the ground to prevent turtles from attempting to burrow or move under the fence into the work area. In addition, high-visibility	

fencing will be erected to identify work area limits and to protect adjacent habitat from encroachment of personnel and equipment. Western pond turtle habitat outside exclusionary fencing will be avoided by all construction or maintenance personnel. The fencing and work area will be inspected by the approved biologist to ensure that the fencing is intact and that no turtles have entered the work area before the start of each work day. Fencing will be maintained by the contractor or maintenance entity until completion of the project. If, after exclusion fencing and dewatering, western pond turtles are found within the project footprint or within 300 feet of the project footprint, the Third-Party Project Proponent will discuss the next best steps with the Implementing Entity and Wildlife Agencies. **<u>This AMM has been revised to reflect USFWS and/or CDFW permit conditions</u>**	
WPT-5 (Avoid Western Pond Turtle Entrapment): If a Covered Activity occurs within western pond turtle modeled habitat (Figure 3-19), all excavated steep-walled holes and trenches more than 6 inches deep will be covered with plywood (or similar material) or provided with one or more escape ramps constructed of earth fill or wooden planks at the end of each work day or 30 minutes prior to sunset, whichever occurs first. All steep-walled holes and trenches will be inspected by the approved biologist each morning to ensure that no wildlife has become entrapped. All construction pipes, culverts, similar structures, construction equipment, and construction debris left overnight within western pond turtle modeled habitat will be inspected for western pond turtle by the approved biologist prior to being moved.	
WPT-6 (Erosion Control Materials in Western Pond Turtle Habitat): If erosion control (BMP-2) is implemented within western pond turtle modeled habitat (Figure 3-19), non-entangling erosion control material will be used to reduce the potential for entrapment. Tightly woven fiber netting (mesh size less than 0.25 inch) or similar material will be used to ensure that turtles are not trapped (no monofilament). Coconut coir matting and fiber rolls containing burlap are examples of acceptable erosion control materials.	
WPT-7 (Western Pond Turtle Modeled Habitat Speed Limit): Covered Activity construction and maintenance vehicles will observe a 20-mile-per-hour speed limit within western pond turtle modeled upland habitat (Figure 3-19).	
WPT-8 (Western Pond Turtle Encounter Protocol): If a western pond turtle is encountered during Covered Activities, the approved biologist will notify the Wildlife Agencies immediately. Covered Activities will be suspended in a 100-foot radius of the animal until the animal leaves the project site on its own volition. If necessary, the approved biologist will notify the Wildlife Agencies to determine the appropriate procedures related to relocation. If the animal is handled, a report will be submitted, including date(s), location(s), habitat description, and any corrective measures taken to protect the turtle, within 1 business day to the Wildlife Agencies. The biologist will report any take of listed species to the U.S. Fish and Wildlife Service immediately. Any worker who inadvertently injures or kills a western pond turtle or who finds one dead, injured, or entrapped must immediately report the incident to the approved biologist. **<u>This AMM has been revised to reflect USFWS and/or CDFW permit conditions</u>**	
WPT-9 (Western Pond Turtle Post-Construction Restoration): After completion of Covered Activities, the applicant will remove any temporary fill and construction debris and will restore temporarily disturbed areas to pre-project conditions. Restoration work includes such activities as re-vegetating the banks and active channels with a seed mix similar to pre-project conditions. Appropriate methods and plant species used to re-vegetate such areas will be determined on a site-	

specific basis in consultation with the Implementing Entity. Restoration work may include replanting emergent aquatic vegetation and placing appropriate artificial or natural basking areas in waterways and wetlands. A photo documentation report showing pre- and post-project conditions will be submitted to the Implementing Entity 1 month after implementation of the restoration. **This AMM has been revised to reflect USFWS and/or CDFW permit conditions**	
Tricolored Blackbird	
Avoidance and Minimization Measure	**Project Compliance**
TCB-1 (Tricolored Blackbird Surveys): If modeled habitat for tricolored blackbird (Figure 3-26) is present within a Covered Activity's project footprint or within 500 feet of a project footprint, or if Covered Activity impacts include the Mixed Riparian Scrub land cover type, regardless of whether it is included in the modeled habitat map, then an approved biologist will conduct a field investigation to determine if existing or potential nesting or foraging sites are present within the project footprint and adjacent areas within 500 feet of the project footprint. Adjacent parcels under different land ownership will be surveyed only if access is granted or if the parcels are visible from authorized areas. Within the Plan Area, potential tricolor blackbird nest sites are often associated with freshwater marsh and seasonal wetlands, or in thickets of willow, blackberry, wild rose, thistle, and other thorny vegetation. Tricolored blackbirds are also known to nest in crops associated with dairy farms. Foraging habitat is associated with annual grasslands, wet and dry vernal pools and other seasonal wetlands, agricultural fields (such as large tracts of alfalfa and pastures with continuous haying schedules and recently tilled fields), cattle feedlots, and dairies. The Third-Party Project Proponent will map all existing or potential nesting or foraging sites and provide these maps to the Land Use Authority Permittees and Implementing Entity. Nesting sites must also be noted on plans that are submitted to a Land Use Authority Permittee. See Chapter 10 for the process to conduct and submit survey information. **This AMM has been revised to reflect USFWS and/or CDFW permit conditions**	
TCB-2 (Tricolored Blackbird Pre-Construction Surveys): Pre-construction surveys will be required to determine if active nests are present within a project footprint or within 500 feet of a project footprint if existing or potential nest sites were found during design surveys and construction activities will occur during the breeding season (March 1 through September 15). An approved biologist will conduct pre-construction surveys within 30 days and again within 3 days of ground-disturbing activities, and within the proposed project footprint and 500 feet of the proposed project footprint to determine the presence of nesting tricolored blackbird. The surveys should be separated by at least three weeks. Pre-construction surveys will be conducted during the breeding season (March 1 through September 15). Surveys conducted in February (to meet pre-construction survey requirements for work starting in March) must be conducted within 14 days and 3 days in advance of ground-disturbing activities. If a nest is present, then TCB-3 and TCB-4 will be implemented. The approved biologist will inform the Land Use Authority Permittee and the Implementing Entity of species locations, and they in turn will notify the Wildlife Agencies. . **This AMM has been revised to reflect USFWS and/or CDFW permit conditions**	
TCB-3 (Tricolored Blackbird Nest Buffer): If active nests are found within the project footprint or within 500 feet of any project-related Covered Activity, the Third-Party Project Proponent will establish a 500-foot temporary buffer around the active nest until the young have fledged.	

Project Name:

SSHCP Project Specific Avoidance and Minimization Measures

TCB-4 (Tricolored Blackbird Nest Buffer Monitoring): If nesting tricolored blackbirds are present within the project footprint or within 500 feet of any project-related Covered Activity, then an approved biologist experienced with tricolored blackbird behavior will be retained by the Third-Party Project Proponent to monitor the nest throughout the nesting season and to determine when the young have fledged. The approved biologist will be on site daily while construction-related activities are taking place near the disturbance buffer. Work within the nest disturbance buffer will not be permitted. If the approved biologist determines that tricolored blackbirds are exhibiting agitated behavior, construction will cease until the buffer size is increased to a distance necessary to result in no harm or harassment to the nesting tricolored blackbirds. If the biologist determines that the colonies are at risk, a meeting with the Third-Party Project Proponent, Implementing Entity, and Wildlife Agencies will be held to determine the best course of action to avoid nest abandonment or take of individuals. The approved biologist will also train construction personnel on the required avoidance procedures, buffer zones, and protocols in the event that a tricolored blackbird flies into an active construction zone (i.e., outside the buffer zone).	
TCB-5 (Timing of Pesticide Use and Harvest Timing on Agricultural Preserves): On SSHCP Agricultural Preserves, pesticides (including herbicides) will not be applied from January 1 through July 15.	
Swainson's Hawk	
Avoidance and Minimization Measure	**Project Compliance**
SWHA-1 (Swainson's Hawk Surveys): If modeled habitat for Swainson's hawk (Figure 3-25) is present within a Covered Activity's project footprint or within 0.25 mile of a project footprint, then an approved biologist will conduct a survey to determine if existing or potential nesting sites are present within the project footprint and adjacent areas within 0.25 mile of the project footprint. Adjacent parcels under different land ownership will be surveyed only if access is granted or if the parcels are visible from authorized areas. Nest sites are often associated with Riparian land cover, but also include lone trees in fields, trees along roadways, and trees around structures. Nest trees may include, but are not limited to, Fremont's cottonwood (*Populus fremontii*), oaks (*Quercus* spp.), willows (*Salix* spp.), walnuts (*Juglans* spp.), eucalyptus (*Eucalyptus* spp.), pines (*Pinus* spp.), and Deodar cedar (*Cedrus deodara*). The Third-Party Project Proponent will map all existing and potential nesting sites and provide these maps to the Local Land Use Permittees and Implementing Entity. Nesting sites must also be noted on plans that are submitted to a Local Land Use Permittee. See Chapter 10 for the process to conduct and submit survey information.	
SWHA-2 (Swainson's Hawk Pre-Construction Surveys): If existing or potential nest sites were found during surveys (SWHA-1), and construction activities will occur during the breeding season (March 1 through September 15), pre-construction surveys will be required to determine if active nests are present within a project footprint or within 0.25 mile of a project footprint. An approved biologist will conduct pre-construction surveys within 30 days and again within 3 days of ground-disturbing activities to determine presence of nesting Swainson's hawk. Pre-construction surveys will be conducted during the breeding season (March 1 through September 15). If a nest is present, then SWHA-3 and SWHA-4 will be implemented. The approved biologist will inform the Land Use Authority Permittee and Implementing Entity of species locations, and they in turn will notify the Wildlife Agencies. **<u>This AMM has been revised to reflect USFWS and/or CDFW permit conditions</u>**	

Project Name:

SSHCP Project Specific Avoidance and Minimization Measures

SWHA-3 (Swainson's Hawk Nest Buffer): If active nests are found within the project footprint or within 0.25 mile of any project-related Covered Activity, the Third-Party Project Proponent will establish a 0.25 mile disturbance buffer around the active nest until the young have fledged, with concurrence from the Wildlife Agencies.	
SWHA-4 (Swainson's Hawk Nest Buffer Monitoring): If nesting Swainson's hawks are present within the project footprint or within 0.25 mile of any project-related Covered Activity, then an approved biologist experienced with Swainson's hawk behavior will be retained by the Third-Party Project Proponent to monitor the nest throughout the nesting season and to determine when the young have fledged. The approved biologist will be on site daily while construction-related activities are taking place within the buffer. Work within the temporary nest disturbance buffer can occur with the written permission of the Implementing Entity and Wildlife Agencies. If nesting Swainson's hawks begin to exhibit agitated behavior, such as defensive flights at intruders, getting up from a brooding position, or flying off the nest, the approved biologist will have the authority to shut down construction activities. If agitated behavior is exhibited, the biologist, Third-Party Project Proponent, Implementing Entity, and Wildlife Agencies will meet to determine the best course of action to avoid nest abandonment or take of individuals. The approved biologist will also train construction personnel on the required avoidance procedures, buffer zones, and protocols in the event that a Swainson's hawk flies into an active construction zone (i.e., outside the buffer zone).	
SWHA-5 (Swainson's Hawk Nest Tree Avoidance): Project proponents shall avoid removal of Swainson's hawk nest trees active within the last 5 years, to the maximum extent practicable. Removal of occupied nest trees shall be timed outside of the Swainson's hawk nesting season, which would limit removal to October 1 through February 1, and shall not remove any occupied nest trees until the last young have fledged, as verified by the approved biologist. The Implementing Entity shall provide the number of Swainsons' hawk nest trees removed each year, along with nest locations, in each Annual Report submitted to CDFW. **This AMM has been revised to reflect USFWS and/or CDFW permit conditions**	
Greater Sandhill Crane	
Avoidance and Minimization Measure	**Project Compliance**
GSC-1 (Greater Sandhill Crane Surveys): If modeled habitat for greater sandhill crane (Figure 3-22) is present within a Covered Activity's project footprint or within 0.5 mile of a project footprint, then an approved biologist will conduct a field investigation to determine if existing or potential roosting sites are present within the project footprint and adjacent areas within 0.5 mile of the project footprint. Adjacent parcels under different land ownership will be surveyed only if access is granted or if the parcels are visible from authorized areas. Roosting sites within the Plan Area are often associated with flooded fields, seasonal wetlands, and freshwater marsh. The Third-Party Project Proponent will map all existing or potential roosting sites and provide these maps to the Local Land Use Permittees and Implementing Entity. Roosting sites must also be noted on plans that are submitted to a Local Land Use Permittee. See Chapter 10 for the process to conduct and submit survey information.	
GSC-2 (Greater Sandhill Crane Pre-Construction Surveys): Pre-construction surveys will be required to determine if active roosting sites are present within a project footprint or within 0.5 mile of a project footprint if existing or potential roosting sites were found during initial surveys and construction activities will occur when wintering flocks are present within the Plan Area (September 1 through March 15). An approved biologist will conduct pre-construction surveys within 15 days of	

ground-disturbing activities, and within 0.5 mile of a project footprint, to determine presence of roosting greater sandhill cranes. Pre-construction surveys will be conducted September 1 through March 15, when wintering flocks are present within the Plan Area. If birds are present, then GSC-3, GSC-4, and GSC-5 will be implemented. The approved biologist will inform the Land Use Authority Permittee and Implementing Entity of species locations, and they in turn will notify the Wildlife Agencies.	
GSC-3 (Greater Sandhill Crane Roosting Buffer): If active roosting sites are found within the project footprint or within 0.5 mile of any project-related Covered Activity, the Third-Party Project Proponent will establish a 0.5 mile temporary roosting disturbance buffer around each roosting site until the cranes have left. **<u>This AMM has been revised to reflect USFWS and/or CDFW permit conditions</u>**	
GSC-4 (Greater Sandhill Crane Visual Barrier): Greater sandhill cranes have low tolerance for human disturbance, and such disturbance has caused cranes to abandon foraging and roosting sites. Repeat disturbance affects their ability to feed and store energy needed for survival. If project-related activities occur within 0.5 mile of a known roosting site as identified by surveys conducted during implementation of GSC-1 or GSC-2, a visual barrier will be constructed.	
GSC-5 (Greater Sandhill Crane Roosting Buffer Monitoring): If roosting sites are found within the project footprint or within 0.50 mile of any project-related Covered Activity, an approved biologist experienced with greater sandhill crane behavior will be retained by the Third-Party Project Proponent to monitor the roosting site throughout the roosting season and to determine when the birds have left. The approved biologist will be on site daily while construction-related activities are taking place within the disturbance buffer. Work within the temporary disturbance buffer can only occur with the written permission of the Implementing Entity and Wildlife Agencies. If greater sandhill cranes are abandoning their roosting and/or forage sites, the approved biologist will have the authority to shut down construction activities. If roost abandonment occurs, the approved biologist, Third-Party Project Proponent, Implementing Entity, and Wildlife Agencies will meet to determine the best course of action to avoid harm and harassment of individuals. The approved biologist will also train construction personnel on the avoidance procedures, buffer zones, and protocols in the event that greater sandhill cranes move into an active construction zone (i.e., outside the buffer zone).	
Western Burrowing Owl	
Avoidance and Minimization Measure	**Project Compliance**
WBO-1 (Western Burrowing Owl Surveys): Surveys within modeled habitat are required for both the breeding and non-breeding season. If the project site falls within modeled habitat, an approved biologist will survey the project site and map all burrows, noting any burrows that may be occupied. Occupied burrows are often (but not always) indicated by tracks, feathers, egg shell fragments, pellets, prey remains, and/or excrement. Surveying and mapping will be conducted by the approved biologist while walking transects throughout the entire project site plus all accessible areas within a 250-foot radius from the project site. The centerline of these transects will be no more than 50 feet apart and will vary in width to account for changes in terrain and vegetation that can preclude complete visual coverage of the area. For example, in hilly terrain with patches of tall grass, transects will be closer together, and in open areas with little vegetation, they can be 50 feet apart. This methodology is consistent with current survey protocols for this species (California Burrowing Owl Consortium 1993). Adjacent parcels under different land ownership will be surveyed only if	

access is granted or if the parcels are visible from authorized areas. If suitable habitat is identified during the initial survey, and if the project does not fully avoid the habitat, pre-construction surveys will be required. Burrowing owl habitat is fully avoided if project-related activities do not impinge on a 250-foot buffer established by the approved biologist around suitable burrows. See Chapter 10 for the process to conduct and submit survey information.	
WBO-2 (Western Burrowing Owl Pre-Construction Surveys): Prior to any Covered Activity ground disturbance, an approved biologist will conduct pre-construction surveys in all areas that were identified as suitable habitat during the initial surveys. The purpose of the pre-construction surveys is to document the presence or absence of burrowing owls on the project site, particularly in areas within 250 feet of construction activities. To maximize the likelihood of detecting owls, the pre-construction survey will last a minimum of 3 hours. The survey will begin 1 hour before sunrise and continue until 2 hours after sunrise (3 hours total), or begin 2 hours before sunset and continue until 1 hour after sunset. Additional time may be required for large project sites. A minimum of two pre-construction surveys will be conducted (if owls are detected on the first survey, a second survey is not needed). All owls observed will be counted and their location will be mapped. Surveys will conclude no more than 2 calendar days prior to construction. Therefore, the Third-Party Project Proponent must begin surveys no more than 4 days prior to construction (2 days of surveying plus up to 2 days between surveys and construction). To avoid last-minute changes in schedule or contracting that may occur if burrowing owls are found, the Third-Party Project Proponent may also conduct a preliminary survey up to 15 days before construction. This preliminary survey may count as the first of the two required surveys as long as the second survey concludes no more than 2 calendar days in advance of construction.	
WBO-3 (Burrowing Owl Avoidance): If western burrowing owl or evidence of western burrowing owl is observed on the project site or within 250 feet of the project site during pre-construction surveys, then the following will occur: ***During Breeding Season***: If the approved biologist finds evidence of western burrowing owls within a project site during the breeding season (February 1 through August 31), all project-related activities will avoid nest sites during the remainder of the breeding season or while the nest remains occupied by adults or young (nest occupation includes individuals or family groups foraging on or near the site following fledging). Avoidance is establishment of a minimum 250-foot buffer zone around nests. Construction and other project-related activities may occur outside of the 250-foot buffer zone. Construction and other project-related activities may be allowed inside of the 250-foot non-disturbance buffer during the breeding season if the nest is not disturbed, and the Third-Party Project Proponent develops an avoidance, minimization, and monitoring plan that is approved by the Implementing Entity and Wildlife Agencies prior to project construction based on the following criteria: • The Implementing Entity and Wildlife Agencies approve of the avoidance and minimization plan provided by the project applicant. • An approved biologist monitors the owls for at least 3 days prior to construction to determine baseline nesting and foraging behavior (i.e., behavior without construction). • The same approved biologist monitors the owls during construction and finds no change in owl nesting and foraging behavior in response to construction activities. If there is any change in owl nesting and foraging behavior as a result of construction activities, the approved biologist will have authority to shut down activities within the 250-foot buffer.	

SSHCP Project Specific Avoidance and Minimization Measures

Construction cannot resume within the 250-foot buffer until any owls present are no longer affected by nearby construction activities, and with written concurrence from the Wildlife Agencies. If monitoring by the approved biologist indicates that the nest is abandoned prior to the end of nesting season and the burrow is no longer in use, the non-disturbance buffer zone may be removed if approved by the Wildlife Agencies. The approved biologist will excavate the burrow in accordance with the latest California Department of Fish and Wildlife guidelines for burrowing owl to prevent reoccupation after receiving approval from the Wildlife Agencies. The Implementing Entity and Wildlife Agencies will respond to a request from the Third-Party Project Proponent to review the proposed construction monitoring plan within 21 days. During Non-Breeding Season: During the non-breeding season (September 1 through January 31), the approved biologist will establish a minimum 250-foot non-disturbance buffer around occupied burrows. Construction activities outside of this 250-foot buffer will be allowed. Construction activities within the non-disturbance buffer will be allowed if the following criteria are met to prevent owls from abandoning over-wintering sites: • An approved biologist monitors the owls for at least 3 days prior to construction to determine baseline foraging behavior (i.e., behavior without construction). • The same approved biologist monitors the owls during construction and finds no change in owl foraging behavior in response to construction activities. • If there is any change in owl foraging behavior as a result of construction activities, the approved biologist will have authority to shut down activities within the 250-foot buffer. • If the owls are gone for at least 1 week, the Third-Party Project Proponent may request approval from the Implementing Entity and Wildlife Agencies that an approved biologist excavate usable burrows and install one-way exclusionary devices to prevent owls from re-occupying the site. After all usable burrows are excavated, the buffer zone will be removed and construction may continue. Monitoring must continue as described above for the non-breeding season as long as the burrow remains active.	
WBO-4 (Burrowing Owl Construction Monitoring): During construction of Covered Activities, 250-foot construction buffer zones will be established and maintained around any occupied burrow. An approved biologist will monitor the site to ensure that buffers are enforced and owls are not disturbed. The approved biologist will also train construction personnel on avoidance procedures, buffer zones, and protocols in the event that a burrowing owl flies into an active construction zone.	
WBO-5 (Burrowing Owl Passive Relocation): Passive relocation is not allowed without the express written approval of the Wildlife Agencies. Passive owl relocation may be allowed on a case-by-case basis on project sites during the non-breeding season (September 1 through January 31) with the written approval of the Wildlife Agencies if the other measures described in this condition preclude work from continuing. Passive relocation must be done in accordance with the latest California Department of Fish and Wildlife guidelines for burrowing owl. Passive relocation will only be proposed if the burrow needing to be removed or with the potential to collapse from construction activities is the result of a Covered Activity. If passive relocation is approved by the Wildlife Agencies, an approved biologist can passively exclude birds from their burrows during the non-breeding season by installing one-way doors in burrow entrances. These doors will be in place for	

48 hours to ensure that owls have left the burrow, and then the biologist will excavate the burrow to prevent reoccupation. Burrows will be excavated using hand tools only. During excavation, an escape route will be maintained at all times. This may include inserting an artificial structure into the burrow to avoid having materials collapse into the burrow and trap owls inside. Other methods of passive relocation, based on best available science, may be approved by the Wildlife Agencies over the 50-year Permit Term.	
WBO-6 (Burrowing Owl Timing of Maintenance Activities): All activities adjacent to existing or planned Preserves, Preserve Setbacks, or Stream Setback areas will be seasonally timed, when safety permits, to avoid or minimize adverse effects on occupied burrows.	
WBO-7 (Rodent Control): Rodent control will be allowed only in developed portions of a Covered Activity project site within western burrowing owl modeled habitat. Where rodent control is allowed, the method of rodent control will comply with the methods of rodent control discussed in the 4(d) Rule published in the U.S. Fish and Wildlife Service's (2004) final listing rule for tiger salamander.	
Covered Raptor Species To avoid direct and indirect effects of Covered Activities on covered raptor species, the following AMMs will be implemented. This measure applies to Cooper's hawk (*Accipiter cooperii*), loggerhead shrike (*Lanius ludovicianus*), northern harrier (*Circus cyaneus*), and white-tailed kite (*Elanus leucurus*). The following AMMs do not apply to ferruginous hawk (*Buteo regalis*), as they do not nest in the Plan Area. The following AMMs also do not apply to Swainson's hawk or burrowing owl, as specific AMMs have been developed for these covered raptor species.	
Avoidance and Minimization Measure	**Project Compliance**
RAPTOR-1 (Raptor Surveys): If modeled habitat for a covered raptor species (Figures 3-20, 3-23, 3-24, or 3-28) is present within a Covered Activity's project footprint or within 0.25 mile of a project footprint, then an approved biologist will conduct a field investigation to determine if existing or potential nesting sites are present within the project footprint and adjacent areas within 0.25 mile of the project footprint. Adjacent parcels under different land ownership will be surveyed only if access is granted or if the parcels are visible from authorized areas. The Third-Party Project Proponent will map all existing or potential nesting sites and provide these maps to the Local Land Use Permittees and Implementing Entity. Nesting sites must also be noted on plans that are submitted to a Local Land Use Permittee. See Chapter 10 for the process to conduct and submit survey information.	
RAPTOR-2 (Raptor Pre-Construction Surveys): Pre-construction surveys will be required to determine if active nests are present with a project footprint or within 0.25 mile of a project footprint if existing or potential nest sites are found during initial surveys and construction activities will occur during the raptor breeding season. An approved biologist will conduct pre-construction surveys within 30 days and 3 days of ground-disturbing activities within the proposed project footprint and within 0.25 mile of the proposed project footprint to determine presence of nesting covered raptor species. Pre-construction surveys will be conducted during the raptor breeding season. If a nest is present, then RAPTOR-3 and RAPTOR-4 will be implemented. The approved biologist will inform the Land Use Authority Permittee and Implementing Entity of species locations, and they in turn will notify the Wildlife Agencies.	
RAPTOR-3 (Raptor Nest/Roost Buffer): If active nests are found within the project footprint or within 0.25 mile of any project-related Covered Activity, the Third-Party Project Proponent will	

establish a 0.25 mile temporary nest disturbance buffer around the active nest until the young have fledged.	
RAPTOR-4 (Raptor Nest/Roost Buffer Monitoring): If project-related Covered Activities within the temporary nest disturbance buffer are determined to be necessary during the nesting season, then an approved biologist experienced with raptor behavior will be retained by the Third-Party Project Proponent to monitor the nest throughout the nesting season and to determine when the young have fledged. The approved biologist will be on site daily while construction-related activities are taking place within the disturbance buffer. Work within the temporary nest disturbance buffer can occur with the written permission of the Implementing Entity and Wildlife Agencies. If nesting raptors begin to exhibit agitated behavior, such as defensive flights at intruders, getting up from a brooding position, or flying off the nest, the approved biologist/monitor will have the authority to shut down construction activities. If agitated behavior is exhibited, the biologist, Third-Party Project Proponent, Implementing Entity, and Wildlife Agencies will meet to determine the best course of action to avoid nest abandonment or take of individuals. The approved biologist will also train construction personnel on the required avoidance procedures, buffer zones, and protocols in the event that a covered raptor species flies into an active construction zone (i.e., outside the buffer zone).	
Western Red Bat	
Avoidance and Minimization Measure	**Project Compliance**
BAT-1 (Maternity Roost Surveys): If modeled habitat (Figure 3-30) for western red bat is present within 300 feet of a Covered Activity's project footprint, and a Covered Activity is proposed between May 1 and August 31 (when pre-flight/nursing young may be present), then an approved biologist will conduct a field investigation of the project footprint and adjacent areas within 300 feet of the project footprint to determine if a potential maternity roost is present, and to identify and map potential maternity roost sites. Adjacent parcels under different land ownership will be surveyed only if access is granted or if the parcels are visible from authorized areas. If potential maternity roost sites are found, the Third-Party Project Proponent will note their locations on project designs and will design the project to avoid all areas within a 300-foot buffer around the potential maternity roost sites. As discussed in AMM BAT-3, maternity roost habitat is fully avoided if project-related activities do not impinge on a 300-foot buffer established by the approved biologist around an existing or potential maternity roost site. See Chapter 10 for the process for Covered Activity projects to conduct and submit project survey information. **<u>This AMM has been revised to reflect USFWS and/or CDFW permit conditions</u>**	
BAT-2 (Maternity Roost Pre-Construction Surveys): If the Third-Party Project Proponent elects not to avoid potential maternity roost sites within the project footprint plus a 300-foot buffer during May through August, additional western red bat surveys are required. Prior to any ground disturbance related to Covered Activities or staging of equipment in the project footprint, an approved biologist will conduct a pre-construction survey within 3 days of ground-disturbing activities (within the project footprint and 300 feet of the project footprint) to determine the presence of maternity roost sites. Pre-construction surveys will be conducted during the roosting season when pre-flight/nursing young may be present (May 1 through August 31). If a maternity roost is present, then AMM BAT-3 shall be implemented. The approved biologist will inform the Land Use Authority Permittee and SSHCP Implementing Entity (the South Sacramento Conservation	

Agency) of all roost sites and species locations, and they in turn will notify the Wildlife Agencies (USFWS and CDFW), and provide all survey information to the Wildlife Agencies. **<u>This AMM has been revised to reflect USFWS and/or CDFW permit conditions</u>**	
BAT-3 (Maternity Roost Buffer): If active maternity roost sites are found within the project footprint or within 300 feet of the project footprint between May 1 and August 31, the Third-Party Project Proponent will establish a 300-foot temporary disturbance buffer around the active maternity roost site until bats have vacated the roost and the Wildlife Agencies concur that the roost is vacant. Very few western red bats are expected to be present in the Action Area in the winter months (November 1 through March 31). However, if active winter hibernaculum sites are found within the project footprint or within 300 feet of the project footprint between November 1 and March 31, the Third-Party Project Proponent will establish the same 300-foot temporary disturbance buffer around the active winter hibernaculum site until bats have vacated the hibernaculum and the Wildlife Agencies concur that the hibernaculum is vacant.. **<u>This AMM has been revised to reflect USFWS and/or CDFW permit conditions</u>**	
BAT-4 (Bat Eviction Methods for Non-Maternity and Non-Hibernaculum Roosts): An approved biologist will determine if non-maternity and non-hibernaculum day and night roosts are present on the project site. If direct impacts to non-maternity and non-hibernaculum day and night roosts cannot be avoided, the Third-Party Project Proponent will prepare a bat eviction plan, and inform the Land Use Authority Permittee and the SSHCP Implementing Entity (the South Sacramento Conservation Agency). They in turn shall inform the Wildlife Agencies, and provide the bat eviction plan for review. If necessary, the approved biologist may be allowed to remove the bats using safe-eviction methods acceptable to the Wildlife Agencies. **<u>This AMM has been revised to reflect USFWS and/or CDFW permit conditions</u>**	

APPENDIX PD-1: LIST OF CANDIDATE REZONE SITES

Site #	APN	Community	Acreage Rezoned (net)	General Plan Designation (Current)	General Plan Designation (Proposed)	Zoning Designation (Current)	Zoning Designation (Proposed)	Income Category	Maximum Density (Existing)	Maximum Density (Proposed)	P max - E max
1	203-0110-047-0000	Antelope	10.00	MDR	No change	RD-20	RD-30	Lower	200	300	100
2	203-0110-069-0000	Antelope	4.66	LDR	MDR	UR	RD-30	Lower	1	139	138
3	203-0120-089-0000	Antelope	9.69	LDR	HDR	RD-20	RD-40	Lower	193	387	194
4	209-0720-027-0000	Antelope	5.28	INT IND	HDR	MP	RD-40	Lower	0	211	211
5	268-0010-007-0000, 268-0010-008-0000 & 268-0010-009-0000	Arden Arcade	1.98	MDR	No change	RD-20	RD-30	Lower	39	59	20
6	220-0025-002-0000	Carmichael/Old Foothill Farms	1.80	LDR	MDR	RD-5	RD-30	Lower	9	54	45
7	220-0311-019-0000	Carmichael/Old Foothill Farms	0.89	MDR	No change	RD-20	RD-30	Lower	17	26	9
8	230-0091-056-0000	Carmichael/Old Foothill Farms	1.32	LDR	MDR	RD-20	RD-30	Lower	26	39	13
9	236-0051-073-0000	Carmichael/Old Foothill Farms	1.33	LDR	No change	RD-5	RD-10	Moderate	6	13	7
10	240-0050-026-0000	Carmichael/Old Foothill Farms	3.01	LDR	MDR	RD-2	RD-15	Moderate	6	45	39
11	247-0220-004-0000	Carmichael/Old Foothill Farms	3.00	LDR	MDR	RD-2	RD-30	Lower	6	90	84
12	283-0020-016-0000 & 283-0020-017-0000	Carmichael/Old Foothill Farms	1.84	LDR	MDR	RD-5	RD-30	Lower	9	55	46
13	289-0042-005-0000	Carmichael/Old Foothill Farms	0.72	LDR	No change	RD-2	RD-10	Moderate	1	7	6
14	289-0600-022-0000	Carmichael/Old Foothill Farms	1.46	LDR	MDR	RD-4	RD-15	Moderate	5	21	16
15	075-0020-015-0000	Cordova	11.45	TOD	HDR	RD-20/O	RD-40/O	Lower	229	458	229
16	075-0440-024-0000	Cordova	2.45	TOD	HDR	RD-20(PC)	RD-40(PC)	Lower	49	98	49
17	235-0060-010-0000 & 235-0060-011-0000	Fair Oaks	1.26	LDR	MDR	RD-2	RD-30	Lower	2	37	35
18	244-0058-025-0000 & 244-0058-028-0000	Fair Oaks	1.63	LDR	MDR	BP	RD-30	Lower	32	48	16
19	219-0032-004-0000	North Highlands	0.97	COMM/OFF	MDR	BP	RD-20	Moderate	19	19	0
20	219-0033-001-0000	North Highlands	5.70	COMM/OFF	MDR	RD-20/BP	RD-30	Lower	114	171	57
21	219-0042-019-0000	North Highlands	3.36	COMM/OFF	MDR	BP	RD-30	Lower	67	100	33
22	222-0024-001-0000 & 222-0024-041-0000	North Highlands	9.96	LDR	MDR	RD-10	RD-30	Lower	99	298	199
23	228-0182-005-0000	North Highlands	1.22	LDR	MDR	BP	RD-30	Lower	24	36	12
24	223-0092-028-0000	Orangevale	2.18	LDR	MDR	RD-2	RD-30	Lower	4	65	61
25	261-0210-013-0000	Orangevale	1.05	MDR	HDR	RD-10	RD-40	Lower	10	42	32
26	203-0080-021-0000	Rio Linda/Elverta	1.15	LDR	MDR	RD-5	RD-30	Lower	5	34	29
27	203-0080-027-0000	Rio Linda/Elverta	5.86	AG-RES	MDR	AR-5	RD-30	Lower	1	175	174
28	214-0092-019-0000	Rio Linda/Elverta	1.52	AG-RES	MDR	RD-20	RD-30	Lower	30	45	15
29	214-0160-061-0000	Rio Linda/Elverta	3.54	MDR	No change	RD-20	RD-30	Lower	70	106	36
30	022-0252-018-0000	South Sacramento	1.77	LDR	MDR	RD-20	RD-30	Lower	35	53	18
31	026-0102-023-0000	South Sacramento	2.13	MDR	HDR	RD-20	RD-40	Lower	42	85	43
32	037-0242-027-0000 & 037-0242-028-0000	South Sacramento	1.73	LDR	MDR	LC	RD-30	Lower	51	51	0
33	039-0054-001-0000	South Sacramento	3.51	MDR	No change	RD-20	RD-30	Lower	70	105	35
34	039-0072-016-0000	South Sacramento	1.39	MDR	No change	RD-20	RD-30	Lower	27	41	14
35	039-0241-001-0000	South Sacramento	2.14	LDR	MDR	RD-20	RD-30	Lower	42	64	22
36	050-0010-076-0000	South Sacramento	1.05	COMM/OFF	HDR	GC	RD-40	Lower	31	42	11
37	050-0010-077-0000	South Sacramento	2.08	MDR	No change	RD-20	RD-30	Lower	41	62	21
38	050-0311-028-0000	South Sacramento	4.39	MDR	HDR	RD-20	RD-40	Lower	87	175	88
39	050-0331-003-0000	South Sacramento	2.35	LDR	MDR	RD-5	RD-30	Lower	11	70	59
40	050-0391-006-0000	South Sacramento	1.10	LDR	MDR	RD-5	RD-30	Lower	5	33	28
41	051-0160-014-0000	South Sacramento	1.68	MDR	HDR	RD-20	RD-40	Lower	33	67	34
42	051-0200-017-0000 & 051-0200-018-0000	South Sacramento	1.43	MDR	No change	RD-20	RD-30	Lower	28	42	14
43	051-0630-021-0000	South Sacramento	3.21	MDR	HDR	RD-20	RD-40	Lower	64	128	64
44	115-0061-007-0000	South Sacramento	1.22	LDR	MDR	RD-5	RD-15	Moderate	6	18	12
45	115-0062-026-0000	South Sacramento	3.08	LDR	HDR	RD-5	RD-40	Lower	15	123	108
46	115-0073-001-0000	South Sacramento	1.78	LDR	MDR	RD-5	RD-15	Moderate	8	26	18
47	115-0073-010-0000	South Sacramento	0.73	LDR	MDR	RD-5	RD-15	Moderate	3	10	7
48	115-0073-011-0000	South Sacramento	0.84	LDR	MDR	RD-5	RD-15	Moderate	4	12	8
49	115-0073-012-0000	South Sacramento	0.94	LDR	MDR	RD-5	RD-15	Moderate	4	14	10
50	115-0073-013-0000	South Sacramento	1.87	LDR	MDR	RD-5	RD-15	Moderate	9	28	19
51	115-0201-012-0000	South Sacramento	6.51	LDR	MDR	RD-5	RD-30	Lower	32	195	163
52	115-0201-018-0000	South Sacramento	6.98	LDR	HDR	RD-5	RD-40	Lower	34	279	245
53	115-0202-018-0000 & 115-0202-019-0000	South Sacramento	2.65	LDR	MDR	RD-5	RD-30	Lower	13	79	66
54	115-0210-010-0000	South Sacramento	4.13	LDR	MDR	RD-5	RD-15	Moderate	20	61	41
55	115-1980-003-0000	South Sacramento	3.64	MDR	HDR	RD-20	RD-40	Lower	72	145	73

Site #	APN	Community	Acreage Rezoned (net)	General Plan Designation (Current)	General Plan Designation (Proposed)	Zoning Designation (Current)	Zoning Designation (Proposed)	Income Category	Maximum Density (Existing)	Maximum Density (Proposed)	P max - E max
56	121-0120-001-0000	Vineyard	2.42	LDR	MDR	UR	RD-30	Lower	1	72	71
57	121-0120-002-0000	Vineyard	2.39	LDR	MDR	UR	RD-30	Lower	1	71	70
58	051-0640-049-0000	South Sacramento	2.26	COMM/OFF	HDR	RD-20(Stockton Boulevard NPA)	RD-40(Stockton Boulevard NPA)	Lower	45	90	45
59	115-0202-002-0000 & 115-0202-005-0000	South Sacramento	4.66	LDR	MDR	RD-5(Victory Avenue NPA)	RD-30(Victory Avenue NPA)	Lower	23	139	116
60	261-0160-018-0000	Orangevale	0.68	LDR	MDR	SPA (Greenback Lane - RD-5)	SPA (Greenback Lane - RD-15)	Moderate	3	10	7
61	261-0160-020-0000	Orangevale	0.69	LDR	No change	SPA (Greenback Lane - RD-2)	SPA (Greenback Lane - RD-10)	Moderate	1	6	5
62	261-0160-034-0000	Orangevale	0.85	LDR	No change	SPA (Greenback Lane - RD-2)	SPA (Greenback Lane - RD-10)	Moderate	1	8	7
63	261-0210-019-0000	Orangevale	1.31	MDR	HDR	SPA (Greenback Lane - RD-10)	SPA (Greenback Lane - RD-40)	Lower	13	52	39
64	261-0220-038-0000	Orangevale	1.17	COMM/OFF	MDR	SPA (Greenback Lane - BP)	SPA (Greenback Lane - RD-30)	Lower	23	35	12
65	207-0141-015-0000	Rio Linda/Elverta	3.70	COMM/OFF	MDR	SPA (Downtown Rio Linda - RD-20/NMU)	SPA (Downtown Rio Linda - RD-30)	Lower	74	111	37
66	207-0300-009-0000	Rio Linda/Elverta	3.00	MDR	No change	SPA (Downtown Rio Linda - RD-20)	SPA (Downtown Rio Linda - RD-30)	Lower	60	90	30
67	260-0310-025-0000	Carmichael/Old Foothill Farms	1.25	TOD	MDR	SPA (Fair Oaks Boulevard - BP)	SPA (Fair Oaks Boulevard - RD-30)	Lower	25	37	12
68	208-0122-066-0000	North Highlands	3.06	TOD	HDR	SPA (North Watt Avenue - RMU-1)	SPA (North Watt Avenue - RD-40)	Lower	76	122	46
69	208-0132-008-0000	North Highlands	4.62	TOD	HDR	SPA (North Watt - RMU-1)	SPA (North Watt Avenue - RD-40)	Lower	115	184	69
70	208-0162-018-0000	North Highlands	5.15	TOD	MDR	SPA (North Watt - RMU-2)	SPA (North Watt Avenue - RD-30)	Lower	103	154	51
71	208-0162-027-0000	North Highlands	6.35	TOD	MDR	SPA (North Watt - RMU-1)	SPA (North Watt Avenue - RD-30)	Lower	158	190	32
72	215-0062-057-0000	North Highlands	2.13	TOD	HDR	SPA (North Watt - RMU-1)	SPA (North Watt Avenue - RD-40)	Lower	53	85	32
73	043-0070-005-0000	South Sacramento	2.80	MDR	No change	SPA (Old Florin Town - MUR)	SPA (Old Florin Town - RD-30)	Lower	56	84	28
74	043-0070-034-0000	South Sacramento	4.70	MDR	No change	SPA (Old Florin Town - MUR)	SPA (Old Florin Town - RD-30)	Lower	94	141	47
75	043-0230-021-0000	South Sacramento	2.43	MDR	No change	SPA (Old Florin Town - MUR)	SPA (Old Florin Town - RD-30)	Lower	48	72	24
76	043-0230-022-0000	South Sacramento	4.70	MDR	No change	SPA (Old Florin Town - MUR)	SPA (Old Florin Town - RD-30)	Lower	94	141	47
77	051-0030-012-0000	South Sacramento	5.82	MDR	No change	SPA (Old Florin Town - MUR/MUC)	SPA (Old Florin Town - RD-30)	Lower	116	174	58
78	051-0061-018-0000	South Sacramento	2.26	MDR	HDR	SPA (Old Florin Town - MUR)	SPA (Old Florin Town - RD-40)	Lower	45	90	45
79	065-0020-012-0000 & 065-0020-045-0000	South Sacramento	2.51	MDR	No change	SPA (Old Florin Town - MUR)	SPA (Old Florin Town - RD-30)	Lower	50	75	25
											4,081

APPENDIX AES-1: CANDIDATE REZONE SITES HEIGHT PERMISSIONS TABLE

APPENDIX AES-1: HEIGHT PERMISSIONS TABLE

The below table provides a comprehensive list of height permissions for the candidate rezone sites, comparing the existing and proposed maximum height permitted by-right.

Site Number	APN	Current Zoning Designation	Current Permitted Height (Feet)	Proposed Zoning Designation	Proposed Permitted Height (Feet)
1	203-0080-027-0000	AR-5	50	RD-30	40
2	244-0058-025-0000 244-0058-028-0000	BP	50	RD-30	40
3	219-0032-004-0000	BP	50	RD-20	40
4	219-0042-019-0000	BP	50	RD-30	40
5	228-0182-005-0000	BP	50	RD-30	40
6	050-0010-076-0000	GC	150	RD-40	150
7	037-0242-027-0000 037-0242-028-0000	LC	150	RD-30	150
8	209-0720-027-0000	MP	40	RD-40	40
9	222-0024-001-0000 222-0024-041-0000	RD-10	30	RD-30	40
10	261-0210-013-0000	RD-10	30	RD-40	40
11	240-0050-026-0000	RD-2	30	RD-15	40
12	247-0220-004-0000	RD-2	30	RD-30	40
13	289-0042-005-0000	RD-2	30	RD-10	30
14	235-0060-010-0000 235-0060-011-0000	RD-2	30	RD-30	40
15	223-0092-028-0000	RD-2	30	RD-30	40
16	203-0110-047-0000	RD-20	40	RD-30	40
17	203-0120-089-0000	RD-20	45	RD-40	150
18	268-0010-007-0000 268-0010-008-0000 268-0010-009-0000	RD-20	45	RD-30	150
19	220-0311-019-0000	RD-20	45	RD-30	150
20	230-0091-056-0000	RD-20	40	RD-30	40
21	214-0092-019-0000	RD-20	40	RD-30	40
22	214-0160-061-0000	RD-20	40	RD-30	40
23	022-0252-018-0000	RD-20	40	RD-30	40

Site Number	APN	Current Zoning Designation	Current Permitted Height (Feet)	Proposed Zoning Designation	Proposed Permitted Height (Feet)
24	026-0102-023-0000	RD-20	45	RD-40	150
25	039-0054-001-0000	RD-20	40	RD-30	40
26	039-0072-016-0000	RD-20	40	RD-30	40
27	039-0241-001-0000	RD-20	40	RD-30	40
28	050-0010-077-0000	RD-20	45	RD-30	150
29	050-0311-028-0000	RD-20	45	RD-40	150
30	051-0160-014-0000	RD-20	40	RD-40	40
31	051-0200-017-0000 051-0200-018-0000	RD-20	40	RD-30	40
32	051-0630-021-0000	RD-20	40	RD-40	40
33	115-1980-003-0000	RD-20	45	RD-40	150
34	075-0440-024-0000	RD-20(PC)	40	RD-40	40
35	219-0033-001-0000	RD-20/BP	50	RD-30	40
36	051-0640-049-0000	RD-20/NPA (Stockton Blvd)	40	RD-40	40
37	075-0020-015-0000	RD-20/O	40	RD-40/O	40
38	289-0600-022-0000	RD-4	30	RD-15	40
39	220-0025-002-0000	RD-5	30	RD-30	40
40	236-0051-073-0000	RD-5	30	RD-10	30
41	283-0020-016-0000 283-0020-017-0000	RD-5	30	RD-30	40
42	203-0080-021-0000	RD-5	30	RD-30	40
43	050-0331-003-0000	RD-5	30	RD-30	40
44	050-0391-006-0000	RD-5	30	RD-30	40
45	115-0061-007-0000	RD-5	30	RD-15	40
46	115-0062-026-0000	RD-5	30	RD-40	40
47	115-0073-001-0000	RD-5	30	RD-15	40
48	115-0073-010-0000	RD-5	30	RD-15	40
49	115-0073-011-0000	RD-5	30	RD-15	40
50	115-0073-012-0000	RD-5	30	RD-15	40
51	115-0073-013-0000	RD-5	30	RD-15	40
52	115-0201-012-0000	RD-5	30	RD-30	40
53	115-0201-018-0000	RD-5	30	RD-40	40

Site Number	APN	Current Zoning Designation	Current Permitted Height (Feet)	Proposed Zoning Designation	Proposed Permitted Height (Feet)
54	115-0202-018-0000 115-0202-019-0000	RD-5	30	RD-30	40
55	115-0210-010-0000	RD-5	30	RD-15	40
56	115-0202-002-0000 115-0202-005-0000	RD-5/NPA (Victory Avenue)	20	RD-30	40
57	207-0141-015-0000	SPA (Downtown Rio Linda – RD-20/NMU)	45	RD-30	150
58	207-0300-009-0000	SPA (Downtown Rio Linda – RD-20/NMU)	45	RD-30	40
59	260-0310-025-0000	SPA (Fair Oaks Central - BP)	50	RD-30	40
60	261-0220-038-0000	SPA (Greenback Ln - BP)	40	RD-30	40
61	261-0210-019-0000	SPA (Greenback Ln - RD-10)	24	RD-40	40
62	261-0160-020-0000	SPA (Greenback Ln - RD-2)	24	RD-10	30
63	261-0160-034-0000	SPA (Greenback Ln - RD-2)	24	RD-10	30
64	261-0160-018-0000	SPA (Greenback Ln - RD-5)	40	RD-15	40
65	208-0122-066-0000	SPA (North Watt - RMU-1)	45	RD-40	45
66	208-0132-008-0000	SPA (North Watt - RMU-1)	45	RD-40	45

Site Number	APN	Current Zoning Designation	Current Permitted Height (Feet)	Proposed Zoning Designation	Proposed Permitted Height (Feet)
67	208-0162-027-0000	SPA (North Watt - RMU-1)	45	RD-30	45
68	215-0062-057-0000	SPA (North Watt - RMU-1)	45	RD-40	45
69	208-0162-018-0000	SPA (North Watt - RMU-2)	45	RD-30	45
70	043-0070-005-0000	SPA (Old Florin Town - MUR)	50	RD-30	50
71	043-0070-034-0000	SPA (Old Florin Town - MUR)	50	RD-30	50
72	043-0230-021-0000	SPA (Old Florin Town - MUR)	50	RD-30	50
73	043-0230-022-0000	SPA (Old Florin Town - MUR)	50	RD-30	50
74	065-0020-012-0000 065-0020-045-0000	SPA (Old Florin Town - MUR)	50	RD-30	50
75	051-0030-012-0000	SPA (Old Florin Town - MUR/MUC)	50	RD-30	50
76	051-0061-018-0000	SPA (Old Florin Town - MUR/MUC)	50	RD-40	50
77	203-0110-069-0000	UR	50	RD-30	40
78	121-0120-001-0000	UR	50	RD-30	40
79	121-0120-002-0000	UR	50	RD-30	40

APPENDIX AQ-1: AIR QUALITY, GREENHOUSE GAS EMISSIONS, AND ENERGY MODELING OUTPUTS

Project Charactistics and Land Use Types

Fair Oaks Land Uses (previous)					Fair Oaks Land Uses (rezoned)				
Land Use Subtype	**Size**	**Unit**	**Lot Acreag**	**landscape Area**	**Land Use Subtype**	**Size**	**Unit**	**Lot Acreage**	**landscape A**
Low Rise Apartments	25	Units	1.25	10890	Mid Rise Apartments	37	Units	1.25	10890

Fair Oaks Schedule					
Phase	**CalEEMod**	**% of total**	**New Work**	**Start**	**end**
~~Demolition~~	~~10~~	0.0%	0.0		
Site Prep	1	0.9%	1.0	1/1/2025	1/1/2025
Grading	2	1.8%	2.0	1/2/2025	1/3/2025
BC	100	88.5%	100.0	1/4/2025	5/23/2025
Paving	5	4.4%	5.0	5/24/2025	5/30/2025
AC	5	4.4%	5.0	5/31/2025	6/6/2025
Total	113	1	113		

North Watt Land Uses (previous)					North Watt Land Uses (rezoned)				
Land Use Subtype	**Size**	**Unit**	**Lot Acreag**	**landscape Area**	**Land Use Subtype**	**Size**	**Unit**	**Lot Acreage**	**landscape A**
Low Rise Apartments	505	Units	21.31	185652.72	Mid Rise Apartments	735	Units	21.31	185652.72

North Watt Schedule					
Phase	**CalEEMod**	**% of total**	**New Work**	**Start**	**end**
~~Demolition~~	~~20~~	0.0%	0		
Site Prep	10	2.2%	10	6/7/2025	6/20/2025
Grading	35	7.7%	35	6/21/2025	8/8/2025
BC	370	81.3%	370	8/9/2025	1/8/2027
Paving	20	4.4%	20	1/9/2027	2/5/2027
AC	20	4.4%	20	2/6/2027	3/5/2027
Total	455	1	455		

Old Florin Land Uses (previous)					Old Florin Land Uses (rezoned				
Land Use Subtype	**Size**	**Unit**	**Lot Acreag**	**landscape Area**	**Land Use Subtype**	**Size**	**Unit**	**Lot Acreage**	**landscape A**
Low Rise Apartments	503	Units	25.22	219716.64	Mid Rise Apartments	777	Units	25.22	219716.64

Old Florin Schedule					
Phase	**CalEEMod**	**% of total**	**New Work**	**Start**	**end**
~~Demolition~~	~~20~~	0.0%	0		
Site Prep	10	2.2%	10	3/6/2027	3/19/2027
Grading	35	7.7%	35	3/20/2027	5/7/2027
BC	370	81.3%	370	5/8/2027	10/6/2028
Paving	20	4.4%	20	10/7/2028	11/1/2028
AC	20	4.4%	20	11/2/2028	11/27/2028
Total	455	1	455		

Main Rezone Land Uses (previous)					Main Rezone Land Uses (rezone)				
Land Use Subtype	**Size**	**Unit**	**Lot Acreag**	**landscape Area**	**Land Use Subtype**	**Size**	**Unit**	**Lot Acreage**	**landscape A**
Low Rise Apartments	2305	Units	187.7423	1635611.12	Mid Rise Apartments	5870	Units	187.7423232	1635611.1

Main Rezone Schedule					
Phase	**CalEEMod**	**% of total**	**New Work**	**Start**	**end**
Demolition	200	0.0%	10.0	1/1/2025	1/14/2025
Site Prep	120	3.0%	39.1	1/15/2025	3/10/2025
Grading	310	7.8%	101.0	3/11/2025	7/29/2025
BC	3100	78.1%	1010.4	7/30/2025	6/12/2029
Paving	220	5.5%	71.7	6/13/2029	9/20/2029
AC	220	5.5%	71.7	9/21/2029	12/31/2029
Total	3970	1	1294		

25% total Project before					25% total Project after				
Land Use Subtype	**Size**	**Unit**	**Lot Acreag**	**landscape Area**	**Land Use Subtype**	**Size**	**Unit**	**Lot Acreage**	**landscape A**
Low Rise Apartments	461	Units	37.54846	327122.224	Mid Rise Apartments	1174	Units	37.54846465	327122.22

Main Rezone Schedule						Before				After			
Phase	**CalEEMod**	**% of total**	**New Work**	**Start**	**end**	**% of total**	**New Workda**	**Start**	**end**
Demolition	70	0.0%	0.0			0.0%	10.0	1/1/2025	1/14/2025
Site Prep	40	2.8%	7.4	1/1/2025	1/9/2025	2.9%	7.2	1/15/2025	1/23/2025
Grading	110	7.8%	20.4	1/10/2025	2/6/2025	7.9%	19.7	1/24/2025	2/20/2025
BC	1110	78.7%	205.5	2/7/2025	11/21/2025	79.3%	199.0	2/21/2025	11/26/2025
Paving	75	5.3%	13.9	11/22/2025	12/11/2025	5.4%	13.4	11/27/2025	12/15/2025
AC	75	5.3%	13.9	12/12/2025	12/31/2025	5.4%	13.4	12/16/2025	12/31/2025
Total	1410	1	261			1.00714286			
total w den	1400		251						

Yearly Construction

Before Rezone

	Units	Acres	Acreage pe	Units per a	Landscape SF
Main Rezoı	2305	187.7423	0.084381	11.85095	1635611
Fair Oaks	25	1.25	0.05	20	10890
North Watl	505	21.31	0.042198	23.69779	185652.7
Old Florin F	503	25.22	0.050139	19.94449	219716.6
Total	**3338**	**235.5223**	**0.072593**	**13.77548**	**2051870**

After Rezone

	Units	Acres	Acreage pe	Units per a	Landscape SF
Main Rezoı	5870	187.7423	0.032037	31.21401	1635611
Fair Oaks	37	1.25	0.033784	29.6	10890
North Watl	735	21.31	0.028993	34.49085	185652.7
Old Florin F	777	25.22	0.032458	30.80888	219716.6
Total	**7419**	**235.5223**	**0.031795**	**31.45148**	**2051870**

Each Year

Before Rezone

Units	Acres	Acreage pe	Units per a	Landscape	building SF
461	37.54846	0.016876	2.37019	327122.2	488660

After Rezone

Units	Acres	Acreage pe	Units per a	Landscape SF
1174	37.54846	0.006407	6.242801	327122.2

Project Summary

Project Totals: **82 sites** **236 acres** **4081 New units**

	Before Rezone					After Rezone					Difference	
	Units	**Acres**	**Acreage pe**	**Units per a**	**Landscape SF**	**Units**	**Acres**	**Acreage pe**	**Units per a**	**Landscape SF**	**Region**	**Units**
Main Rezoning	2305	187.742323	0.08145	12.27747	1635611.1	5870	187.7423	0.031983	31.26626	1635611	Main Rezoning	3565
Fair Oaks	25	1.25	0.05	20	10890	37	1.25	0.033784	29.6	10890	Fair Oaks	12
North Watt	505	21.31	0.042198	23.69779	185652.72	735	21.31	0.028993	34.49085	185652.7	North Watt	230
Old Florin Road	503	25.22	0.050139	19.94449	219716.64	777	25.22	0.032458	30.80888	219716.6	Old Florin Road	274
Total	**3338**	**235.522323**	**0.070558**	**14.17275**	**2051870.5**	**7419**	**235.5223**	**0.031746**	**31.5002**	**2051870**	**Total**	4081

Distinct Community Planning Areas

Zone	**Site #**	**Net increase**	**Acres**	**Old Subzor**	**New Subzoi**	**Note:**
Fair Oaks Boulevard Corridor Plan	71	12	1.25	BP	RD-30	
North Watt Avenue Corridor Plan	72-76	230	21.31	RMU-1, RM	RD-40, RD-3	Up to 20 units/acre
Old Florin Town SPA	77-83	274	25.22	MUR, MUC	RD-30, RD-4	Up to 20 units/acre

SF in an acre: 43560

Kari Comments:
Assume no NG
Assume no fireplaces

Houses demolished:	20	
Average size sacramento house (as of de	1851	source: https://fred.stlouisfed.org/series/MEDSQUFEE40900
SF demolished:	37020	
Acres demolished:	0.849862	
20% SF demolished:	7404	

TOTAL REZONE

Background Information						Capacity Analysis / VLI #s				CEQA #s						
Site #	Lot size / P	General Pl	General Pl	Zoning Des	Zoning De	Income Category	Capacity Adjusted Units (Lower)	Capacity Adjusted Units (Moderate)	Existing Ca	Net Increase	Minimum Density (Existing)	Maximum	Minimum	Maximum	P max - E max	Notes re: Other Applicable LU Plans	Column1	Column2
1	10	MDR	No change	RD-20	RD-30	Lower	192	0	128	64	150	200	225	300	100			
2	4.66	LDR	MDR	UR	RD-30	Lower	63	0	1	62	1	1	105	139	138			
3	9.69	LDR	HDR	RD-20	RD-40 - PO	Lower	201	0	101	100	146	193	291	387	194			
4	5.28	INT IND	HDR	MP	RD-40	Lower	118	0	0	118	0	0	159	211	211			
5	1.98	MDR	No change	RD-20	RD-30 - PO	Lower	35	0	23	12	30	39	45	59	20			
6	1.8	LDR	MDR	RD-5	RD-30	Lower	25	0	5	20	7	9	41	54	45			
7	0.89	MDR	No change	RD-20	RD-30	Lower	15	0	10	5	14	17	21	26	9			
8	1.32	LDR	MDR	RD-20	RD-30	Lower	16	0	11	5	20	26	30	39	13			
9	1.33	LDR	No change	RD-5	RD-10	Moderate	0	7	4	3	5	6	10	13	7			
10	3.01	LDR	MDR	RD-2	RD-15	Moderate	0	28	4	24	5	6	34	45	39			
11	3	LDR	MDR	RD-2	RD-30	Lower	39	0	3	36	5	6	68	90	84			
12	1.84	LDR	MDR	RD-5	RD-30 - PO	Lower	28	0	5	23	7	9	42	55	46			
13	0.72	LDR	No change	RD-2	RD-10	Moderate	0	3	1	2	1	1	6	7	6			
14	1.46	LDR	MDR	RD-4	RD-15	Moderate	0	11	3	8	5	5	17	21	16			
15	11.45	TOD	HDR	RD-20/O	RD-40/O	Lower	283	0	142	141	172	229	344	458	229			
16	2.45	TOD	HDR	RD-20(PC)	RD-40	Lower	58	0	29	29	37	49	74	98	49			
17	1.26	LDR	MDR	RD-2	RD-30 - PO	Lower	21	0	2	19	2	2	29	37	35			
18	1.63	LDR	MDR	BP	RD-30	Lower	24	0	16	8	25	32	37	48	16			
19	0.97	COMM/OF	MDR	BP	RD-20 - PO	Moderate	0	10	10	0	15	19	15	19	0			
20	5.7	COMM/OF	MDR	RD-20/BP	RD-30	Lower	43	0	29	14	86	114	129	171	57			
21	3.36	COMM/OF	MDR	BP	RD-30 - PO	Lower	38	0	25	13	51	67	76	100	33			
22	9.96	LDR	MDR	RD-10	RD-30	Lower	124	0	42	82	75	99	225	298	199			
23	1.22	LDR	MDR	BP	RD-30	Lower	20	0	13	7	19	24	28	36	12			
24	2.18	LDR	MDR	RD-2	RD-30	Lower	31	0	3	28	4	4	50	65	61			
25	1.05	MDR	HDR	RD-10	RD-40	Lower	17	0	5	12	8	10	32	42	32			
26	1.15	LDR	MDR	RD-5	RD-30 - PO	Lower	22	0	4	18	5	5	26	34	29			
27	5.86	AG-RES	MDR	AR-5	RD-30 - PO	Lower	99	0	1	98	1	1	132	175	174			
28	1.52	AG-RES	MDR	RD-20	RD-30	Lower	17	0	11	6	23	30	35	45	15			
29	3.54	MDR	No change	RD-20	RD-30	Lower	63	0	42	21	54	70	80	106	36			
30	1.77	LDR	MDR	RD-20	RD-30	Lower	31	0	21	10	27	35	40	53	18			
31	2.13	MDR	HDR	RD-20	RD-40	Lower	40	0	27	13	32	42	64	85	43			
32	1.73	LDR	MDR	LC	RD-30 - PO	Lower	30	0	30	0	39	51	39	51	0			
33	3.51	MDR	No change	RD-20	RD-30	Lower	46	0	31	15	53	70	79	105	35			
34	1.39	MDR	No change	RD-20	RD-30	Lower	24	0	16	8	21	27	32	41	14			
35	2.14	LDR	MDR	RD-20	RD-30	Lower	36	0	24	12	33	42	49	64	22			
36	1.05	COMM/OF	HDR	GC	RD-40	Lower	25	0	19	6	24	31	32	42	11			
37	2.08	MDR	No change	RD-20	RD-30	Lower	35	0	24	11	32	41	47	62	21			
38	4.39	MDR	HDR	RD-20	RD-40	Lower	117	0	59	58	66	87	132	175	88			
39	2.35	LDR	MDR	RD-5	RD-30	Lower	34	0	6	28	9	11	53	70	59			
40	1.1	LDR	MDR	RD-5	RD-30 - PO	Lower	16	0	3	13	5	5	25	33	28			
41	1.68	MDR	HDR	RD-20	RD-40	Lower	33	0	17	16	26	33	51	67	34			
42	1.43	MDR	No change	RD-20	RD-30	Lower	25	0	17	8	22	28	33	42	14			
43	3.21	MDR	HDR	RD-20	RD-40	Lower	74	0	37	37	49	64	97	128	64			
44	1.22	MDR	MDR	RD-5	RD-15	Moderate	0	8	1	7	5	6	14	18	12			
45	3.08	MDR	HDR	RD-5	RD-40	Lower	84	0	1	83	12	15	93	123	108			
46	1.78	MDR	MDR	RD-5	RD-15	Moderate	0	13	1	12	7	8	21	26	18			
47	0.73	LDR	MDR	RD-5	RD-15	Moderate	0	6	3	3	3	3	9	10	7			
48	0.84	LDR	MDR	RD-5	RD-15	Moderate	0	7	11	-4	4	4	10	12	8			
49	0.94	LDR	MDR	RD-5	RD-15	Moderate	0	8	5	3	4	4	11	14	10			
50	1.87	LDR	MDR	RD-5	RD-15	Moderate	0	12	2	10	8	9	22	28	19			
51	6.51	LDR	MDR	RD-5	RD-30 - PO	Lower	115	0	3	112	25	32	147	195	163			
52	6.98	LDR	HDR	RD-5	RD-40	Lower	181	0	3	178	27	34	210	279	245			
53	2.65	LDR	MDR	RD-5	RD-30 - PO	Lower	33	0	4	29	10	13	60	79	66			
54	4.13	LDR	MDR	RD-5	RD-15	Moderate	0	34	20	14	16	20	47	61	41			
55	3.64	LDR	HDR	RD-20	RD-40	Lower	70	0	23	47	55	72	110	145	73			
56	2.42	LDR	MDR	UR	RD-30 - PO	Lower	33	0	6	27	1	1	55	72	71			
57	2.39	LDR	MDR	UR	RD-30 - PO	Lower	35	0	12	23	1	1	54	71	70			
58	2.26	MDR	HDR	RD-20/NPA	RD-40	Lower	54	0	35	19	34	45	68	90	45			
59	4.66	LDR	MDR	RD-5/NPA	RD-30 - PO	Lower	80	0	1	79	18	23	105	139	116			
60	0.682323	LDR	MDR	SPA (Greer	RD-15	Moderate	0	4	1	3	3	3	8	10	7			
61	0.69	COMM/OF	No change	SPA (Greer	RD-10	Moderate	0	3	27	-24	1	1	6	6	5	Stockton Blvd NPA - amend NPA to not require discretionary review by COPC for this site		
62	0.85	LDR	No change	SPA (Greer	RD-10	Moderate	0	2	14	-12	1	1	7	8	7	Victory Avenue NPA - amend NPA to not require discretionary review by COPC for this site		
63	1.31	LDR	HDR	SPA (Greer	RD-40	Lower	20	0	2	18	10	13	40	52	39	Greenback Lane SPA - review 506-22 (no exist SF uses on sites), consider adding sites to 506-23(b) to explicitly state only MF uses permitted, no Development Plan Review		
64	1.17	LDR	MDR	SPA (Greer	RD-30	Lower	20	0	1	19	18	23	27	35	12	Greenback Lane SPA - review 506-22 (no existing SF uses on sites), consider adding sites to 506-23(b) to explicitly state only MF uses permitted, no Development Plan Review		
65	3.7	LDR	MDR	SPA (Down	RD-30	Lower	60	0	1	59	56	74	84	111	37	Greenback Lane SPA - review 506-22 (no existing SF uses on sites), consider adding sites to 506-23(b) to explicitly state only MF uses permitted, no Development Plan Review		
66	3	MDR	No change	SPA (Down	RD-30	Lower	26	0	7	19	45	60	68	90	30	Greenback Lane SPA - review 506-22 (no existing SF uses on sites), consider adding sites to 506-23(b) to explicitly state only MF uses permitted, no Development Plan Review		
67	1.25	COMM/OF	MDR	SPA (Fair O	RD-30	Lower	22	0	13	9	19	25	29	37	12	Greenback Lane SPA - review 506-22 (no existing SF uses on sites), consider adding sites to 506-23(b) to explicitly state only MF uses permitted, no Development Plan Review		
68	3.06	COMM/OF	HDR	SPA (North	RD-40	Lower	65	0	40	25	58	76	92	122	46	Downtown Rio Linda SPA - RD-20/NMU allows up to 20 units/acre		
69	4.62	MDR	HDR	SPA (North	RD-40	Lower	98	0	18	80	87	115	139	184	69	Downtown Rio Linda SPA - RD-20/NMU allows up to 20 units/acre		
70	5.15	TOD	MDR	SPA (North	RD-30	Lower	82	0	15	67	78	103	116	154	51			
71	6.35	TOD	MDR	SPA (North	RD-30 - PO	Lower	101	0	41	60	120	158	143	190	32	North Watt SPA - RMU-1 allows up to 25 units/acre		
72	2.13	TOD	HDR	SPA (North	RD-40	Lower	45	0	61	-16	40	53	64	85	32	North Watt SPA - RMU-1 allows up to 25 units/acre		
73	2.8	TOD	No change	SPA (Old Fl	RD-30	Lower	53	0	55	-2	42	56	63	84	28	North Watt SPA - RMU-2 allows up to 20 units/acre		
74	4.7	TOD	No change	SPA (Old Fl	RD-30	Lower	101	0	84	17	71	94	106	141	47	North Watt SPA - RMU-1 allows up to 25 units/acre		
75	2.43	TOD	No change	SPA (Old Fl	RD-30	Lower	49	0	28	21	37	48	55	72	24	North Watt SPA - RMU-1 allows up to 25 units/acre		
76	4.7	MDR	No change	SPA (Old Fl	RD-30	Lower	94	0	36	58	71	94	106	141	47	Old Florin Town SPA - MUR allows up to 20 units/acre		
77	5.82	MDR	No change	SPA (Old Fl	RD-30	Lower	86	0	67	19	88	116	131	174	58	Old Florin Town SPA - MUR allows up to 20 units/acre		
78	2.26	MDR	HDR	SPA (Old Fl	RD-40 - PO	Lower	45	0	33	12	34	45	68	90	45	Old Florin Town SPA - MUR allows up to 20 units/acre		
79	2.51	MDR	No change	SPA (Old Fl	RD-30 - PO	Lower	47	0	63	-16	38	50	57	75	25	Old Florin Town SPA - MUR allows up to 20 units/acre		
	235.5223	TOTAL AC	186.95	181.15			3963	156		2140	2558	3338	5624	7419	4081			
	21.22	To MDR	109.43			LOWER	MODERATE			NET NEW UNITS		2305						

Main Rezone

Background Information						CEQA #s				
Site #	Lot size / F	General Pl	General Pl	Zoning Des	Zoning Des	Minimum Density (Existing)	Maximum	Minimum	Maximum Density (F	P max - E max
1	10	MDR	No change	RD-20	RD-30	150	200	225	300	100
2	4.66	LDR	MDR	UR	RD-30	1	1	105	139	138
3	9.69	LDR	HDR	RD-20	RD-40 - PO	146	193	291	387	194
4	5.28	INT IND	HDR	MP	RD-40	0	0	159	211	211
5	1.98	MDR	No change	RD-20	RD-30 - PO	30	39	45	59	20
6	1.8	LDR	MDR	RD-5	RD-30	7	9	41	54	45
7	0.89	MDR	No change	RD-20	RD-30	14	17	21	26	9
8	1.32	LDR	MDR	RD-20	RD-30	20	26	30	39	13
9	1.33	LDR	No change	RD-5	RD-10	5	6	10	13	7
10	3.01	LDR	MDR	RD-2	RD-15	5	6	34	45	39
11	3	LDR	MDR	RD-2	RD-30	5	6	68	90	84
12	1.84	LDR	MDR	RD-5	RD-30 - PO	7	9	42	55	46
13	0.72	LDR	No change	RD-2	RD-10	1	1	6	7	6
14	1.46	LDR	MDR	RD-4	RD-15	5	5	17	21	16
15	11.45	TOD	HDR	RD-20/O	RD-40/O	172	229	344	458	229
16	2.45	TOD	HDR	RD-20(PC)	RD-40	37	49	74	98	49
17	1.26	LDR	MDR	RD-2	RD-30 - PO	2	2	29	37	35
18	1.63	LDR	MDR	BP	RD-30	25	32	37	48	16
19	0.97	COMM/OF	MDR	BP	RD-20 - PO	15	19	15	19	0
20	5.7	COMM/OF	MDR	RD-20/BP	RD-30	86	114	129	171	57
21	3.36	COMM/OF	MDR	BP	RD-30 - PO	51	67	76	100	33
22	9.96	LDR	MDR	RD-10	RD-30	75	99	225	298	199
23	1.22	LDR	MDR	BP	RD-30	19	24	28	36	12
24	2.18	LDR	MDR	RD-2	RD-30	4	4	50	65	61
25	1.05	MDR	HDR	RD-10	RD-40	8	10	32	42	32
26	1.15	LDR	MDR	RD-5	RD-30 - PO	5	5	26	34	29
27	5.86	AG-RES	MDR	AR-5	RD-30 - PO	1	1	132	175	174
28	1.52	AG-RES	MDR	RD-20	RD-30	23	30	35	45	15
29	3.54	MDR	No change	RD-20	RD-30	54	70	80	106	36
30	1.77	LDR	MDR	RD-20	RD-30	27	35	40	53	18
31	2.13	MDR	HDR	RD-20	RD-40	32	42	64	85	43
32	1.73	LDR	MDR	LC	RD-30 - PO	39	51	39	51	0
33	3.51	MDR	No change	RD-20	RD-30	53	70	79	105	35
34	1.39	MDR	No change	RD-20	RD-30	21	27	32	41	14
35	2.14	LDR	MDR	RD-20	RD-30	33	42	49	64	22
36	1.05	COMM/OF	HDR	GC	RD-40	24	31	32	42	11
37	2.08	MDR	No change	RD-20	RD-30	32	41	47	62	21
38	4.39	MDR	HDR	RD-20	RD-40	66	87	132	175	88
39	2.35	LDR	MDR	RD-5	RD-30	9	11	53	70	59
40	1.1	LDR	MDR	RD-5	RD-30 - PO	5	5	25	33	28
41	1.68	MDR	HDR	RD-20	RD-40	26	33	51	67	34
42	1.43	MDR	No change	RD-20	RD-30	22	28	33	42	14
43	3.21	MDR	HDR	RD-20	RD-40	49	64	97	128	64
44	1.22	MDR	MDR	RD-5	RD-15	5	6	14	18	12
45	3.08	MDR	HDR	RD-5	RD-40	12	15	93	123	108
46	1.78	MDR	MDR	RD-5	RD-15	7	8	21	26	18
47	0.73	LDR	MDR	RD-5	RD-15	3	3	9	10	7
48	0.84	LDR	MDR	RD-5	RD-15	4	4	10	12	8
49	0.94	LDR	MDR	RD-5	RD-15	4	4	11	14	10
50	1.87	LDR	MDR	RD-5	RD-15	8	9	22	28	19
51	6.51	LDR	MDR	RD-5	RD-30 - PO	25	32	147	195	163
52	6.98	LDR	HDR	RD-5	RD-40	27	34	210	279	245
53	2.65	LDR	MDR	RD-5	RD-30 - PO	10	13	60	79	66
54	4.13	LDR	MDR	RD-5	RD-15	16	20	47	61	41
55	3.64	LDR	HDR	RD-20	RD-40	55	72	110	145	73
56	2.42	LDR	MDR	UR	RD-30 - PO	1	1	55	72	71
57	2.39	LDR	MDR	UR	RD-30 - PO	1	1	54	71	70
58	2.26	MDR	HDR	RD-20/NPA	RD-40	34	45	68	90	45
59	4.66	LDR	MDR	RD-5/NPA	RD-30 - PO	18	23	105	139	116
60	0.682323	LDR	MDR	SPA (Green	RD-15	3	3	8	10	7
61	0.69	COMM/OF	No change	SPA (Green	RD-10	1	1	6	6	5
62	0.85	LDR	No change	SPA (Green	RD-10	1	1	7	8	7
63	1.31	LDR	HDR	SPA (Green	RD-40	10	13	40	52	39
64	1.17	LDR	MDR	SPA (Green	RD-30	18	23	27	35	12
65	3.7	LDR	MDR	SPA (Down	RD-30	56	74	84	111	37
66	3	MDR	No change	SPA (Down	RD-30	45	60	68	90	30
	187.7423						**2305**		**5870**	**3565**
							Total Existing		Total Proposed	Net Increase

Fair Oaks

Background Information							Capacity Analysis / VLI #s					CEQA #s						
Site #	Communit	Lot size / P	General Pla	General Pla	Zoning Des	Zoning Des	Income Ca	Capacity A	Capacity A	Existing Ca	Net Increa	Minimum [	Maximum Density (Existing)		Minimum [	Maximum Density (Proposed)		P max - E	Notes re: Other Applicable LU Plans
70	Carmichae	1.25	TOD	MDR	SPA (Fair O	RD-30	Lower	22	0	15	7	19	25		29	37		12	
totals		1.25										total existing			total proposed			Net increase	
													25			37		12	

North Watt

Background Information						Capacity Analysis / VLI #s				CEQA #s					
Site #	Community	Lot size / Pa	General Pla	Zoning Des	Zoning Des	Income Cat	Capacity Ac	Capacity Ac	Existing Ca	Net Increas	Minimum D	Maximum	Minimum D	Maximum	P max - E m	Notes re: Other Applicable LU Plans
71	North High	3.06	HDR	SPA (North	RD-40	Lower	65	0	41	24	58	76	92	122	46	North Watt SPA - RMU-1 allows up to 25 units/acre
72	North High	4.62	HDR	SPA (North	RD-40	Lower	98	0	61	37	87	115	139	184	69	North Watt SPA - RMU-1 allows up to 25 units/acre
73	North High	5.15	MDR	SPA (North	RD-30	Lower	82	0	55	27	78	103	116	154	51	North Watt SPA - RMU-2 allows up to 20 units/acre
74	North High	6.35	MDR	SPA (North	RD-30 - PO	Lower	101	0	84	17	120	158	143	190	32	North Watt SPA - RMU-1 allows up to 25 units/acre
75	North High	2.13	HDR	SPA (North	RD-40	Lower	45	0	28	17	40	53	64	85	32	North Watt SPA - RMU-1 allows up to 25 units/acre
Totals		21.31										505		735	230	
												total existing		total propc	Net increase	

Old Florin

Background Information							Capacity Analysis / VLI #s					CEQA #s					
Site #	Community	Lot size / Pr	General Pla	General Pla	Zoning Des	Zoning Des	Income Cat	Capacity Ac	Capacity Ac	Existing Ca	Net Increas	Minimum D	Maximum I	Minimum D	Maximum I	P max - E m	Notes re: Other Applicable LU Plans
76	South Sacra	2.8	MDR	No change	SPA (Old Fl	RD-30	Lower	53	0	36	17	42	56	63	84	28	Old Florin Town SPA - MUR allows up to 20 units/acre
77	South Sacra	4.7	MDR	No change	SPA (Old Fl	RD-30	Lower	101	0	67	34	71	94	106	141	47	Old Florin Town SPA - MUR allows up to 20 units/acre
78	South Sacra	2.43	MDR	No change	SPA (Old Fl	RD-30	Lower	49	0	33	16	37	48	55	72	24	Old Florin Town SPA - MUR allows up to 20 units/acre
79	South Sacra	4.7	MDR	No change	SPA (Old Fl	RD-30	Lower	94	0	63	31	71	94	106	141	47	Old Florin Town SPA - MUR allows up to 20 units/acre
80	South Sacra	5.82	MDR	No change	SPA (Old Fl	RD-30	Lower	86	0	57	29	88	116	131	174	58	Old Florin Town SPA - MUR/MUC allows up to 20 units/acre
81	South Sacra	2.26	MDR	HDR	SPA (Old Fl	RD-40 - PO	Lower	45	0	23	22	34	45	68	90	45	Old Florin Town SPA - MUR/MUC allows up to 20 units/acre
82	South Sacra	2.51	MDR	No change	SPA (Old Fl	RD-30 - PO	Lower	47	0	31	16	38	50	57	75	25	Old Florin Town SPA - MUR allows up to 20 units/acre
Totals		25.22											503		777	274	
													total existing		total propo	Net increase	

Summary Tables

Maximum Daily Construction Emissions (after rezone)

Year	ROG (lb/day)	NO_X (lb/day)	PM_{10} (lb/day)	$PM_{2.5}$ (lb/day)	PM_{10} (tpy)	$PM_{2.5}$ (tpy)	Regions
Maximum Daily Emissions							
2025	72	63	19	10	1.5	0.5	Main, Fair Oaks/North Watt
2026	91	45	16	7	1.9	0.5	Main, North Watt
2027	92	56	19	10	1.7	0.5	Main, North Watt/Old Florin
2028	93	42	16	7	1.7	0.5	Main, Old Florin
2029	68	26	10	5	1.1	0.3	Main

Maximum Daily Construction Emissions (before rezone)

Year	ROG (lb/day)	NO_X (lb/day)	PM_{10} (lb/day)	$PM_{2.5}$ (lb/day)	PM_{10} (tpy)	$PM_{2.5}$ (tpy)	Regions
Maximum Daily Emissions							
2025	31	63	18	10	0.9	0.3	Main, Fair Oaks/North Watt
2026	46	43	14	6	1.1	0.3	Main, North Watt
2027	46	56	18	10	1.0	0.4	Main, North Watt/Old Florin
2028	44	40	13	6	0.9	0.3	Main, Old Florin
2029	28	26	9	5	0.5	0.2	Main

Maximum Daily Construction Emissions (difference)

Year	ROG (lb/day)	NO_X (lb/day)	PM_{10} (lb/day)	$PM_{2.5}$ (lb/day)	PM_{10} (tpy)	$PM_{2.5}$ (tpy)	Regions
Maximum Daily Emissions							
2025	41	0	1	0	1	0	Main, Fair Oaks/North Watt
2026	45	2	3	0	1	0	Main, North Watt
2027	47	0	1	0	1	0	Main, North Watt
2028	49	2	3	1	1	0	Main, North Watt/Old Florin
2029	40	0	1	0	1	0	Main, Old Florin

Annual Construction GHG Emissions (after rezone) (unmitigated operations)

Year	Phase				Operations	Total CO2e/year
	Main	Fair Oaks	North Watt	Old Florin		
2025	1479	106	619	0	0	2204
2026	1457	0	1204	0	0	2661
2027	1432	0	52	940	0	2424
2028	1403	0	0	957	0	2360
2029	1386	0	0	0	0	1386
Operations (Unmit)					51236.5	51236
Operations (Mit)					45959.5	45959

Annual Construction GHG Emissions (before rezone)

Year	Phase				Operations	Total CO2e/year
	Main	Fair Oaks	North Watt	Old Florin		
2025	785	100	502	0	0	1387
2026	776	0	916	0	0	1692
2027	766	0	42.8	721	0	1530
2028	756	0	0	704	0	1460
2029	747	0	0	0	0	747
Operations (Unmit)					30337.1	30337
Operations (Mit)					28075.1	28075

Annual Construction GHG Emissions (difference)

Year	Phase				Operations	Total CO2e/year
	Main	Fair Oaks	North Watt	Old Florin		
2025	694	6	117	0	0	817
2026	681	0	288	0	0	969
2027	666	0	9.2	219	0	894
2028	647	0	0	253	0	900
2029	639	0	0	0	0	639
Operations (unmit)					20899.34	20899
Operations (mit)					17884.34	17884

Emissions Per Capita (after rezone)

Year	ROG (lb/day)	NO_x (lb/day)	PM_{10} (lb/day)	$PM_{2.5}$ (lb/day)	PM_{10} (tpy)	$PM_{2.5}$ (tpy)	Regions
Maximum Daily Emissions							
2025	0.00347	0.00305	0.00092	0.00050	0.00007	0.00002	Main, Fair Oaks/North Watt
2026	0.00439	0.00216	0.00078	0.00033	0.00009	0.00003	Main, North Watt
2027	0.00445	0.00270	0.00091	0.00049	0.00008	0.00003	Main, North Watt/Old Florin
2028	0.00448	0.00202	0.00079	0.00033	0.00008	0.00002	Main, Old Florin
2029	0.00326	0.00125	0.00047	0.00024	0.00005	0.00001	Main
Average	0.00401	0.00224	0.00078	0.00038	0.00008	0.000022	

Emissions Per Capita (before rezone)

Year	ROG (lb/day)	NO_x (lb/day)	PM_{10} (lb/day)	$PM_{2.5}$ (lb/day)	PM_{10} (tpy)	$PM_{2.5}$ (tpy)	Regions
Maximum Daily Emissions							
2025	0.00336	0.00678	0.00197	0.00112	0.00009	0.00003	Main, Fair Oaks/North Watt
2026	0.00489	0.00461	0.00145	0.00069	0.00012	0.00004	Main, North Watt
2027	0.00489	0.00599	0.00193	0.00108	0.00011	0.00004	Main, North Watt/Old Florin
2028	0.00474	0.00428	0.00143	0.00067	0.00010	0.00003	Main, Old Florin
2029	0.00300	0.00278	0.00096	0.00053	0.00005	0.00002	Main
Average	0.00418	0.00489	0.00155	0.00082	0.00009	0.000031	

Annual GHG Emissions Per Capita (tons per person)			
Year	Before Rezone	After Rezone	
2025	0.14839	0.10610	-0.04229
2026	0.18102	0.12810	-0.05292
2027	0.16367	0.11669	-0.04698
2028	0.15620	0.11361	-0.04259
2029	0.07992	0.06672	-0.01320
2030+ (Unmit)	3.24565	2.46649	
2030+ (Mit)	3.00365	2.21246	

0.79119

Main Rezone Pop (after)	16435	Note: Population output is multiplied by 5 since 1 year contains one fifth of project
Fair Oaks Pop (after)	104	
North Watt Pop (after)	2058	
Old Florin Pop (after)	2176	
TOTAL POP (AFTER)	**20773**	

Main Rezone Pop (before)	6455
Fair Oaks Pop (before)	70
North Watt Pop (before)	1414
Old Florin Pop (before)	1408
TOTAL POP (before)	**9347**

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Nar	Sac Rezone after (2025)
Constructic	1/1/2025
Lead Agency	
Land Use S	Project/site
Analysis Le	County
Windspeec	3
Precipitatic	36.6
Location	38.496642743017276, -121.4302236650689
County	Sacramento
City	Unincorporated
Air District	Sacramento Metropolitan AQMD
Air Basin	Sacramento Valley
TAZ	732
EDFZ	13
Electric Uti	Sacramento Municipal Utility District
Gas Utility	Pacific Gas & Electric
App Versio	2022.1.1.21

1.2. Land Use Types

Land Use S	Size	Unit	Lot Acreag	Building Ar	Landscape	Special Lan	Population	Description
Apartment	1174	Dwelling U	37.5	1127040	327122		3287	

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Un/Mit.	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Unmit.	5.64	67.77536	19.5	66.4	0.05	0.48	9.49	9.97	0.45	2.26	2.7		15623	15623	0.48	0.9	46.3	15948
Daily, Winter (Max)																		
Unmit.	5.3	67.77536	31.7	53.1	0.06	1.37	9.49	9.97	1.26	3.98	5.24		14544	14544	0.54	0.9	1.2	14826
Average Daily (Max)																		
Unmit.	3.32	31.8	14.2	32.8	0.03	0.4	5.5	5.9	0.37	1.38	1.74		8767	8767	0.3	0.5	11	8934
Annual (Max)																		
Unmit.	0.61	5.8	2.59	5.98	0.01	0.07	1	1.08	0.07	0.25	0.32		1451	1451	0.05	0.08	1.83	1479

2.2. Construction Emissions by Year, Unmitigated

Year	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily - Summer (Max)																		
2025	5.64	67.77536	19.5	66.4	0.05	0.48	9.49	9.97	0.45	2.26	2.7		15623	15623	0.48	0.9	46.3	15948
Daily - Winter (Max)																		
2025	5.3	67.77536	31.7	53.1	0.06	1.37	9.49	9.97	1.26	3.98	5.24		14544	14544	0.54	0.9	1.2	14826
Average Daily																		
2025	3.32	31.8	14.2	32.8	0.03	0.4	5.5	5.9	0.37	1.38	1.74		8767	8767	0.3	0.5	11	8934
Annual																		
2025	0.61	5.8	2.59	5.98	0.01	0.07	1	1.08	0.07	0.25	0.32		1451	1451	0.05	0.08	1.83	1479

3. Construction Emissions Details

3.1. Demolition (2025) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Off-Road E	2.86	2.4	22.2	19.9	0.03	0.92		0.92	0.84		0.84		3425	3425	0.14	0.03		3437
Demolition							0.75	0.75		0.11	0.11							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Off-Road E	0.08	0.07	0.61	0.55	< 0.005	0.03		0.03	0.02		0.02		93.8	93.8	< 0.005	< 0.005		94.2
Demolition							0.02	0.02		< 0.005	< 0.005							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Off-Road E	0.01	0.01	0.11	0.1	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		15.5	15.5	< 0.005	< 0.005		15.6
Demolition							< 0.005	< 0.005		< 0.005	< 0.005							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Worker	0.06	0.06	0.06	0.67	0	0	0.15	0.15	0	0.04	0.04		151	151	< 0.005	0.01	0.02	153
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0.08	0.02	1.23	0.45	< 0.005	0.01	0.16	0.17	0.01	0.04	0.06		637	637	0.06	0.1	0.03	669
Average Daily																		
Worker	< 0.005	< 0.005	< 0.005	0.02	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005		4.25	4.25	< 0.005	< 0.005	0.01	4.31
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0

Report Tables

Daily Max

Year	ROG	NOx	PM10	PM2.5	CO2	PM10	PM2.5
2025	68	32	10	5	1479	1.08	0.32

diesel PM 1.37

Yearly

Year	ROG	NOx	PM10	PM2.5	CO2	PM10	PM2.5
2025	68	32	10	5	1479	1.08	0.32

Fuel Calcs

Tons/year

Year	Gasoline	Diesel
2025	813.77	665.31

Hauling	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	17.5	17.5	< 0.005	< 0.005	0.02	18.3
Annual																	
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005	0.7	0.7	< 0.005	< 0.005	< 0.005	0.71
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	2.89	2.89	< 0.005	< 0.005	< 0.005	3.04

3.3. Site Preparation (2025) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Off-Road E	3.94	3.31	31.6	30.2	0.05	1.37		1.37	1.26		1.26		5295	5295	0.21	0.04		5314
Dust From Material Movement							7.67	7.67		3.94	3.94							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Off-Road E	0.08	0.06	0.61	0.58	< 0.005	0.03		0.03	0.02		0.02		102	102	< 0.005	< 0.005		102
Dust From Material Movement							0.15	0.15		0.08	0.08							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Off-Road E	0.01	0.01	0.11	0.11	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		16.8	16.8	< 0.005	< 0.005		16.9
Dust From Material Movement							0.03	0.03		0.01	0.01							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Worker	0.07	0.07	0.06	0.78	0	0	0.18	0.18	0	0.04	0.04		176	176	< 0.005	0.01	0.02	179
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Worker	< 0.005	< 0.005	< 0.005	0.02	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005		3.47	3.47	< 0.005	< 0.005	0.01	3.52
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005		0.57	0.57	< 0.005	< 0.005	< 0.005	0.58
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0

3.5. Grading (2025) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Off-Road E	3.8	3.2	29.7	28.3	0.06	1.23		1.23	1.14		1.14		6599	6599	0.27	0.05		6622
Dust From Material Movement							3.59	3.59		1.42	1.42							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Off-Road E	0.21	0.18	1.63	1.55	< 0.005	0.07		0.07	0.06		0.06		362	362	0.01	< 0.005		363
Dust From Material Movement							0.2	0.2		0.08	0.08							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Off-Road E	0.04	0.03	0.3	0.28	< 0.005	0.01		0.01	0.01		0.01		59.9	59.9	< 0.005	< 0.005		60.1
Dust From Material Movement							0.04	0.04		0.01	0.01							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Worker	0.08	0.08	0.07	0.89	0	0	0.2	0.2	0	0.05	0.05		202	202	< 0.005	0.01	0.02	204
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Worker	< 0.005	< 0.005	< 0.005	0.05	0	0	0.01	0.01	0	< 0.005	< 0.005		11.3	11.3	< 0.005	< 0.005	0.02	11.5
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Worker	< 0.005	< 0.005	< 0.005	0.01	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005		1.88	1.88	< 0.005	< 0.005	< 0.005	1.9
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0

3.7. Building Construction (2025) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Off-Road E	1.35	1.13	10.4	13	0.02	0.43		0.43	0.4		0.4		2398	2398	0.1	0.02		2406
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Daily, Winter (Max)																		
Off-Road E	1.35	1.13	10.4	13	0.02	0.43		0.43	0.4		0.4		2398	2398	0.1	0.02		2406
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0

Average Daily																	
Off-Road E	0.73	0.61	5.69	7.11	0.01	0.24		0.24	0.22		0.22	1307	1307	0.05	0.01		1312
Onsite truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual																	
Off-Road E	0.13	0.11	1.04	1.3	< 0.005	0.04		0.04	0.04		0.04	216	216	0.01	< 0.005		217
Onsite truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Offsite																	
Daily, Summer (Max)																	
Worker	3.89	3.57	2.46	50.9	0	0	8.54	8.54	0	2	2	9595	9595	0.15	0.34	36.8	9737
Vendor	0.4	0.16	6.58	2.44	0.02	0.05	0.95	1	0.05	0.26	0.3	3630	3630	0.24	0.54	9.44	3805
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily, Winter (Max)																	
Worker	3.56	3.18	3.13	37.5	0	0	8.54	8.54	0	2	2	8518	8518	0.2	0.34	0.96	8626
Vendor	0.39	0.13	7.03	2.5	0.02	0.05	0.95	1	0.05	0.26	0.31	3628	3628	0.24	0.54	0.25	3794
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Average Daily																	
Worker	1.93	1.74	1.52	20.9	0	0	4.55	4.55	0	1.06	1.06	4766	4766	0.09	0.19	8.66	4833
Vendor	0.22	0.08	3.78	1.34	0.01	0.03	0.51	0.54	0.03	0.14	0.17	1979	1979	0.13	0.29	2.22	2071
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual																	
Worker	0.35	0.32	0.28	3.81	0	0	0.83	0.83	0	0.19	0.19	789	789	0.02	0.03	1.43	800
Vendor	0.04	0.02	0.69	0.24	< 0.005	0.01	0.09	0.1	0.01	0.03	0.03	328	328	0.02	0.05	0.37	343
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

3.9. Paving (2025) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Off-Road E	0.95	0.8	7.45	9.98	0.01	0.35		0.35	0.32		0.32		1511	1511	0.06	0.01		1517
Paving		0																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Off-Road E	0.03	0.03	0.27	0.36	< 0.005	0.01		0.01	0.01		0.01		53.8	53.8	< 0.005	< 0.005		54
Paving		0																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Off-Road E	0.01	0.01	0.05	0.06	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		8.91	8.91	< 0.005	< 0.005		8.94
Paving		0																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Worker	0.06	0.06	0.06	0.67	0	0	0.15	0.15	0	0.04	0.04		151	151	< 0.005	0.01	0.02	153
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Worker	< 0.005	< 0.005	< 0.005	0.02	0	0	0.01	0.01	0	< 0.005	< 0.005		5.53	5.53	< 0.005	< 0.005	0.01	5.6
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005		0.91	0.91	< 0.005	< 0.005	< 0.005	0.93
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0

3.11. Architectural Coating (2025) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Off-Road E	0.15	0.13	0.88	1.14	< 0.005	0.03		0.03	0.03		0.03		134	134	0.01	< 0.005		134
Architectural Coatings		882																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Off-Road E	0.01	< 0.005	0.03	0.04	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		4.39	4.39	< 0.005	< 0.005		4.4
Architectural Coatings		29																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Off-Road E	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		0.73	0.73	< 0.005	< 0.005		0.73
Architectural Coatings		5.29																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Worker	0.71	0.64	0.63	7.5	0	0	1.71	1.71	0	0.4	0.4		1704	1704	0.04	0.07	0.19	1725
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0

Average Daily																	
Worker	0.02	0.02	0.02	0.25	0	0	0.05	0.05	0	0.01	0.01	57.5	57.5	< 0.005	< 0.005	0.1	58.3
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual																	
Worker	< 0.005	< 0.005	< 0.005	0.05	0	0	0.01	0.01	0	< 0.005	< 0.005	9.52	9.52	< 0.005	< 0.005	0.02	9.65
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Vegetation	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Species	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		
Removed																		
Subtotal																		
Daily, Winter (Max)																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		
Removed																		
Subtotal																		
Annual																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		
Removed																		
Subtotal																		

5. Activity Data

5.1. Construction Schedule

Phase Nam	Phase Type	Start Date	End Date	Days Per W	Work Days	Phase Description
Demolition	Demolition	1/1/2025	1/14/2025	5	10	
Site Prepar	Site Prepar	1/15/2025	1/23/2025	5	7	
Grading	Grading	1/24/2025	2/20/2025	5	20	
Building Cc	Building Cc	2/21/2025	########	5	199	
Paving	Paving	########	########	5	13	
Architectur	Architectur	########	########	5	12	

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Nam	Equipment	Fuel Type	Engine Tier	Number pe	Hours Per I	Horsepowe	Load Factor
Demolition	Rubber Tire	Diesel	Average	2	8	367	0.4
Demolition	Excavators	Diesel	Average	3	8	36	0.38
Demolition	Concrete/Ir	Diesel	Average	1	8	33	0.73
Site Prepar	Rubber Tire	Diesel	Average	3	8	367	0.4
Site Prepar	Tractors/Lc	Diesel	Average	4	8	84	0.37
Grading	Graders	Diesel	Average	1	8	148	0.41
Grading	Excavators	Diesel	Average	2	8	36	0.38
Grading	Tractors/Lc	Diesel	Average	2	8	84	0.37

Grading	Scrapers	Diesel	Average	2	8	423	0.48
Grading	Rubber Tire	Diesel	Average	1	8	367	0.4
Building Cc	Forklifts	Diesel	Average	3	8	82	0.2
Building Cc	Generator :	Diesel	Average	1	8	14	0.74
Building Cc	Cranes	Diesel	Average	1	7	367	0.29
Building Cc	Welders	Diesel	Average	1	8	46	0.45
Building Cc	Tractors/Lc	Diesel	Average	3	7	84	0.37
Paving	Pavers	Diesel	Average	2	8	81	0.42
Paving	Paving Equ	Diesel	Average	2	8	89	0.36
Paving	Rollers	Diesel	Average	2	8	36	0.38
Architectur	Air Compre	Diesel	Average	1	6	37	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Nam	Trip Type	One-Way T	Miles per T	Vehicle Mix
Demolition				
Demolition	Worker	15	14.3	LDA,LDT1,LDT2
Demolition	Vendor		8.8	HHDT,MHDT
Demolition	Hauling	8.6	20	HHDT
Demolition	Onsite truck			HHDT
Site Preparation				
Site Prepar	Worker	17.5	14.3	LDA,LDT1,LDT2
Site Prepar	Vendor		8.8	HHDT,MHDT
Site Prepar	Hauling	0	20	HHDT
Site Prepar	Onsite truck			HHDT
Grading				
Grading	Worker	20	14.3	LDA,LDT1,LDT2
Grading	Vendor		8.8	HHDT,MHDT
Grading	Hauling	0	20	HHDT
Grading	Onsite truck			HHDT
Building Construction				
Building Cc	Worker	845	14.3	LDA,LDT1,LDT2
Building Cc	Vendor	126	8.8	HHDT,MHDT
Building Cc	Hauling	0	20	HHDT
Building Cc	Onsite truck			HHDT
Paving				
Paving	Worker	15	14.3	LDA,LDT1,LDT2
Paving	Vendor		8.8	HHDT,MHDT
Paving	Hauling	0	20	HHDT
Paving	Onsite truck			HHDT
Architectural Coating				
Architectur	Worker	169	14.3	LDA,LDT1,LDT2
Architectur	Vendor		8.8	HHDT,MHDT
Architectur	Hauling	0	20	HHDT
Architectur	Onsite truck			HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Str	PM10 Redu	PM2.5 Reduction

5.5. Architectural Coatings

Phase Nam	Residential	Residential	Non-Reside	Non-Reside	Parking Area Coated (sq ft)
Architectur	2282256	760752	0	0	

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Nam	Material Im	Material Ex	Acres Grad	Material De	Acres Paved (acres)
Demolition	0	0	0	7404	
Site Preparation			10.5	0	
Grading			60	0	
Paving	0	0	0	0	

5.6.2. Construction Earthmoving Control Strategies

Control Str	Frequency	PM10 Redu	PM2.5 Reduction
Water Expo	2	61	61

5.7. Construction Paving

Land Use	Area Paved	% Asphalt
Apartments Mid Rise	0	

5.8. Construction Electricity Consumption and Emissions Factors

Year	kWh per Ye	CO2	CH4	N2O
2025	0	375	0.01	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation	Vegetation Initial Acres	Final Acres

5.18.1. Biomass Cover Type
5.18.1.1. Unmitigated

Biomass Cc	Initial Acres	Final Acres

5.18.2. Sequestration
5.18.2.1. Unmitigated

Tree Type	Number	Electricity S	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report
6.1. Climate Risk Summary
Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Ha	Result for F	Unit
Temperatu	19.3	annual days of extreme heat
Extreme Pr	5.7	annual days with precipitation above 20 mm
Sea Level Rise		meters of inundation depth
Wildfire	0	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different a

6.2. Initial Climate Risk Scores

Climate Ha	Exposure S	Sensitivity	Adaptive C	Vulnerability Score
Temperatu	1	0	0	N/A
Extreme Pr	2	0	0	N/A
Sea Level R	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack I	N/A	N/A	N/A	N/A
Air Quality	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Ha	Exposure S	Sensitivity	Adaptive C	Vulnerability Score
Temperatu	1	1	1	2
Extreme Pr	2	1	1	3
Sea Level R	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack I	N/A	N/A	N/A	N/A
Air Quality	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures
7. Health and Equity Details
7.1. CalEnviroScreen 4.0 Scores
The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	
AQ-Ozone	40
AQ-PM	35.1
AQ-DPM	76.8
Drinking W	78.5
Lead Risk H	72.2
Pesticides	0
Toxic Relea	22.2
Traffic	82
Effect Indicators	
CleanUp Si	51.3
Groundwat	82.5
Haz Waste	10.2
Impaired W	43.8
Solid Waste	0
Sensitive Population	
Asthma	89.8
Cardio-vasc	78.3
Low Birth W	53.5
Socioeconomic Factor Indicators	
Education	87.3

Housing	99.3
Linguistic	93.9
Poverty	87.8
Unemployr	81.7

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	
Above Pov	15.01347
Employed	17.64404
Median HI	2.065957
Education	
Bachelor's	23.94457
High schoo	100
Preschool e	52.58565
Transportation	
Auto Acces	6.351854
Active com	46.04132
Social	
2-parent h	26.27999
Voting	29.56499
Neighborhood	
Alcohol ava	31.10484
Park access	62.08136
Retail dens	73.19389
Supermark	94.25125
Tree canop	79.53291
Housing	
Homeowne	13.08867
Housing ha	6.108046
Low-inc ho	69.52393
Low-inc re	0.898242
Uncrowdec	24.76582
Health Outcomes	
Insured ad	41.04966
Arthritis	88
Asthma ER	8.1
High Blood	55
Cancer (ex	98
Asthma	2.1
Coronary H	86
Chronic Ob	29
Diagnosed	49
Life Expect	3.1
Cognitively	9.6
Physically	14
Heart Attac	14
Mental Hea	5
Chronic Kic	73
Obesity	10
Pedestrian	90
Physical He	19
Stroke	52
Health Risk Behaviors	
Binge Drink	70
Current Sm	1.9
No Leisure	17
Climate Change Exposures	
Wildfire Ris	0
SLR Inunda	0
Children	11
Elderly	80
English Spe	12
Foreign-bo	66
Outdoor W	48
Climate Change Adaptive Capacity	
Impervious	20
Traffic Den	77
Traffic Acc	87
Other Indices	
Hardship	93
Other Decision Support	
2016 Votin	10

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract

CalEnviroSc	86
Healthy Pla	14
Project Loc	Yes
Project Loc	Yes
Project Loc	South Florin

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

Measure Ti	Co-Benefits Achieved

7.5. Evaluation Scorecard

Category	Number of	Total Point	Max Possib	Weighted Score

7.6. Health & Equity Custom Measures

Measure Ti	Sponsor

8. User Changes to Default Data

Screen	Justification
Land Use	1/5th of project in 2025
Constructic	1/5th of project

ı four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
ıssumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Nar	Sac Rezone after (2026)
Constructic	1/1/2026
Lead Agency	
Land Use S	Project/site
Analysis Le	County
Windspeec	3
Precipitatic	36.6
Location	38.496642743017276, -121.4302236650689
County	Sacramento
City	Unincorporated
Air District	Sacramento Metropolitan AQMD
Air Basin	Sacramento Valley
TAZ	732
EDFZ	13
Electric Uti	Sacramento Municipal Utility District
Gas Utility	Pacific Gas & Electric
App Versio	2022.1.1.21

1.2. Land Use Types

Land Use S	Size	Unit	Lot Acreag	Building Ar	Landscape	Special Lan	Population	Description
Apartment	1174	Dwelling U	37.5	1127040	327122		3287	

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Un/Mit.	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Unmit.	5.38	67.77536	18.2	62.9	0.05	0.43	9.49	9.92	0.4	2.26	2.65		15362	15362	0.46	0.88	42.2	15677
Daily, Winter (Max)																		
Unmit.	4.81	67.77536	29.2	50.4	0.06	1.24	9.49	9.92	1.14	3.98	5.12		14307	14307	0.52	0.89	1.1	14588
Average Daily (Max)																		
Unmit.	3.02	31.7	13.2	31.2	0.03	0.36	5.5	5.86	0.33	1.38	1.71		8633	8633	0.3	0.5	10.1	8799
Annual (Max)																		
Unmit.	0.55	5.78	2.41	5.69	0.01	0.06	1	1.07	0.06	0.25	0.31		1429	1429	0.05	0.08	1.67	1457

2.2. Construction Emissions by Year, Unmitigated

Year	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily - Summer (Max)																		
2026	5.38	67.77536	18.2	62.9	0.05	0.43	9.49	9.92	0.4	2.26	2.65		15362	15362	0.46	0.88	42.2	15677
Daily - Winter (Max)																		
2026	4.81	67.77536	29.2	50.4	0.06	1.24	9.49	9.92	1.14	3.98	5.12		14307	14307	0.52	0.89	1.1	14588
Average Daily																		
2026	3.02	31.7	13.2	31.2	0.03	0.36	5.5	5.86	0.33	1.38	1.71		8633	8633	0.3	0.5	10.1	8799
Annual																		
2026	0.55	5.78	2.41	5.69	0.01	0.06	1	1.07	0.06	0.25	0.31		1429	1429	0.05	0.08	1.67	1457

3. Construction Emissions Details

3.1. Demolition (2026) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Off-Road Ei	2.72	2.29	20.7	19	0.03	0.84		0.84	0.78		0.78		3427	3427	0.14	0.03		3438
Demolition							0.75	0.75		0.11	0.11							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Off-Road Ei	0.07	0.06	0.57	0.52	< 0.005	0.02		0.02	0.02		0.02		93.9	93.9	< 0.005	< 0.005		94.2
Demolition							0.02	0.02		< 0.005	< 0.005							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Off-Road Ei	0.01	0.01	0.1	0.1	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		15.5	15.5	< 0.005	< 0.005		15.6
Demolition							< 0.005	< 0.005		< 0.005	< 0.005							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Worker	0.06	0.05	0.05	0.62	0	0	0.15	0.15	0	0.04	0.04		148	148	< 0.005	0.01	0.02	150
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0.07	0.02	1.17	0.44	< 0.005	0.01	0.16	0.17	0.01	0.04	0.06		623	623	0.06	0.1	0.03	655
Average Daily																		
Worker	< 0.005	< 0.005	< 0.005	0.02	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005		4.17	4.17	< 0.005	< 0.005	0.01	4.23
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005		17.1	17.1	< 0.005	< 0.005	0.02	18
Annual																		
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005		0.69	0.69	< 0.005	< 0.005	< 0.005	0.7
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005		2.83	2.83	< 0.005	< 0.005	< 0.005	2.97

3.3. Site Preparation (2026) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Off-Road Ei	3.74	3.14	29.2	28.8	0.05	1.24		1.24	1.14		1.14		5298	5298	0.21	0.04		5316
Dust From Material Movement							7.67	7.67		3.94	3.94							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Off-Road Ei	0.07	0.06	0.56	0.55	< 0.005	0.02		0.02	0.02		0.02		102	102	< 0.005	< 0.005		102

Report Tables

Daily Max

Year	ROG	NOx	PM10	PM2.5	CO2	PM10	PM2.5
2026	68	29	10	5	1457	1.07	0.31

diesel PM 1.24

	Off road	Vendor/haul
demo	15.6	2.97
SP	16.9	
Grading	60.1	
BC	217	336
Paving	8.94	
AC	0.73	
total		658.24

Yearly

Tons/year

Year	Gasoline	Diesel
2026	798.51	658.24

Fuel Calcs

Dust From Material Movement							0.15	0.15		0.08	0.08							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual																		
Off-Road E	0.01	0.01	0.1	0.1	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		16.8	16.8	< 0.005	< 0.005		16.9
Dust From Material Movement							0.03	0.03		0.01	0.01							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Worker	0.07	0.06	0.06	0.73	0	0	0.18	0.18	0	0.04	0.04		173	173	< 0.005		0.01	0.02	175
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0
Average Daily																		
Worker	< 0.005	< 0.005	< 0.005	0.01	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005		3.4	3.4	< 0.005	< 0.005	0.01	3.45	
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0
Annual																		
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005		0.56	0.56	< 0.005	< 0.005	< 0.005	0.57	
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0

3.5. Grading (2026) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Off-Road E	3.62	3.04	27.2	27.6	0.06	1.12		1.12	1.03		1.03		6599	6599	0.27	0.05		6621
Dust From Material Movement							3.59	3.59		1.42	1.42							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Off-Road E	0.2	0.17	1.49	1.51	< 0.005	0.06		0.06	0.06		0.06		362	362	0.01	< 0.005		363
Dust From Material Movement							0.2	0.2		0.08	0.08							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Off-Road E	0.04	0.03	0.27	0.28	< 0.005	0.01		0.01	0.01		0.01		59.9	59.9	< 0.005	< 0.005		60.1
Dust From Material Movement							0.04	0.04		0.01	0.01							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Worker	0.07	0.07	0.07	0.83	0	0	0.2	0.2	0	0.05	0.05		198	198	< 0.005		0.01	0.02	200
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0
Average Daily																		
Worker	< 0.005	< 0.005	< 0.005	0.05	0	0	0.01	0.01	0	< 0.005	< 0.005		11.1	11.1	< 0.005	< 0.005	0.02	11.3	
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0
Annual																		
Worker	< 0.005	< 0.005	< 0.005	0.01	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005		1.84	1.84	< 0.005	< 0.005	< 0.005	1.87	
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0

3.7. Building Construction (2026) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Off-Road E	1.28	1.07	9.85	13	0.02	0.38		0.38	0.35		0.35		2397	2397	0.1	0.02		2405
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Daily, Winter (Max)																		
Off-Road E	1.28	1.07	9.85	13	0.02	0.38		0.38	0.35		0.35		2397	2397	0.1	0.02		2405
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Off-Road E	0.7	0.58	5.37	7.07	0.01	0.21		0.21	0.19		0.19		1307	1307	0.05	0.01		1311
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Off-Road E	0.13	0.11	0.98	1.29	< 0.005	0.04		0.04	0.03		0.03		216	216	0.01	< 0.005		217
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Worker	3.73	3.38	2.18	47.6	0	0	8.54	8.54	0	2	2		9407	9407	0.13	0.32	33.6	9540
Vendor	0.37	0.13	6.15	2.34	0.02	0.05	0.95	1	0.05	0.26	0.3		3557	3557	0.24	0.54	8.57	3731
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Daily, Winter (Max)																		
Worker	3.16	3.07	2.82	35	0	0	8.54	8.54	0	2	2		8355	8355	0.19	0.34	0.87	8462
Vendor	0.37	0.13	6.59	2.39	0.02	0.05	0.95	1	0.05	0.26	0.31		3556	3556	0.24	0.53	0.22	3721
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Worker	1.7	1.66	1.35	19.5	0	0	4.55	4.55	0	1.06	1.06		4674	4674	0.09	0.19	7.92	4740
Vendor	0.2	0.07	3.53	1.3	0.01	0.03	0.51	0.54	0.03	0.14	0.16		1939	1939	0.13	0.29	2.01	2031
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Worker	0.31	0.3	0.25	3.55	0	0	0.83	0.83	0	0.19	0.19		774	774	0.02	0.03	1.31	785
Vendor	0.04	0.01	0.64	0.24	< 0.005	0.01	0.09	0.1	< 0.005	0.03	0.03		321	321	0.02	0.05	0.33	336
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0

3.9. Paving (2026) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Off-Road E	0.91	0.76	7.12	9.94	0.01	0.32		0.32	0.29		0.29		1511	1511	0.06	0.01		1516
Paving		0																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0

Average Daily																	
Off-Road Ei	0.03	0.03	0.25	0.35	< 0.005	0.01		0.01	0.01		0.01	53.8	53.8	< 0.005	< 0.005		54
Paving		0															
Onsite truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual																	
Off-Road Ei	0.01	< 0.005	0.05	0.06	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005	8.91	8.91	< 0.005	< 0.005		8.94
Paving		0															
Onsite truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Offsite																	
Daily, Summer (Max)																	
Daily, Winter (Max)																	
Worker	0.06	0.05	0.05	0.62	0	0	0.15	0.15	0	0.04	0.04	148	148	< 0.005	0.01	0.02	150
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Average Daily																	
Worker	< 0.005	< 0.005	< 0.005	0.02	0	0	0.01	0.01	0	< 0.005	< 0.005	5.42	5.42	< 0.005	< 0.005	0.01	5.49
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual																	
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005	0.9	0.9	< 0.005	< 0.005	< 0.005	0.91
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

3.11. Architectural Coating (2026) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Off-Road Ei	0.15	0.12	0.86	1.13	< 0.005	0.02		0.02	0.02		0.02	134	134	0.01	< 0.005		134
Architectural Coatings		882																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Average Daily																		
Off-Road Ei	< 0.005	< 0.005	0.03	0.04	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005	4.39	4.39	< 0.005	< 0.005		4.4	
Architectural Coatings		29																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual																		
Off-Road Ei	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005	0.73	0.73	< 0.005	< 0.005		0.73	
Architectural Coatings		5.29																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Worker	0.63	0.61	0.56	7	0	0	1.71	1.71	0	0.4	0.4	1671	1671	0.04	0.07	0.17	1692	
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Average Daily																		
Worker	0.02	0.02	0.02	0.23	0	0	0.05	0.05	0	0.01	0.01	56.4	56.4	< 0.005	< 0.005	0.1	57.2	
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual																		
Worker	< 0.005	< 0.005	< 0.005	0.04	0	0	0.01	0.01	0	< 0.005	< 0.005	9.33	9.33	< 0.005	< 0.005	0.02	9.46	
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Vegetation	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Species	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		
Removed																		
Subtotal																		
Daily, Winter (Max)																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		
Removed																		
Subtotal																		
Annual																		

Avoided
Subtotal
Sequestered
Subtotal
Removed
Subtotal

5. Activity Data
5.1. Construction Schedule

Phase Nam	Phase Type	Start Date	End Date	Days Per W	Work Days	Phase Description
Demolition	Demolition	1/1/2026	1/14/2026	5	10	
Site Prepar	Site Prepar	1/15/2026	1/23/2026	5	7	
Grading	Grading	1/24/2026	2/20/2026	5	20	
Building Cc	Building Cc	2/21/2026	########	5	199	
Paving	Paving	########	########	5	13	
Architectur	Architectur	########	########	5	12	

5.2. Off-Road Equipment
5.2.1. Unmitigated

Phase Nam	Equipment	Fuel Type	Engine Tier	Number pe	Hours Per I	Horsepow	Load Factor
Demolition	Rubber Tir	Diesel	Average	2	8	367	0.4
Demolition	Excavators	Diesel	Average	3	8	36	0.38
Demolition	Concrete/I	Diesel	Average	1	8	33	0.73
Site Prepar	Rubber Tir	Diesel	Average	3	8	367	0.4
Site Prepar	Tractors/Lc	Diesel	Average	4	8	84	0.37
Grading	Graders	Diesel	Average	1	8	148	0.41
Grading	Excavators	Diesel	Average	2	8	36	0.38
Grading	Tractors/Lc	Diesel	Average	2	8	84	0.37
Grading	Scrapers	Diesel	Average	2	8	423	0.48
Grading	Rubber Tir	Diesel	Average	1	8	367	0.4
Building Cc	Forklifts	Diesel	Average	3	8	82	0.2
Building Cc	Generator	Diesel	Average	1	8	14	0.74
Building Cc	Cranes	Diesel	Average	1	7	367	0.29
Building Cc	Welders	Diesel	Average	1	8	46	0.45
Building Cc	Tractors/Lc	Diesel	Average	3	7	84	0.37
Paving	Pavers	Diesel	Average	2	8	81	0.42
Paving	Paving Equ	Diesel	Average	2	8	89	0.36
Paving	Rollers	Diesel	Average	2	8	36	0.38
Architectur	Air Compre	Diesel	Average	1	6	37	0.48

5.3. Construction Vehicles
5.3.1. Unmitigated

Phase Nam	Trip Type	One-Way T	Miles per T	Vehicle Mix
Demolition				
Demolition	Worker	15	14.3	LDA,LDT1,LDT2
Demolition	Vendor		8.8	HHDT,MHDT
Demolition	Hauling	8.6	20	HHDT
Demolition	Onsite truck			HHDT
Site Preparation				
Site Prepar	Worker	17.5	14.3	LDA,LDT1,LDT2
Site Prepar	Vendor		8.8	HHDT,MHDT
Site Prepar	Hauling	0	20	HHDT
Site Prepar	Onsite truck			HHDT
Grading				
Grading	Worker	20	14.3	LDA,LDT1,LDT2
Grading	Vendor		8.8	HHDT,MHDT
Grading	Hauling	0	20	HHDT
Grading	Onsite truck			HHDT
Building Construction				
Building Cc	Worker	845	14.3	LDA,LDT1,LDT2
Building Cc	Vendor	126	8.8	HHDT,MHDT
Building Cc	Hauling	0	20	HHDT
Building Cc	Onsite truck			HHDT
Paving				
Paving	Worker	15	14.3	LDA,LDT1,LDT2
Paving	Vendor		8.8	HHDT,MHDT
Paving	Hauling	0	20	HHDT
Paving	Onsite truck			HHDT
Architectural Coating				
Architectur	Worker	169	14.3	LDA,LDT1,LDT2
Architectur	Vendor		8.8	HHDT,MHDT
Architectur	Hauling	0	20	HHDT
Architectur	Onsite truck			HHDT

5.4. Vehicles
5.4.1. Construction Vehicle Control Strategies

Control Str	PM10 Redu	PM2.5 Reduction

5.5. Architectural Coatings

Phase Nam	Residential	Residential	Non-Reside	Non-Reside	Parking Area Coated (sq ft)
Architectur	2282256	760752	0	0	

5.6. Dust Mitigation
5.6.1. Construction Earthmoving Activities

Phase Nam	Material In	Material Ex	Acres Grad	Material Di	Acres Paved (acres)
Demolition	0	0	0	7404	
Site Preparation			10.5	0	
Grading			60	0	
Paving	0	0	0	0	

5.6.2. Construction Earthmoving Control Strategies

Control Str	Frequency	PM10 Redu	PM2.5 Reduction

Water Exp	2	61	61

5.7. Construction Paving

Land Use	Area Pavec	% Asphalt
Apartments Mid Rise		0

5.8. Construction Electricity Consumption and Emissions Factors

Year	kWh per Y	CO2	CH4	N2O
2026	0	375	0.01	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation	Vegetation	Initial Acre	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cc	Initial Acre	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity S	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Ha	Result for F	Unit
Temperatu	19.3	annual days of extreme heat
Extreme Pr	5.7	annual days with precipitation above 20 mm
Sea Level Rise		meters of inundation depth
Wildfire	0	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell.

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGl

6.2. Initial Climate Risk Scores

Climate Ha	Exposure S	Sensitivity	Adaptive C	Vulnerability Score
Temperatu	1	0	0	N/A
Extreme Pr	2	0	0	N/A
Sea Level R	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack I	N/A	N/A	N/A	N/A
Air Quality	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Ha	Exposure S	Sensitivity	Adaptive C	Vulnerability Score
Temperatu	1	1	1	2
Extreme Pr	2	1	1	3
Sea Level R	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack I	N/A	N/A	N/A	N/A
Air Quality	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	
AQ-Ozone	40
AQ-PM	35.1
AQ-DPM	76.8
Drinking W	78.5
Lead Risk H	72.2
Pesticides	0
Toxic Relea	22.2
Traffic	82
Effect Indicators	
CleanUp Si	51.3
Groundwat	82.5
Haz Waste	10.2
Impaired W	43.8
Solid Wast	0
Sensitive Population	
Asthma	89.8
Cardio-vas	78.3
Low Birth W	53.5
Socioeconomic Factor Indicators	
Education	87.3
Housing	99.3
Linguistic	93.9
Poverty	87.8

Unemployr	81.7

7.2. Healthy Places Index Scores
The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	
Above Pov	15.01347
Employed	17.64404
Median HI	2.065957
Education	
Bachelor's	23.94457
High schoo	100
Preschool e	52.58565
Transportation	
Auto Acces	6.351854
Active com	46.04132
Social	
2-parent ho	26.27999
Voting	29.56499
Neighborhood	
Alcohol ava	31.10484
Park access	62.08136
Retail dens	73.19389
Supermark	94.25125
Tree canop	79.53291
Housing	
Homeowne	13.08867
Housing ha	6.108046
Low-inc ho	69.52393
Low-inc ren	0.898242
Uncrowdec	24.76582
Health Outcomes	
Insured ad	41.04966
Arthritis	88
Asthma ER	8.1
High Blood	55
Cancer (exc	98
Asthma	2.1
Coronary H	86
Chronic Ob	29
Diagnosed	49
Life Expect	3.1
Cognitively	9.6
Physically	14
Heart Attac	14
Mental Hea	5
Chronic Kid	73
Obesity	10
Pedestrian	90
Physical He	19
Stroke	52
Health Risk Behaviors	
Binge Drink	70
Current Sm	1.9
No Leisure	17
Climate Change Exposures	
Wildfire Ris	0
SLR Inunda	0
Children	11
Elderly	80
English Spe	12
Foreign-bo	66
Outdoor W	48
Climate Change Adaptive Capacity	
Impervious	20
Traffic Den	77
Traffic Acce	87
Other Indices	
Hardship	93
Other Decision Support	
2016 Votin	10

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroSc	86
Healthy Pla	14
Project Loc	Yes
Project Loc	Yes
Project Loc	South Florin

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

Measure Ti	Co-Benefits Achieved

7.5. Evaluation Scorecard

Category	Number of	Total Point	Max Possit	Weighted Score

7.6. Health & Equity Custom Measures

Measure Ti	Sponsor

8. User Changes to Default Data

Screen	Justification

Land Use 1/5th of project in 2025
Constructic 1/5th of project

The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
EM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Nar	Sac Rezone after (2027)
Constructic	1/1/2027
Lead Agency	
Land Use S	Project/site
Analysis Le	County
Windspeec	3
Precipitatic	36.6
Location	38.496642743017276, -121.4302236650689
County	Sacramento
City	Unincorporated
Air District	Sacramento Metropolitan AQMD
Air Basin	Sacramento Valley
TAZ	732
EDFZ	13
Electric Uti	Sacramento Municipal Utility District
Gas Utility	Pacific Gas & Electric
App Versio	2022.1.1.21

1.2. Land Use Types

Land Use S	Size	Unit	Lot Acreag	Building Ar	Landscape	Special Lan	Population	Description
Apartment	1174	Dwelling U	37.5	1127040	327122		3287	

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Un/Mit.	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Unmit.	4.93	67.33825	17.3	60.1	0.05	0.39	9.49	9.88	0.36	2.26	2.62		15112	15112	0.44	0.85	38.2	15415
Daily, Winter (Max)																		
Unmit.	4.63	67.33825	28	48.1	0.06	1.17	9.49	9.88	1.08	3.98	5.06		14079	14079	0.5	0.87	0.99	14351
Average Daily (Max)																		
Unmit.	2.9	31.4	12.5	29.9	0.03	0.32	5.5	5.82	0.3	1.37	1.67		8490	8490	0.28	0.47	9.14	8648
Annual (Max)																		
Unmit.	0.53	5.73	2.28	5.45	0.01	0.06	1	1.06	0.05	0.25	0.3		1406	1406	0.05	0.08	1.51	1432

2.2. Construction Emissions by Year, Unmitigated

Year	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily - Summer (Max)																		
2027	4.93	67.33825	17.3	60.1	0.05	0.39	9.49	9.88	0.36	2.26	2.62		15112	15112	0.44	0.85	38.2	15415
Daily - Winter (Max)																		
2027	4.63	67.33825	28	48.1	0.06	1.17	9.49	9.88	1.08	3.98	5.06		14079	14079	0.5	0.87	0.99	14351
Average Daily																		
2027	2.9	31.4	12.5	29.9	0.03	0.32	5.5	5.82	0.3	1.37	1.67		8490	8490	0.28	0.47	9.14	8648
Annual																		
2027	0.53	5.73	2.28	5.45	0.01	0.06	1	1.06	0.05	0.25	0.3		1406	1406	0.05	0.08	1.51	1432

3. Construction Emissions Details

3.1. Demolition (2027) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Off-Road E	2.64	2.21	19.9	18.6	0.03	0.8		0.8	0.73		0.73		3427	3427	0.14	0.03		3439
Demolition							0.75	0.75		0.11	0.11							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Off-Road E	0.07	0.06	0.55	0.51	< 0.005	0.02		0.02	0.02		0.02		93.9	93.9	< 0.005	< 0.005		94.2
Demolition							0.02	0.02		< 0.005	< 0.005							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Off-Road E	0.01	0.01	0.1	0.09	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		15.5	15.5	< 0.005	< 0.005		15.6
Demolition							< 0.005	< 0.005		< 0.005	< 0.005							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Worker	0.05	0.05	0.05	0.58	0	0	0.15	0.15	0	0.04	0.04		146	146	< 0.005	0.01	0.01	148
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0.07	0.02	1.11	0.42	< 0.005	0.01	0.16	0.17	0.01	0.04	0.06		608	608	0.05	0.1	0.03	639
Average Daily																		
Worker	< 0.005	< 0.005	< 0.005	0.02	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005		4.09	4.09	< 0.005	< 0.005	0.01	4.15
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005		16.7	16.7	< 0.005	< 0.005	0.01	17.5
Annual																		
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005		0.68	0.68	< 0.005	< 0.005	< 0.005	0.69
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005		2.76	2.76	< 0.005	< 0.005	< 0.005	2.9

3.3. Site Preparation (2027) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Off-Road E	3.63	3.05	28	28.3	0.05	1.17		1.17	1.08		1.08		5298	5298	0.21	0.04		5316
Dust From Material Movement							7.67	7.67		3.94	3.94							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Off-Road E	0.07	0.06	0.54	0.54	< 0.005	0.02		0.02	0.02		0.02		102	102	< 0.005	< 0.005		102
Dust From Material Movement							0.15	0.15		0.08	0.08							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Off-Road E	0.01	0.01	0.1	0.1	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		16.8	16.8	< 0.005	< 0.005		16.9
Dust From Material Movement							0.03	0.03		0.01	0.01							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Worker	0.06	0.06	0.06	0.68	0	0	0.18	0.18	0	0.04	0.04		170	170	< 0.005	0.01	0.02	172
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0

Report Tables

Daily Max

Year	ROG	NOx	PM10	PM2.5	CO2	PM10	PM2.5
2027	67	28	10	5	1432	1.06	0.30

diesel PM 1.17

Yearly

Tons/year

Year	Gasoline	Diesel
2027	783.98	647.23

Fuel Calcs

Average Daily																					
Worker	< 0.005	< 0.005	< 0.005	0.01	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005	3.34	3.34	< 0.005	< 0.005	0.01	3.39				
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Annual																					
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005	0.55	0.55	< 0.005	< 0.005	< 0.005	0.56				
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				

3.5. Grading (2027) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Off-Road E	3.51	2.95	25.6	27.3	0.06	1.04		1.04	0.96		0.96		6598	6598	0.27	0.05		6621
Dust From Material Movement							3.59	3.59		1.42	1.42							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Off-Road E	0.18	0.15	1.33	1.42	< 0.005	0.05		0.05	0.05		0.05		343	343	0.01	< 0.005		345
Dust From Material Movement							0.19	0.19		0.07	0.07							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Off-Road E	0.03	0.03	0.24	0.26	< 0.005	0.01		0.01	0.01		0.01		56.9	56.9	< 0.005	< 0.005		57.1
Dust From Material Movement							0.03	0.03		0.01	0.01							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Worker	0.07	0.06	0.07	0.78	0	0	0.2	0.2	0	0.05	0.05		194	194	< 0.005	0.01	0.02	197
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Worker	< 0.005	< 0.005	< 0.005	0.04	0	0	0.01	0.01	0	< 0.005	< 0.005		10.4	10.4	< 0.005	< 0.005	0.02	10.5
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Worker	< 0.005	< 0.005	< 0.005	0.01	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005		1.72	1.72	< 0.005	< 0.005	< 0.005	1.74
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0

3.7. Building Construction (2027) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Off-Road E	1.23	1.03	9.39	12.9	0.02	0.34		0.34	0.31		0.31		2397	2397	0.1	0.02		2405
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Daily, Winter (Max)																		
Off-Road E	1.23	1.03	9.39	12.9	0.02	0.34		0.34	0.31		0.31		2397	2397	0.1	0.02		2405
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Off-Road E	0.67	0.56	5.12	7.05	0.01	0.18		0.18	0.17		0.17		1307	1307	0.05	0.01		1311
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Off-Road E	0.12	0.1	0.93	1.29	< 0.005	0.03		0.03	0.03		0.03		216	216	0.01	< 0.005		217
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Worker	3.33	3.27	2.14	44.9	0	0	8.54	8.54	0	2	2		9239	9239	0.13	0.32	30.5	9369
Vendor	0.37	0.13	5.78	2.27	0.02	0.05	0.95	1	0.05	0.26	0.3		3476	3476	0.21	0.51	7.69	3641
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Daily, Winter (Max)																		
Worker	3.03	2.67	2.78	32.8	0	0	8.54	8.54	0	2	2		8207	8207	0.19	0.34	0.79	8314
Vendor	0.36	0.12	6.17	2.31	0.02	0.05	0.95	1	0.05	0.26	0.31		3475	3475	0.21	0.51	0.2	3632
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Worker	1.64	1.46	1.33	18.3	0	0	4.55	4.55	0	1.06	1.06		4591	4591	0.08	0.18	7.19	4653
Vendor	0.2	0.07	3.3	1.24	0.01	0.03	0.51	0.53	0.03	0.14	0.16		1895	1895	0.12	0.28	1.81	1982
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Worker	0.3	0.27	0.24	3.35	0	0	0.83	0.83	0	0.19	0.19		760	760	0.01	0.03	1.19	770
Vendor	0.04	0.01	0.6	0.23	< 0.005	< 0.005	0.09	0.1	< 0.005	0.03	0.03		314	314	0.02	0.05	0.3	328
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0

3.9. Paving (2027) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Off-Road E	0.88	0.74	6.94	9.95	0.01	0.3		0.3	0.27		0.27		1511	1511	0.06	0.01		1516
Paving		0																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Off-Road E	0.03	0.03	0.25	0.35	< 0.005	0.01		0.01	0.01		0.01		53.8	53.8	< 0.005	< 0.005		54
Paving		0																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Off-Road E	0.01	< 0.005	0.05	0.06	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		8.91	8.91	< 0.005	< 0.005		8.94
Paving		0																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Worker	0.05	0.05	0.05	0.58	0	0	0.15	0.15	0	0.04	0.04		146	146	< 0.005	0.01	0.01	148
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Worker	< 0.005	< 0.005	< 0.005	0.02	0	0	0.01	0.01	0	< 0.005	< 0.005		5.32	5.32	< 0.005	< 0.005	0.01	5.39
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005		0.88	0.88	< 0.005	< 0.005	< 0.005	0.89
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0

3.11. Architectural Coating (2027) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Off-Road E		0.14	0.11	0.83	1.13	< 0.005	0.02		0.02	0.02		0.02		134	134	0.01	< 0.005	134
Architectural Coatings			814															
Onsite truc		0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0
Average Daily																		
Off-Road E		< 0.005	< 0.005	0.03	0.04	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		4.76	4.76	< 0.005	< 0.005	4.77
Architectural Coatings			29															
Onsite truc		0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0
Annual																		
Off-Road E		< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		0.79	0.79	< 0.005	< 0.005	0.79
Architectural Coatings			5.29															
Onsite truc		0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Worker		0.61	0.53	0.56	6.57	0	0	1.71	1.71	0	0.4	0.4		1641	1641	0.04	0.07	0.16	1663
Vendor		0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling		0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Worker		0.02	0.02	0.02	0.24	0	0	0.06	0.06	0	0.01	0.01		60	60	< 0.005	< 0.005	0.09	60.8
Vendor		0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling		0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Worker		< 0.005	< 0.005	< 0.005	0.04	0	0	0.01	0.01	0	< 0.005	< 0.005		9.93	9.93	< 0.005	< 0.005	0.02	10.1
Vendor		0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling		0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Vegetation	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Species	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		
Removed																		
Subtotal																		
Daily, Winter (Max)																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		
Removed																		
Subtotal																		
Annual																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		
Removed																		
Subtotal																		

5. Activity Data

5.1. Construction Schedule

Phase Nam	Phase Type	Start Date	End Date	Days Per W	Work Days	Phase Description
Demolition	Demolition	1/1/2027	########	5	10	
Site Prepar	Site Prepar	########	########	5	7	
Grading	Grading	########	########	5	19	
Building Co	Building Co	########	########	5	199	
Paving	Paving	########	########	5	13	
Architectur	Architectur	########	########	5	13	

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Nam	Equipment	Fuel Type	Engine Tier	Number pe	Hours Per I	Horsepow	Load Factor
Demolition	Rubber Tire	Diesel	Average	2	8	367	0.4
Demolition	Excavators	Diesel	Average	3	8	36	0.38
Demolition	Concrete/Ir	Diesel	Average	1	8	33	0.73
Site Prepar	Rubber Tire	Diesel	Average	3	8	367	0.4
Site Prepar	Tractors/Lc	Diesel	Average	4	8	84	0.37
Grading	Graders	Diesel	Average	1	8	148	0.41
Grading	Excavators	Diesel	Average	2	8	36	0.38
Grading	Tractors/Lc	Diesel	Average	2	8	84	0.37
Grading	Scrapers	Diesel	Average	2	8	423	0.48
Grading	Rubber Tire	Diesel	Average	1	8	367	0.4
Building Co	Forklifts	Diesel	Average	3	8	82	0.2
Building Co	Generator	Diesel	Average	1	8	14	0.74
Building Co	Cranes	Diesel	Average	1	7	367	0.29
Building Co	Welders	Diesel	Average	1	8	46	0.45
Building Co	Tractors/Lc	Diesel	Average	3	7	84	0.37

Paving	Pavers	Diesel	Average	2	8	81	0.42
Paving	Paving Equ	Diesel	Average	2	8	89	0.36
Paving	Rollers	Diesel	Average	2	8	36	0.38
Architectur	Air Compre	Diesel	Average	1	6	37	0.48

5.3. Construction Vehicles
5.3.1. Unmitigated

Phase Nam	Trip Type	One-Way T	Miles per T	Vehicle Mix
Demolition				
Demolition	Worker	15	14.3	LDA,LDT1,LDT2
Demolition	Vendor		8.8	HHDT,MHDT
Demolition	Hauling	8.6	20	HHDT
Demolition	Onsite truck			HHDT
Site Preparation				
Site Prepar	Worker	17.5	14.3	LDA,LDT1,LDT2
Site Prepar	Vendor		8.8	HHDT,MHDT
Site Prepar	Hauling	0	20	HHDT
Site Prepar	Onsite truck			HHDT
Grading				
Grading	Worker	20	14.3	LDA,LDT1,LDT2
Grading	Vendor		8.8	HHDT,MHDT
Grading	Hauling	0	20	HHDT
Grading	Onsite truck			HHDT
Building Construction				
Building Co	Worker	845	14.3	LDA,LDT1,LDT2
Building Co	Vendor	126	8.8	HHDT,MHDT
Building Co	Hauling	0	20	HHDT
Building Co	Onsite truck			HHDT
Paving				
Paving	Worker	15	14.3	LDA,LDT1,LDT2
Paving	Vendor		8.8	HHDT,MHDT
Paving	Hauling	0	20	HHDT
Paving	Onsite truck			HHDT
Architectural Coating				
Architectur	Worker	169	14.3	LDA,LDT1,LDT2
Architectur	Vendor		8.8	HHDT,MHDT
Architectur	Hauling	0	20	HHDT
Architectur	Onsite truck			HHDT

5.4. Vehicles
5.4.1. Construction Vehicle Control Strategies

Control Str	PM10 Redu	PM2.5 Reduction

5.5. Architectural Coatings

Phase Nam	Residential	Residential	Non-Residc	Non-Residc	Parking Area Coated (sq ft)
Architectur	2282256	760752	0	0	

5.6. Dust Mitigation
5.6.1. Construction Earthmoving Activities

Phase Nam	Material Im	Material Ex	Acres Grad	Material Di	Acres Paved (acres)
Demolition	0	0	0	7404	
Site Preparation			10.5	0	
Grading			57	0	
Paving	0	0	0	0	

5.6.2. Construction Earthmoving Control Strategies

Control Str	Frequency	PM10 Redu	PM2.5 Reduction
Water Exp	2	61	61

5.7. Construction Paving

Land Use	Area Paved	% Asphalt
Apartments Mid Rise		0

5.8. Construction Electricity Consumption and Emissions Factors

Year	kWh per Y	CO2	CH4	N2O
2027	0	375	0.01	< 0.005

5.18. Vegetation
5.18.1. Land Use Change
5.18.1.1. Unmitigated

Vegetation	Vegetation	Initial Acre	Final Acres

5.18.1. Biomass Cover Type
5.18.1.1. Unmitigated

Biomass Cc	Initial Acre	Final Acres

5.18.2. Sequestration
5.18.2.1. Unmitigated

Tree Type	Number	Electricity S	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report
6.1. Climate Risk Summary
Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Ha	Result for F	Unit
Temperatu	19.3	annual days of extreme heat
Extreme Pr	5.7	annual days with precipitation above 20 mm
Sea Level Rise		meters of inundation depth
Wildfire	0	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 mete
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average condi

6.2. Initial Climate Risk Scores

Climate Ha	Exposure S	Sensitivity	Adaptive C	Vulnerability Score
Temperatu	1	0	0	N/A
Extreme Pr	2	0	0	N/A
Sea Level R	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack	N/A	N/A	N/A	N/A
Air Quality	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Ha	Exposure S	Sensitivity	Adaptive C	Vulnerability Score
Temperatu	1	1	1	2
Extreme Pr	2	1	1	3
Sea Level R	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack	N/A	N/A	N/A	N/A
Air Quality	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	
AQ-Ozone	40
AQ-PM	35.1
AQ-DPM	76.8
Drinking W	78.5
Lead Risk H	72.2
Pesticides	0
Toxic Relea	22.2
Traffic	82
Effect Indicators	
CleanUp Si	51.3
Groundwat	82.5
Haz Waste	10.2
Impaired W	43.8
Solid Waste	0
Sensitive Population	
Asthma	89.8
Cardio-vas	78.3
Low Birth W	53.5
Socioeconomic Factor Indicators	
Education	87.3
Housing	99.3
Linguistic	93.9
Poverty	87.8
Unemployr	81.7

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	
Above Pov	15.01347
Employed	17.64404
Median HI	2.065957
Education	
Bachelor's	23.94457
High schoo	100
Preschool e	52.58565
Transportation	
Auto Acces	6.351854
Active com	46.04132
Social	
2-parent h	26.27999
Voting	29.56499
Neighborhood	
Alcohol ava	31.10484
Park acces	62.08136
Retail dens	73.19389
Supermark	94.25125
Tree canop	79.53291
Housing	
Homeowne	13.08867
Housing ha	6.108046
Low-inc ho	69.52393
Low-inc re	0.898242
Uncrowdec	24.76582
Health Outcomes	
Insured ad	41.04966
Arthritis	88
Asthma ER	8.1
High Blood	55
Cancer (ex	98
Asthma	2.1
Coronary H	86
Chronic Ob	29
Diagnosed	49
Life Expect	3.1
Cognitively	9.6
Physically	14
Heart Atta	14
Mental He	5
Chronic Kic	73
Obesity	10
Pedestrian	90
Physical He	19
Stroke	52
Health Risk Behaviors	
Binge Drin	70
Current Sm	1.9
No Leisure	17
Climate Change Exposures	
Wildfire Ris	0
SLR Inunda	0
Children	11
Elderly	80

English Spe	12
Foreign-bo	66
Outdoor W	48
Climate Change Adaptive Capacity	
Impervious	20
Traffic Den	77
Traffic Acce	87
Other Indices	
Hardship	93
Other Decision Support	
2016 Votin	10

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroSc	86
Healthy Pla	14
Project Loc	Yes
Project Loc	Yes
Project Loc	South Florin

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

Measure Ti	Co-Benefits Achieved

7.5. Evaluation Scorecard

Category	Number of	Total Point	Max Possib	Weighted Score

7.6. Health & Equity Custom Measures

Measure Ti	Sponsor

8. User Changes to Default Data

Screen	Justification
Land Use	1/5th of project in 2025
Constructio	1/5th of project

:r, 1.41 meters
tions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

1. Basic Project Information
1.1. Basic Project Information

Data Field	Value
Project Nar	Sac Rezone after (2028)
Constructic	1/1/2028
Lead Agency	
Land Use S	Project/site
Analysis Le	County
Windspeec	3
Precipitatic	36.6
Location	38.496642743017276, -121.4302236650689
County	Sacramento
City	Unincorporated
Air District	Sacramento Metropolitan AQMD
Air Basin	Sacramento Valley
TAZ	732
EDFZ	13
Electric Uti	Sacramento Municipal Utility District
Gas Utility	Pacific Gas & Electric
App Versio	2022.1.1.21

1.2. Land Use Types

Land Use S	Size	Unit	Lot Acreag	Building Ar	Landscape	Special Lan	Population	Description
Apartment	1174	Dwelling U	37.5	1127040	327122		3287	

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title

2. Emissions Summary
2.1. Construction Emissions Compared Against Thresholds

Un/Mit.	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Unmit.	4.74	67.98561	16.2	57.2	0.05	0.35	9.49	9.84	0.32	2.26	2.58		14830	14830	0.42	0.58	34.4	15049
Daily, Winter (Max)																		
Unmit.	4.46	67.98561	27.5	46.2	0.06	1.14	9.49	9.84	1.05	3.98	5.03		13819	13819	0.48	0.87	0.89	14091
Average Daily (Max)																		
Unmit.	2.8	31.3	11.8	28.6	0.03	0.3	5.48	5.77	0.27	1.37	1.65		8319	8319	0.28	0.47	8.2	8475
Annual (Max)																		
Unmit.	0.51	5.72	2.15	5.22	0.01	0.05	1	1.05	0.05	0.25	0.3		1377	1377	0.05	0.08	1.36	1403

2.2. Construction Emissions by Year, Unmitigated

Year	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily - Summer (Max)																		
2028	4.74	67.98561	16.2	57.2	0.05	0.35	9.49	9.84	0.32	2.26	2.58		14830	14830	0.42	0.58	34.4	15049
Daily - Winter (Max)																		
2028	4.46	67.98561	27.5	46.2	0.06	1.14	9.49	9.84	1.05	3.98	5.03		13819	13819	0.48	0.87	0.89	14091
Average Daily																		
2028	2.8	31.3	11.8	28.6	0.03	0.3	5.48	5.77	0.27	1.37	1.65		8319	8319	0.28	0.47	8.2	8475
Annual																		
2028	0.51	5.72	2.15	5.22	0.01	0.05	1	1.05	0.05	0.25	0.3		1377	1377	0.05	0.08	1.36	1403

3. Construction Emissions Details
3.1. Demolition (2028) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Off-Road E	2.61	2.19	19.6	18.7	0.03	0.78		0.78	0.71		0.71		3429	3429	0.14	0.03		3440
Demolition							0.75	0.75		0.11	0.11							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Off-Road E	0.07	0.06	0.54	0.51	< 0.005	0.02		0.02	0.02		0.02		93.9	93.9	< 0.005	< 0.005		94.3
Demolition							0.02	0.02		< 0.005	< 0.005							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Off-Road E	0.01	0.01	0.1	0.09	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		15.6	15.6	< 0.005	< 0.005		15.6
Demolition							< 0.005	< 0.005		< 0.005	< 0.005							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Worker	0.05	0.05	0.04	0.55	0	0	0.15	0.15	0	0.04	0.04		143	143	< 0.005	0.01	0.01	145
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0.07	0.02	1.05	0.41	< 0.005	0.01	0.16	0.17	0.01	0.04	0.06		592	592	0.05	0.09	0.03	621
Average Daily																		
Worker	< 0.005	< 0.005	< 0.005	0.02	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005		4.01	4.01	< 0.005	< 0.005	0.01	4.06
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005		16.2	16.2	< 0.005	< 0.005	0.01	17
Annual																		
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005		0.66	0.66	< 0.005	< 0.005	< 0.005	0.67
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005		2.69	2.69	< 0.005	< 0.005	< 0.005	2.82

3.3. Site Preparation (2028) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Off-Road E	3.61	3.04	27.5	28.4	0.05	1.14		1.14	1.05		1.05		5300	5300	0.21	0.04		5318
Dust From Material Movement							7.67	7.67		3.94	3.94							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Off-Road E	0.07	0.06	0.53	0.54	< 0.005	0.02		0.02	0.02		0.02		102	102	< 0.005	< 0.005		102
Dust From Material Movement							0.15	0.15		0.08	0.08							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Off-Road E	0.01	0.01	0.1	0.1	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		16.8	16.8	< 0.005	< 0.005		16.9
Dust From Material Movement							0.03	0.03		0.01	0.01							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Worker	0.06	0.05	0.05	0.64	0	0	0.18	0.18	0	0.04	0.04		166	166	< 0.005	0.01	0.01	169
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0

Report Tables

Daily Max

Year	ROG	NOx	PM10	PM2.5	CO2	PM10	PM2.5
2028	68	28	10	5	1403	1.05	0.30

diesel PM 1.14

Yearly

Year	ROG	NOx	PM10	PM2.5	CO2	PM10	PM2.5

Fuel Calcs

Tons/year

Year	Gasoline	Diesel
2028	763.98	639.09

Average Daily																						
Worker	< 0.005	< 0.005	< 0.005	0.01	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005	3.28	3.28	< 0.005	< 0.005	< 0.005	3.32					
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
Annual																						
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005	0.54	0.54	< 0.005	< 0.005	< 0.005	0.55					
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					

3.5. Grading (2028) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Off-Road E	3.43	2.88	24.3	27.2	0.06	0.99		0.99	0.91		0.91		6598	6598	0.27	0.05		6621
Dust From Material Movement							3.59	3.59		1.42	1.42							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Off-Road E	0.19	0.16	1.33	1.49	< 0.005	0.05		0.05	0.05		0.05		362	362	0.01	< 0.005		363
Dust From Material Movement							0.2	0.2		0.08	0.08							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Off-Road E	0.03	0.03	0.24	0.27	< 0.005	0.01		0.01	0.01		0.01		59.9	59.9	< 0.005	< 0.005		60.1
Dust From Material Movement							0.04	0.04		0.01	0.01							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Worker	0.07	0.06	0.06	0.73	0	0	0.2	0.2	0	0.05	0.05		190	190	< 0.005	0.01	0.02	193
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Worker	< 0.005	< 0.005	< 0.005	0.04	0	0	0.01	0.01	0	< 0.005	< 0.005		10.7	10.7	< 0.005	< 0.005	0.02	10.8
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Worker	< 0.005	< 0.005	< 0.005	0.01	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005		1.77	1.77	< 0.005	< 0.005	< 0.005	1.79
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0

3.7. Building Construction (2028) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Off-Road E	1.18	0.99	8.92	12.9	0.02	0.3		0.3	0.28		0.28		2397	2397	0.1	0.02		2406
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Daily, Winter (Max)																		
Off-Road E	1.18	0.99	8.92	12.9	0.02	0.3		0.3	0.28		0.28		2397	2397	0.1	0.02		2406
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Off-Road E	0.64	0.54	4.84	7.02	0.01	0.16		0.16	0.15		0.15		1301	1301	0.05	0.01		1305
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Off-Road E	0.12	0.1	0.88	1.28	< 0.005	0.03		0.03	0.03		0.03		215	215	0.01	< 0.005		216
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Worker	3.22	2.89	1.85	42.1	0	0	8.54	8.54	0	2	2		9049	9049	0.11	0.06	27.6	9096
Vendor	0.34	0.13	5.4	2.17	0.02	0.05	0.95	1	0.05	0.26	0.3		3383	3383	0.21	0.51	6.82	3547
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Daily, Winter (Max)																		
Worker	2.94	2.6	2.48	31	0	0	8.54	8.54	0	2	2		8039	8039	0.17	0.34	0.72	8145
Vendor	0.34	0.12	5.77	2.23	0.02	0.05	0.95	1	0.05	0.26	0.3		3383	3383	0.21	0.51	0.18	3540
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Worker	1.58	1.41	1.17	17.2	0	0	4.52	4.52	0	1.06	1.06		4475	4475	0.08	0.17	6.47	4535
Vendor	0.18	0.07	3.08	1.19	0.01	0.03	0.51	0.53	0.03	0.14	0.16		1835	1835	0.11	0.28	1.6	1922
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Worker	0.29	0.26	0.21	3.13	0	0	0.83	0.83	0	0.19	0.19		741	741	0.01	0.03	1.07	751
Vendor	0.03	0.01	0.56	0.22	< 0.005	< 0.005	0.09	0.1	< 0.005	0.02	0.03		304	304	0.02	0.05	0.27	318
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0

3.9. Paving (2028) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Off-Road E	0.82	0.69	6.63	9.91	0.01	0.26		0.26	0.24		0.24		1511	1511	0.06	0.01		1516
Paving		0																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Off-Road E	0.03	0.02	0.24	0.35	< 0.005	0.01		0.01	0.01		0.01		53.8	53.8	< 0.005	< 0.005		54
Paving		0																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Off-Road E	0.01	< 0.005	0.04	0.06	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		8.91	8.91	< 0.005	< 0.005		8.94
Paving		0																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Worker	0.05	0.05	0.04	0.55	0	0	0.15	0.15	0	0.04	0.04		143	143	< 0.005	0.01	0.01	145
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Worker	< 0.005	< 0.005	< 0.005	0.02	0	0	0.01	0.01	0	< 0.005	< 0.005		5.21	5.21	< 0.005	< 0.005	0.01	5.28
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005		0.86	0.86	< 0.005	< 0.005	< 0.005	0.87
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0

3.11. Architectural Coating (2028) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Off-Road E		0.13	0.11	0.81	1.12	< 0.005	0.02		0.02	0.01		0.01		134	134	0.01	< 0.005		134
Architectural Coatings			882															
Onsite truc		0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Off-Road E		< 0.005	< 0.005	0.03	0.04	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		4.39	4.39	< 0.005	< 0.005		4.4
Architectural Coatings			29															
Onsite truc		0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Off-Road E		< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		0.73	0.73	< 0.005	< 0.005		0.73
Architectural Coatings			5.29															
Onsite truc		0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Worker		0.59	0.52	0.5	6.2	0	0	1.71	1.71	0	0.4	0.4		1608	1608	0.03	0.07	0.14	1629
Vendor		0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling		0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Worker		0.02	0.02	0.01	0.21	0	0	0.05	0.05	0	0.01	0.01		54.2	54.2	< 0.005	< 0.005	0.08	55
Vendor		0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling		0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Worker		< 0.005	< 0.005	< 0.005	0.04	0	0	0.01	0.01	0	< 0.005	< 0.005		8.98	8.98	< 0.005	< 0.005	0.01	9.1
Vendor		0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling		0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Vegetation	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Species	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		
Removed																		
Subtotal																		
Daily, Winter (Max)																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		
Removed																		
Subtotal																		
Annual																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		
Removed																		
Subtotal																		

5. Activity Data

5.1. Construction Schedule

Phase Nam	Phase Type	Start Date	End Date	Days Per W	Work Days	Phase Description
Demolition	Demolition	1/1/2028	########	5	10	
Site Prepar	Site Prepar	########	########	5	7	
Grading	Grading	########	########	5	20	
Building Co	Building Co	########	########	5	198	
Paving	Paving	########	########	5	13	
Architectur	Architectur	########	########	5	12	

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Nam	Equipment	Fuel Type	Engine Tier	Number pe	Hours Per I	Horsepow	Load Factor
Demolition	Rubber Tire	Diesel	Average	2	8	367	0.4
Demolition	Excavators	Diesel	Average	3	8	36	0.38
Demolition	Concrete/Ir	Diesel	Average	1	8	33	0.73
Site Prepar	Rubber Tire	Diesel	Average	3	8	367	0.4
Site Prepar	Tractors/Lc	Diesel	Average	4	8	84	0.37
Grading	Graders	Diesel	Average	1	8	148	0.41
Grading	Excavators	Diesel	Average	2	8	36	0.38
Grading	Tractors/Lc	Diesel	Average	2	8	84	0.37
Grading	Scrapers	Diesel	Average	2	8	423	0.48
Grading	Rubber Tire	Diesel	Average	1	8	367	0.4
Building Co	Forklifts	Diesel	Average	3	8	82	0.2
Building Co	Generator	Diesel	Average	1	8	14	0.74
Building Co	Cranes	Diesel	Average	1	7	367	0.29
Building Co	Welders	Diesel	Average	1	8	46	0.45
Building Co	Tractors/Lc	Diesel	Average	3	7	84	0.37

Paving	Pavers	Diesel	Average	2	8	81	0.42
Paving	Paving Equ	Diesel	Average	2	8	89	0.36
Paving	Rollers	Diesel	Average	2	8	36	0.38
Architectur	Air Compre	Diesel	Average	1	6	37	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Nam	Trip Type	One-Way T	Miles per T	Vehicle Mix
Demolition				
Demolition	Worker	15	14.3	LDA,LDT1,LDT2
Demolition	Vendor		8.8	HHDT,MHDT
Demolition	Hauling	8.6	20	HHDT
Demolition	Onsite truck			HHDT
Site Preparation				
Site Prepar	Worker	17.5	14.3	LDA,LDT1,LDT2
Site Prepar	Vendor		8.8	HHDT,MHDT
Site Prepar	Hauling	0	20	HHDT
Site Prepar	Onsite truck			HHDT
Grading				
Grading	Worker	20	14.3	LDA,LDT1,LDT2
Grading	Vendor		8.8	HHDT,MHDT
Grading	Hauling	0	20	HHDT
Grading	Onsite truck			HHDT
Building Construction				
Building Co	Worker	845	14.3	LDA,LDT1,LDT2
Building Co	Vendor	126	8.8	HHDT,MHDT
Building Co	Hauling	0	20	HHDT
Building Co	Onsite truck			HHDT
Paving				
Paving	Worker	15	14.3	LDA,LDT1,LDT2
Paving	Vendor		8.8	HHDT,MHDT
Paving	Hauling	0	20	HHDT
Paving	Onsite truck			HHDT
Architectural Coating				
Architectur	Worker	169	14.3	LDA,LDT1,LDT2
Architectur	Vendor		8.8	HHDT,MHDT
Architectur	Hauling	0	20	HHDT
Architectur	Onsite truck			HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Str	PM10 Redu	PM2.5 Reduction

5.5. Architectural Coatings

Phase Nam	Residential	Residential	Non-Reside	Non-Reside	Parking Area Coated (sq ft)
Architectur	2282256	760752	0	0	

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Nam	Material Im	Material Ex	Acres Grad	Material Di	Acres Paved (acres)
Demolition	0	0	0	7404	
Site Preparation			10.5	0	
Grading			60	0	
Paving	0	0	0	0	

5.6.2. Construction Earthmoving Control Strategies

Control Str	Frequency	PM10 Redu	PM2.5 Reduction
Water Exp	2	61	61

5.7. Construction Paving

Land Use	Area Paved	% Asphalt
Apartments Mid Rise		0

5.8. Construction Electricity Consumption and Emissions Factors

Year	kWh per Y	CO2	CH4	N2O
2028	0	375	0.01	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation	Vegetation	Initial Acre	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cc	Initial Acre	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity S	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Ha	Result for F	Unit
Temperatu	19.3	annual days of extreme heat
Extreme Pr	5.7	annual days with precipitation above 20 mm
Sea Level Rise		meters of inundation depth
Wildfire	0	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 m

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (Ca

6.2. Initial Climate Risk Scores

Climate Ha	Exposure S	Sensitivity	Adaptive C	Vulnerability Score
Temperatu	1	0	0	N/A
Extreme Pr	2	0	0	N/A
Sea Level R	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack	N/A	N/A	N/A	N/A
Air Quality	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Ha	Exposure S	Sensitivity	Adaptive C	Vulnerability Score
Temperatu	1	1	1	2
Extreme Pr	2	1	1	3
Sea Level R	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack	N/A	N/A	N/A	N/A
Air Quality	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	
AQ-Ozone	40
AQ-PM	35.1
AQ-DPM	76.8
Drinking W	78.5
Lead Risk H	72.2
Pesticides	0
Toxic Relea	22.2
Traffic	82
Effect Indicators	
CleanUp Si	51.3
Groundwat	82.5
Haz Waste	10.2
Impaired W	43.8
Solid Waste	0
Sensitive Population	
Asthma	89.8
Cardio-vas	78.3
Low Birth W	53.5
Socioeconomic Factor Indicators	
Education	87.3
Housing	99.3
Linguistic	93.9
Poverty	87.8
Unemployr	81.7

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	
Above Pov	15.01347
Employed	17.64404
Median HI	2.065957
Education	
Bachelor's	23.94457
High schoo	100
Preschool e	52.58565
Transportation	
Auto Acces	6.351854
Active com	46.04132
Social	
2-parent h	26.27999
Voting	29.56499
Neighborhood	
Alcohol ava	31.10484
Park acces	62.08136
Retail dens	73.19389
Supermark	94.25125
Tree canop	79.53291
Housing	
Homeowne	13.08867
Housing ha	6.108046
Low-inc ho	69.52393
Low-inc re	0.898242
Uncrowdec	24.76582
Health Outcomes	
Insured ad	41.04966
Arthritis	88
Asthma ER	8.1
High Blood	55
Cancer (ex	98
Asthma	2.1
Coronary H	86
Chronic Ob	29
Diagnosed	49
Life Expect	3.1
Cognitively	9.6
Physically	14
Heart Atta	14
Mental He	5
Chronic Kic	73
Obesity	10
Pedestrian	90
Physical He	19
Stroke	52
Health Risk Behaviors	
Binge Drin	70
Current Sm	1.9
No Leisure	17
Climate Change Exposures	
Wildfire Ris	0
SLR Inunda	0
Children	11
Elderly	80

English Spe	12
Foreign-bo	66
Outdoor W	48
Climate Change Adaptive Capacity	
Impervious	20
Traffic Den	77
Traffic Acce	87
Other Indices	
Hardship	93
Other Decision Support	
2016 Votin	10

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroSc	86
Healthy Pla	14
Project Loc	Yes
Project Loc	Yes
Project Loc	South Florin

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

Measure Ti	Co-Benefits Achieved

7.5. Evaluation Scorecard

Category	Number of	Total Point	Max Possib	Weighted Score

7.6. Health & Equity Custom Measures

Measure Ti	Sponsor

8. User Changes to Default Data

Screen	Justification
Land Use	1/5th of project in 2025
Constructio	1/5th of project

neters
nESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

1. Basic Project Information
1.1. Basic Project Information

Data Field	Value
Project Nar	Sac Rezone after (2029)
Constructic	1/1/2029
Lead Agency	
Land Use S	Project/site
Analysis Le	County
Windspeec	3
Precipitatic	36.6
Location	38.496642743017276, -121.4302236650689
County	Sacramento
City	Unincorporated
Air District	Sacramento Metropolitan AQMD
Air Basin	Sacramento Valley
TAZ	732
EDFZ	13
Electric Uti	Sacramento Municipal Utility District
Gas Utility	Pacific Gas & Electric
App Versio	2022.1.1.21

1.2. Land Use Types

Land Use S	Size	Unit	Lot Acreag	Building Ar	Landscape	Special Lan	Population	Description
Apartment	1174	Dwelling U	37.5	1127040	327122		3287	

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title

2. Emissions Summary
2.1. Construction Emissions Compared Against Thresholds

Un/Mit.	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Unmit.	4.56	67.69861	15.4	54.7	0.05	0.32	9.49	9.82	0.3	2.26	2.56		14566	14566	0.42	0.56	30.7	14774
Daily, Winter (Max)																		
Unmit.	4.27	67.69861	26	44.2	0.06	1.09	9.49	9.82	1	3.98	4.98		13576	13576	0.47	0.85	0.79	13840
Average Daily (Max)																		
Unmit.	2.72	31.2	11.1	27.7	0.03	0.28	5.5	5.78	0.26	1.38	1.63		8221	8221	0.27	0.46	7.33	8372
Annual (Max)																		
Unmit.	0.5	5.7	2.03	5.05	0.01	0.05	1	1.05	0.05	0.25	0.3		1361	1361	0.04	0.08	1.21	1386

2.2. Construction Emissions by Year, Unmitigated

Year	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily - Summer (Max)																		
2029	4.56	67.69861	15.4	54.7	0.05	0.32	9.49	9.82	0.3	2.26	2.56		14566	14566	0.42	0.56	30.7	14774
Daily - Winter (Max)																		
2029	4.27	67.69861	26	44.2	0.06	1.09	9.49	9.82	1	3.98	4.98		13576	13576	0.47	0.85	0.79	13840
Average Daily																		
2029	2.72	31.2	11.1	27.7	0.03	0.28	5.5	5.78	0.26	1.38	1.63		8221	8221	0.27	0.46	7.33	8372
Annual																		
2029	0.5	5.7	2.03	5.05	0.01	0.05	1	1.05	0.05	0.25	0.3		1361	1361	0.04	0.08	1.21	1386

3. Construction Emissions Details
3.1. Demolition (2029) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Off-Road E	2.55	2.14	18.6	18.5	0.03	0.74		0.74	0.68		0.68		3427	3427	0.14	0.03		3439
Demolition							0.75	0.75		0.11	0.11							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Off-Road E	0.07	0.06	0.51	0.51	< 0.005	0.02		0.02	0.02		0.02		93.9	93.9	< 0.005	< 0.005		94.2
Demolition							0.02	0.02		< 0.005	< 0.005							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Off-Road E	0.01	0.01	0.09	0.09	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		15.5	15.5	< 0.005	< 0.005		15.6
Demolition							< 0.005	< 0.005		< 0.005	< 0.005							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Worker	0.05	0.04	0.04	0.52	0	0	0.15	0.15	0	0.04	0.04		140	140	< 0.005	0.01	0.01	142
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0.06	0.02	0.99	0.4	< 0.005	0.01	0.16	0.17	0.01	0.04	0.05		575	575	0.05	0.09	0.03	604
Average Daily																		
Worker	< 0.005	< 0.005	< 0.005	0.01	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005		3.94	3.94	< 0.005	< 0.005	0.01	3.99
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005		15.7	15.7	< 0.005	< 0.005	0.01	16.6
Annual																		
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005		0.65	0.65	< 0.005	< 0.005	< 0.005	0.66
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005		2.61	2.61	< 0.005	< 0.005	< 0.005	2.74

3.3. Site Preparation (2029) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Off-Road E	3.53	2.97	25.9	28.1	0.05	1.09		1.09	1		1		5296	5296	0.21	0.04		5314
Dust From Material Movement							7.67	7.67		3.94	3.94							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Off-Road E	0.07	0.06	0.5	0.54	< 0.005	0.02		0.02	0.02		0.02		102	102	< 0.005	< 0.005		102
Dust From Material Movement							0.15	0.15		0.08	0.08							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Off-Road E	0.01	0.01	0.09	0.1	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		16.8	16.8	< 0.005	< 0.005		16.9
Dust From Material Movement							0.03	0.03		0.01	0.01							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Worker	0.06	0.05	0.05	0.6	0	0	0.18	0.18	0	0.04	0.04		163	163	< 0.005	0.01	0.01	166
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0

Report Tables

Daily Max

Year	ROG	NOx	PM10	PM2.5	CO2	PM10	PM2.5
2029	68	26	10	5	1386	1.05	0.30

diesel PM 1.09

Yearly

Tons/year

Year	Gasoline	Diesel
2029	753.76	631.91

Fuel Calcs

Average Daily																						
Worker	< 0.005	< 0.005	< 0.005	0.01	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005		3.22	3.22	< 0.005	< 0.005	< 0.005	3.26				
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0				
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0				
Annual																						
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005		0.53	0.53	< 0.005	< 0.005	< 0.005	0.54				
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0				
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0				

3.5. Grading (2029) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Off-Road E	3.32	2.79	22.7	26.9	0.06	0.92		0.92	0.84		0.84		6596	6596	0.27	0.05		6619
Dust From Material Movement							3.59	3.59		1.42	1.42							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Off-Road E	0.18	0.15	1.25	1.47	< 0.005	0.05		0.05	0.05		0.05		361	361	0.01	< 0.005		363
Dust From Material Movement							0.2	0.2		0.08	0.08							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Off-Road E	0.03	0.03	0.23	0.27	< 0.005	0.01		0.01	0.01		0.01		59.8	59.8	< 0.005	< 0.005		60
Dust From Material Movement							0.04	0.04		0.01	0.01							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Worker	0.07	0.06	0.05	0.69	0	0	0.2	0.2	0	0.05	0.05		187	187	< 0.005	0.01	0.02	189
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Worker	< 0.005	< 0.005	< 0.005	0.04	0	0	0.01	0.01	0	< 0.005	< 0.005		10.5	10.5	< 0.005	< 0.005	0.01	10.6
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Worker	< 0.005	< 0.005	< 0.005	0.01	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005		1.74	1.74	< 0.005	< 0.005	< 0.005	1.76
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0

3.7. Building Construction (2029) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Off-Road E	1.15	0.97	8.58	12.9	0.02	0.28		0.28	0.25		0.25		2397	2397	0.1	0.02		2405
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Daily, Winter (Max)																		
Off-Road E	1.15	0.97	8.58	12.9	0.02	0.28		0.28	0.25		0.25		2397	2397	0.1	0.02		2405
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Off-Road E	0.63	0.53	4.68	7.03	0.01	0.15		0.15	0.14		0.14		1307	1307	0.05	0.01		1311
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Off-Road E	0.11	0.1	0.85	1.28	< 0.005	0.03		0.03	0.03		0.03		216	216	0.01	< 0.005		217
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Worker	3.09	2.76	1.82	39.7	0	0	8.54	8.54	0	2	2		8886	8886	0.11	0.06	24.8	8931
Vendor	0.32	0.1	5.04	2.09	0.02	0.05	0.95	1	0.05	0.26	0.3		3283	3283	0.21	0.48	5.95	3438
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Daily, Winter (Max)																		
Worker	2.81	2.47	2.2	29.2	0	0	8.54	8.54	0	2	2		7896	7896	0.17	0.34	0.64	8002
Vendor	0.31	0.1	5.4	2.15	0.02	0.05	0.95	1	0.05	0.26	0.3		3283	3283	0.21	0.48	0.15	3433
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Worker	1.54	1.35	1.01	16.3	0	0	4.55	4.55	0	1.06	1.06		4417	4417	0.07	0.18	5.82	4477
Vendor	0.17	0.06	2.89	1.15	0.01	0.03	0.51	0.53	0.03	0.14	0.16		1790	1790	0.11	0.26	1.4	1873
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Worker	0.28	0.25	0.18	2.98	0	0	0.83	0.83	0	0.19	0.19		731	731	0.01	0.03	0.96	741
Vendor	0.03	0.01	0.53	0.21	< 0.005	< 0.005	0.09	0.1	< 0.005	0.03	0.03		296	296	0.02	0.04	0.23	310
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0

3.9. Paving (2029) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Off-Road E	0.8	0.67	6.46	9.92	0.01	0.24		0.24	0.22		0.22		1511	1511	0.06	0.01		1516
Paving		0																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Off-Road E	0.03	0.02	0.23	0.35	< 0.005	0.01		0.01	0.01		0.01		53.8	53.8	< 0.005	< 0.005		54
Paving		0																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Off-Road E	0.01	< 0.005	0.04	0.06	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		8.91	8.91	< 0.005	< 0.005		8.94
Paving		0																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Worker	0.05	0.04	0.04	0.52	0	0	0.15	0.15	0	0.04	0.04		140	140	< 0.005	0.01	0.01	142
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Worker	< 0.005	< 0.005	< 0.005	0.02	0	0	0.01	0.01	0	< 0.005	< 0.005		5.12	5.12	< 0.005	< 0.005	0.01	5.19
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005		0.85	0.85	< 0.005	< 0.005	< 0.005	0.86
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0

3.11. Architectural Coating (2029) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Off-Road E	0.12	0.1	0.79	1.11	< 0.005	0.01		0.01	0.01		0.01		134	134	0.01	< 0.005		134
Architectural Coatings		882																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Off-Road E	< 0.005	< 0.005	0.03	0.04	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		4.39	4.39	< 0.005	< 0.005		4.4
Architectural Coatings		29																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Off-Road E	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		0.73	0.73	< 0.005	< 0.005		0.73
Architectural Coatings		5.29																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Worker	0.56	0.49	0.44	5.83	0	0	1.71	1.71	0	0.4	0.4		1579	1579	0.03	0.07	0.13	1600
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Worker	0.02	0.02	0.01	0.2	0	0	0.05	0.05	0	0.01	0.01		53.3	53.3	< 0.005	< 0.005	0.07	54
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Worker	< 0.005	< 0.005	< 0.005	0.04	0	0	0.01	0.01	0	< 0.005	< 0.005		8.82	8.82	< 0.005	< 0.005	0.01	8.94
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Vegetation	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Species	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		
Removed																		
Subtotal																		
Daily, Winter (Max)																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		
Removed																		
Subtotal																		
Annual																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		
Removed																		
Subtotal																		

5. Activity Data

5.1. Construction Schedule

Phase Nam	Phase Type	Start Date	End Date	Days Per W	Work Days	Phase Description
Demolition	Demolition	1/1/2029	########	5	10	
Site Prepar	Site Prepar	########	########	5	7	
Grading	Grading	########	########	5	20	
Building Co	Building Co	########	########	5	199	
Paving	Paving	########	########	5	13	
Architectur	Architectur	########	########	5	12	

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Nam	Equipment	Fuel Type	Engine Tier	Number pe	Hours Per I	Horsepow	Load Factor
Demolition	Rubber Tire	Diesel	Average	2	8	367	0.4
Demolition	Excavators	Diesel	Average	3	8	36	0.38
Demolition	Concrete/Ir	Diesel	Average	1	8	33	0.73
Site Prepar	Rubber Tire	Diesel	Average	3	8	367	0.4
Site Prepar	Tractors/Lc	Diesel	Average	4	8	84	0.37
Grading	Graders	Diesel	Average	1	8	148	0.41
Grading	Excavators	Diesel	Average	2	8	36	0.38
Grading	Tractors/Lc	Diesel	Average	2	8	84	0.37
Grading	Scrapers	Diesel	Average	2	8	423	0.48
Grading	Rubber Tire	Diesel	Average	1	8	367	0.4
Building Co	Forklifts	Diesel	Average	3	8	82	0.2
Building Co	Generator	Diesel	Average	1	8	14	0.74
Building Co	Cranes	Diesel	Average	1	7	367	0.29
Building Co	Welders	Diesel	Average	1	8	46	0.45
Building Co	Tractors/Lc	Diesel	Average	3	7	84	0.37

Paving	Pavers	Diesel	Average	2	8	81	0.42
Paving	Paving Equ	Diesel	Average	2	8	89	0.36
Paving	Rollers	Diesel	Average	2	8	36	0.38
Architectur	Air Compre	Diesel	Average	1	6	37	0.48

5.3. Construction Vehicles
5.3.1. Unmitigated

Phase Nam	Trip Type	One-Way T	Miles per T	Vehicle Mix
Demolition				
Demolition	Worker	15	14.3	LDA,LDT1,LDT2
Demolition	Vendor		8.8	HHDT,MHDT
Demolition	Hauling	8.6	20	HHDT
Demolition	Onsite truck			HHDT
Site Preparation				
Site Prepar	Worker	17.5	14.3	LDA,LDT1,LDT2
Site Prepar	Vendor		8.8	HHDT,MHDT
Site Prepar	Hauling	0	20	HHDT
Site Prepar	Onsite truck			HHDT
Grading				
Grading	Worker	20	14.3	LDA,LDT1,LDT2
Grading	Vendor		8.8	HHDT,MHDT
Grading	Hauling	0	20	HHDT
Grading	Onsite truck			HHDT
Building Construction				
Building Co	Worker	845	14.3	LDA,LDT1,LDT2
Building Co	Vendor	126	8.8	HHDT,MHDT
Building Co	Hauling	0	20	HHDT
Building Co	Onsite truck			HHDT
Paving				
Paving	Worker	15	14.3	LDA,LDT1,LDT2
Paving	Vendor		8.8	HHDT,MHDT
Paving	Hauling	0	20	HHDT
Paving	Onsite truck			HHDT
Architectural Coating				
Architectur	Worker	169	14.3	LDA,LDT1,LDT2
Architectur	Vendor		8.8	HHDT,MHDT
Architectur	Hauling	0	20	HHDT
Architectur	Onsite truck			HHDT

5.4. Vehicles
5.4.1. Construction Vehicle Control Strategies

Control Str	PM10 Redu	PM2.5 Reduction

5.5. Architectural Coatings

Phase Nam	Residential	Residential	Non-Residc	Non-Residc	Parking Area Coated (sq ft)
Architectur	2282256	760752	0	0	

5.6. Dust Mitigation
5.6.1. Construction Earthmoving Activities

Phase Nam	Material Im	Material Ex	Acres Grad	Material Di	Acres Paved (acres)
Demolition	0	0	0	7404	
Site Preparation			10.5	0	
Grading			60	0	
Paving	0	0	0	0	

5.6.2. Construction Earthmoving Control Strategies

Control Str	Frequency	PM10 Redu	PM2.5 Reduction
Water Exp	2	61	61

5.7. Construction Paving

Land Use	Area Paved	% Asphalt
Apartments Mid Rise		0

5.8. Construction Electricity Consumption and Emissions Factors

Year	kWh per Y	CO2	CH4	N2O
2029	0	375	0.01	< 0.005

5.18. Vegetation
5.18.1. Land Use Change
5.18.1.1. Unmitigated

Vegetation	Vegetation	Initial Acre	Final Acres

5.18.1. Biomass Cover Type
5.18.1.1. Unmitigated

Biomass Cc	Initial Acre	Final Acres

5.18.2. Sequestration
5.18.2.1. Unmitigated

Tree Type	Number	Electricity S	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report
6.1. Climate Risk Summary
Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Ha	Result for F	Unit
Temperatu	19.3	annual days of extreme heat
Extreme Pr	5.7	annual days with precipitation above 20 mm
Sea Level Rise		meters of inundation depth
Wildfire	0	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 met
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanE

6.2. Initial Climate Risk Scores

Climate Ha	Exposure S	Sensitivity	Adaptive C	Vulnerability Score
Temperatu	1	0	0	N/A
Extreme Pr	2	0	0	N/A
Sea Level R	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack	N/A	N/A	N/A	N/A
Air Quality	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Ha	Exposure S	Sensitivity	Adaptive C	Vulnerability Score
Temperatu	1	1	1	2
Extreme Pr	2	1	1	3
Sea Level R	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack	N/A	N/A	N/A	N/A
Air Quality	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	
AQ-Ozone	40
AQ-PM	35.1
AQ-DPM	76.8
Drinking W	78.5
Lead Risk H	72.2
Pesticides	0
Toxic Relea	22.2
Traffic	82
Effect Indicators	
CleanUp Si	51.3
Groundwat	82.5
Haz Waste	10.2
Impaired W	43.8
Solid Waste	0
Sensitive Population	
Asthma	89.8
Cardio-vas	78.3
Low Birth W	53.5
Socioeconomic Factor Indicators	
Education	87.3
Housing	99.3
Linguistic	93.9
Poverty	87.8
Unemployr	81.7

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	
Above Pov	15.01347
Employed	17.64404
Median HI	2.065957
Education	
Bachelor's	23.94457
High schoo	100
Preschool e	52.58565
Transportation	
Auto Acces	6.351854
Active com	46.04132
Social	
2-parent h	26.27999
Voting	29.56499
Neighborhood	
Alcohol ava	31.10484
Park acces	62.08136
Retail dens	73.19389
Supermark	94.25125
Tree canop	79.53291
Housing	
Homeowne	13.08867
Housing ha	6.108046
Low-inc ho	69.52393
Low-inc re	0.898242
Uncrowdec	24.76582
Health Outcomes	
Insured ad	41.04966
Arthritis	88
Asthma ER	8.1
High Blood	55
Cancer (ex	98
Asthma	2.1
Coronary H	86
Chronic Ob	29
Diagnosed	49
Life Expect	3.1
Cognitively	9.6
Physically	14
Heart Atta	14
Mental He	5
Chronic Kic	73
Obesity	10
Pedestrian	90
Physical He	19
Stroke	52
Health Risk Behaviors	
Binge Drin	70
Current Sm	1.9
No Leisure	17
Climate Change Exposures	
Wildfire Ris	0
SLR Inunda	0
Children	11
Elderly	80

English Spe	12
Foreign-bo	66
Outdoor W	48
Climate Change Adaptive Capacity	
Impervious	20
Traffic Den	77
Traffic Acce	87
Other Indices	
Hardship	93
Other Decision Support	
2016 Votin	10

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroSc	86
Healthy Pla	14
Project Loc	Yes
Project Loc	Yes
Project Loc	South Florin

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

Measure Ti	Co-Benefits Achieved

7.5. Evaluation Scorecard

Category	Number of	Total Point	Max Possib	Weighted Score

7.6. Health & Equity Custom Measures

Measure Ti	Sponsor

8. User Changes to Default Data

Screen	Justification
Land Use	1/5th of project in 2025
Constructio	1/5th of project

:ers
:SM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Nar	Sac Rezone Fair Oaks (rezoned)
Constructic	1/1/2025
Lead Agency	
Land Use S	Project/site
Analysis Le	County
Windspeec	3.5
Precipitatic	39.2
Location	38.637469230516956, -121.32836613666706
County	Sacramento
City	Unincorporated
Air District	Sacramento Metropolitan AQMD
Air Basin	Sacramento Valley
TAZ	619
EDFZ	13
Electric Uti	Sacramento Municipal Utility District
Gas Utility	Pacific Gas & Electric
App Versio	2022.1.1.21

1.2. Land Use Types

Land Use S	Size	Unit	Lot Acreage	Building Ar	Landscape	Special Lan	Population	Description
Apartment	37	Dwelling U	1.25	35520	10890		104	

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Un/Mit.	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Unmit.	1.42	4.394737	9.23	11.7	0.02	0.33	0.3	0.63	0.3	0.07	0.37		2218	2218	0.09	0.04	1.46	2234
Daily, Winter (Max)																		
Unmit.	1.84	4.394737	14.1	15	0.02	0.64	2.86	3.51	0.59	1.36	1.95		2555	2555	0.1	0.04	0.04	2565
Average Daily (Max)																		
Unmit.	0.41	1.26	2.72	3.33	0.01	0.1	0.1	0.2	0.09	0.03	0.12		638	638	0.02	0.01	0.18	643
Annual (Max)																		
Unmit.	0.07	0.015132	0.5	0.61	< 0.005	0.02	0.02	0.04	0.02	0.01	0.02		106	106	< 0.005	< 0.005	0.03	106

2.2. Construction Emissions by Year, Unmitigated

Year	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily - Summer (Max)																		
2025	1.42	4.394737	9.23	11.7	0.02	0.33	0.3	0.63	0.3	0.07	0.37		2218	2218	0.09	0.04	1.46	2234
Daily - Winter (Max)																		
2025	1.84	4.394737	14.1	15	0.02	0.64	2.86	3.51	0.59	1.36	1.95		2555	2555	0.1	0.04	0.04	2565
Average Daily																		
2025	0.41	1.26	2.72	3.33	0.01	0.1	0.1	0.2	0.09	0.03	0.12		638	638	0.02	0.01	0.18	643
Annual																		
2025	0.07	0.015132	0.5	0.61	< 0.005	0.02	0.02	0.04	0.02	0.01	0.02		106	106	< 0.005	< 0.005	0.03	106

3. Construction Emissions Details

3.1. Site Preparation (2025) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Off-Road Ei	1.56	1.31	12.1	12.1	0.02	0.56		0.56	0.52		0.52		2065	2065	0.08	0.02		2072
Dust From Material Movement							2.44	2.44		1.17	1.17							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Off-Road Ei	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		5.66	5.66	< 0.005	< 0.005		5.68
Dust From Material Movement							0.01	0.01		< 0.005	< 0.005							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Off-Road Ei	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		0.94	0.94	< 0.005	< 0.005		0.94
Dust From Material Movement							< 0.005	< 0.005		< 0.005	< 0.005							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Worker	0.03	0.03	0.03	0.33	0	0	0.08	0.08	0	0.02	0.02		75.6	75.6	< 0.005	< 0.005	0.01	76.5
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005		0.21	0.21	< 0.005	< 0.005	< 0.005	0.22
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005		0.04	0.04	< 0.005	< 0.005	< 0.005	0.04
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0

3.3. Grading (2025) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Off-Road Ei	1.8	1.51	14.1	14.5	0.02	0.64		0.64	0.59		0.59		2455	2455	0.1	0.02		2463
Dust From Material Movement							2.76	2.76		1.34	1.34							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Off-Road Ei	0.01	0.01	0.08	0.08	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		13.5	13.5	< 0.005	< 0.005		13.5

Report Tables

Daily Max

Year	ROG	NOx	PM10	PM2.5	CO2	PM10	PM2.5
2025	4	14	4	2	106	0.04	0.02

diesel PM 0.64

Yearly

Tons/year

Year	ROG	NOx	PM10	PM2.5	CO2	PM10	PM2.5
2025	4	14	4	2	106	0.04	0.02

Emissions per Capita

ROG	NOx	PM10	PM2.5	CO2
0.042	0.136	0.034	0.019	1.01923

Fuel Calcs

Note: gasoline = worker emissions; Diesel = vendor + offroad eq

Year	Gasoline	Diesel
2025	13.27	93.16

Dust From Material Movement							0.02	0.02		0.01	0.01							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual																		
Off-Road E	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005	2.23	2.23	< 0.005	< 0.005			2.23
Dust From Material Movement							< 0.005	< 0.005		< 0.005	< 0.005							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Worker	0.04	0.04	0.04	0.44	0	0	0.1	0.1	0	0.02	0.02	101	101	< 0.005	< 0.005	0.01	102	
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Average Daily																		
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005	0.57	0.57	< 0.005	< 0.005	< 0.005	0.57	
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Annual																		
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005	0.09	0.09	< 0.005	< 0.005	< 0.005	0.1	
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

3.5. Building Construction (2025) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Off-Road E	1.28	1.07	8.95	10	0.02	0.33		0.33	0.3		0.3	1801	1801	0.07	0.01		1807	
Onsite truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily, Winter (Max)																		
Off-Road E	1.28	1.07	8.95	10	0.02	0.33		0.33	0.3		0.3	1801	1801	0.07	0.01		1807	
Onsite truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Average Daily																		
Off-Road E	0.35	0.29	2.45	2.75	0.01	0.09		0.09	0.08		0.08	493	493	0.02	< 0.005		495	
Onsite truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual																		
Off-Road E	0.06	0.05	0.45	0.5	< 0.005	0.02		0.02	0.02		0.02	81.7	81.7	< 0.005	< 0.005		82	
Onsite truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Worker	0.12	0.11	0.08	1.61	0	0	0.27	0.27	0	0.06	0.06	302	302	< 0.005	0.01	1.16	307	
Vendor	0.01	< 0.005	0.21	0.08	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	114	114	0.01	0.02	0.3	120	
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Daily, Winter (Max)																		
Worker	0.11	0.1	0.1	1.18	0	0	0.27	0.27	0	0.06	0.06	268	268	0.01	0.01	0.03	272	
Vendor	0.01	< 0.005	0.22	0.08	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	114	114	0.01	0.02	0.01	120	
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Average Daily																		
Worker	0.03	0.03	0.02	0.33	0	0	0.07	0.07	0	0.02	0.02	75.5	75.5	< 0.005	< 0.005	0.14	76.5	
Vendor	< 0.005	< 0.005	0.06	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	31.3	31.3	< 0.005	< 0.005	0.04	32.8	
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Annual																		
Worker	0.01	0.01	< 0.005	0.06	0	0	0.01	0.01	0	< 0.005	< 0.005	12.5	12.5	< 0.005	< 0.005	0.02	12.7	
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	5.19	5.19	< 0.005	< 0.005	0.01	5.43	
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

3.7. Paving (2025) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Off-Road E	0.59	0.49	4.63	6.5	0.01	0.2		0.2	0.19		0.19	992	992	0.04	0.01		995	
Paving		0																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily, Winter (Max)																		
Average Daily																		
Off-Road E	0.01	0.01	0.06	0.09	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005	13.6	13.6	< 0.005	< 0.005		13.6	
Paving		0																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual																		
Off-Road E	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005	2.25	2.25	< 0.005	< 0.005		2.26	
Paving		0																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Worker	0.06	0.05	0.04	0.75	0	0	0.13	0.13	0	0.03	0.03	142	142	< 0.005	0.01	0.54	144	
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Daily, Winter (Max)																		
Average Daily																		
Worker	< 0.005	< 0.005	< 0.005	0.01	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005	1.77	1.77	< 0.005	< 0.005	< 0.005	1.8	
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Annual																		
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005	0.29	0.29	< 0.005	< 0.005	< 0.005	0.3	
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

3.9. Architectural Coating (2025) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Off-Road E	0.15	0.13	0.88	1.14	< 0.005	0.03		0.03	0.03		0.03	134	134	0.01	< 0.005		134	
Architectural Coatings		66.7																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily, Winter (Max)																		

Average Daily																						
Off-Road Ei	< 0.005	< 0.005			0.01	0.02	< 0.005	< 0.005			< 0.005	< 0.005			< 0.005			1.83	1.83	< 0.005	< 0.005			1.84
Architectural Coatings			0.91																			
Onsite truc	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual																						
Off-Road Ei	< 0.005	< 0.005	< 0.005		< 0.005	< 0.005	< 0.005				< 0.005	< 0.005			< 0.005			0.3	0.3	< 0.005	< 0.005			0.3
Architectural Coatings			0.17																			
Onsite truc	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Offsite																						
Daily, Summer (Max)																						
Worker	0.02	0.02		0.02	0.32	0	0	0.05	0.05	0	0.01	0.01	0	60.5	60.5	< 0.005	< 0.005	0.23	61.4			
Vendor	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Hauling	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Daily, Winter (Max)																						
Average Daily																						
Worker	< 0.005	< 0.005	< 0.005		< 0.005	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005	0	0.75	0.75	< 0.005	< 0.005	< 0.005	0.77			
Vendor	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Hauling	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Annual																						
Worker	< 0.005	< 0.005	< 0.005		< 0.005	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005	0	0.12	0.12	< 0.005	< 0.005	< 0.005	0.13			
Vendor	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Hauling	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Vegetation	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Species	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		
Removed																		
Subtotal																		
Daily, Winter (Max)																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		
Removed																		
Subtotal																		
Annual																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		
Removed																		
Subtotal																		

5. Activity Data

5.1. Construction Schedule

Phase Nam	Phase Type	Start Date	End Date	Days Per W	Work Days	Phase Description
Site Prepar	Site Prepar	1/1/2025	1/1/2025	5	1	
Grading	Grading	1/2/2025	1/3/2025	5	2	
Building Cc	Building Cc	1/4/2025	5/23/2025	5	100	
Paving	Paving	5/24/2025	5/30/2025	5	5	
Architectur	Architectur	5/31/2025	6/6/2025	5	5	

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Nam	Equipment	Fuel Type	Engine Tier	Number pe	Hours Per I	Horsepow	Load Factor
Site Prepar	Graders	Diesel	Average	1	8	148	0.41
Site Prepar	Tractors/Lc	Diesel	Average	1	8	84	0.37
Site Prepar	Rubber Tire	Diesel	Average	1	7	367	0.4
Grading	Graders	Diesel	Average	1	8	148	0.41
Grading	Rubber Tire	Diesel	Average	1	8	367	0.4
Grading	Tractors/Lc	Diesel	Average	2	7	84	0.37
Building Cc	Cranes	Diesel	Average	1	6	367	0.29
Building Cc	Forklifts	Diesel	Average	1	6	82	0.2
Building Cc	Tractors/Lc	Diesel	Average	1	6	84	0.37
Building Cc	Generator	Diesel	Average	1	8	14	0.74
Building Cc	Welders	Diesel	Average	3	8	46	0.45

Paving	Tractors/Lc	Diesel	Average	1	8	84	0.37
Paving	Cement an	Diesel	Average	1	6	10	0.56
Paving	Pavers	Diesel	Average	1	6	81	0.42
Paving	Rollers	Diesel	Average	1	7	36	0.38
Paving	Paving Equ	Diesel	Average	1	8	89	0.36
Architectur	Air Compre	Diesel	Average	1	6	37	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Nam	Trip Type	One-Way T	Miles per Trip	Vehicle Mix
Site Preparation				
Site Prepar	Worker	7.5	14.3	LDA,LDT1,LDT2
Site Prepar	Vendor		8.8	HHDT,MHDT
Site Prepar	Hauling	0	20	HHDT
Site Prepar	Onsite truck			HHDT
Grading				
Grading	Worker	10	14.3	LDA,LDT1,LDT2
Grading	Vendor		8.8	HHDT,MHDT
Grading	Hauling	0	20	HHDT
Grading	Onsite truck			HHDT
Building Construction				
Building Cc	Worker	26.6	14.3	LDA,LDT1,LDT2
Building Cc	Vendor	3.96	8.8	HHDT,MHDT
Building Cc	Hauling	0	20	HHDT
Building Cc	Onsite truck			HHDT
Paving				
Paving	Worker	12.5	14.3	LDA,LDT1,LDT2
Paving	Vendor		8.8	HHDT,MHDT
Paving	Hauling	0	20	HHDT
Paving	Onsite truck			HHDT
Architectural Coating				
Architectur	Worker	5.33	14.3	LDA,LDT1,LDT2
Architectur	Vendor		8.8	HHDT,MHDT
Architectur	Hauling	0	20	HHDT
Architectur	Onsite truck			HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Str	PM10 Redı	PM2.5 Reduction

5.5. Architectural Coatings

Phase Nam	Residential	Residential	Non-Residential	Non-Residc	Parking Area Coated (sq ft)
Architectur	71928	23976	0	0	

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Nam	Material Im	Material Ex	Acres Graded (a	Material Dı	Acres Paved (acres)
Site Preparation			0.94	0	
Grading			2	0	
Paving	0	0	0	0	

5.6.2. Construction Earthmoving Control Strategies

Control Str	Frequency	PM10 Redı	PM2.5 Reduction
Water Expc	2	61	61
Water Dem	2	36	36

5.7. Construction Paving

Land Use	Area Pavec	% Asphalt
Apartments Mid Rise		0

5.8. Construction Electricity Consumption and Emissions Factors

Year	kWh per Yc	CO2	CH4	N2O
2025	0	375	0.01	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation	Vegetation	Initial Acre	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cc	Initial Acre	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity S	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Ha	Result for F	Unit
Temperatu	24.1	annual days of extreme heat
Extreme Pr	6.45	annual days with precipitation above 20 mm
Sea Level Rise		meters of inundation depth
Wildfire	0.69	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the gric

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (h

6.2. Initial Climate Risk Scores

Climate Ha	Exposure S	Sensitivity	Adaptive Capaci	Vulnerability Score
Temperatu	2	0	0	N/A

Extreme Pr	2	0	0	N/A
Sea Level R	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack I	N/A	N/A	N/A	N/A
Air Quality	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Ha	Exposure S	Sensitivity	Adaptive Capaci	Vulnerability Score
Temperatu	2	1	1	3
Extreme Pr	2	1	1	3
Sea Level R	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack I	N/A	N/A	N/A	N/A
Air Quality	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	
AQ-Ozone	59.7
AQ-PM	39.5
AQ-DPM	50.3
Drinking W	47.8
Lead Risk H	54.5
Pesticides	0
Toxic Relea	20.9
Traffic	21.4
Effect Indicators	
CleanUp Si	18.7
Groundwat	78.3
Haz Waste	59.8
Impaired W	77.3
Solid Wast	0
Sensitive Population	
Asthma	88.7
Cardio-vas	62.6
Low Birth V	7.38
Socioeconomic Factor Indicators	
Education	25.1
Housing	70.2
Linguistic	37
Poverty	67.4
Unemployr	14.4

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	
Above Pov	37.16156
Employed	15.56525
Median HI	23.82908
Education	
Bachelor's	54.33081
High schoo	26.62646
Preschool e	15.20595
Transportation	
Auto Acces	28.94906
Active com	46.06698
Social	
2-parent h	11.18953
Voting	74.93905
Neighborhood	
Alcohol ava	37.77749
Park access	30.25792
Retail dens	94.59772
Supermark	42.71782
Tree canop	91.62069
Housing	
Homeowne	51.98255
Housing ha	41.55011
Low-inc ho	37.45669
Low-inc rer	6.736815
Uncrowdec	66.91903
Health Outcomes	
Insured adu	47.9148
Arthritis	0
Asthma ER	6
High Blood	0
Cancer (exc	0
Asthma	0
Coronary H	0

Chronic Ob	0
Diagnosed	0
Life Expect	11
Cognitively	14
Physically	27
Heart Attac	49
Mental Hea	0
Chronic Kid	0
Obesity	0
Pedestrian	53
Physical He	0
Stroke	0
Health Risk Behaviors	
Binge Drink	0
Current Sm	0
No Leisure	0
Climate Change Exposures	
Wildfire Ris	0
SLR Inunda	0
Children	67
Elderly	28
English Spe	75
Foreign-bo	11
Outdoor W	47
Climate Change Adaptive Capacity	
Impervious	61
Traffic Den	60
Traffic Acce	23
Other Indices	
Hardship	64
Other Decision Support	
2016 Votin	65

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroSc	47
Healthy Pla	30
Project Loc No	
Project Loc Yes	
Project Loc No	

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

Measure Ti	Co-Benefits Achieved

7.5. Evaluation Scorecard

Category	Number of	Total Point	Max Possible Pc	Weighted Score

7.6. Health & Equity Custom Measures

Measure Ti	Sponsor

8. User Changes to Default Data

Screen	Justification
Constructic	no demo
Land Use	PD

ł cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
ıadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

1. Basic Project Information
1.1. Basic Project Information

Data Field	Value
Project Nar	Sac Rezone North Watt (rezoned)
Constructic	6/7/2025
Lead Agency	
Land Use S	Project/site
Analysis Le	County
Windspeec	3.5
Precipitatic	39.2
Location	38.66735756395545, -121.38321539651498
County	Sacramento
City	Unincorporated
Air District	Sacramento Metropolitan AQMD
Air Basin	Sacramento Valley
TAZ	657
EDFZ	13
Electric Uti	Sacramento Municipal Utility District
Gas Utility	Pacific Gas & Electric
App Versio	2022.1.1.21

1.2. Land Use Types

Land Use S	Size	Unit	Lot Acreage	Building Ar	Landscape	Special Lan	Population	Description
Apartment	735	Dwelling U	21.3	705600	185653		2058	

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title

2. Emissions Summary
2.1. Construction Emissions Compared Against Thresholds

Un/Mit.	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Unmit.	4.03	3.46	31.7	46.5	0.06	1.37	7.84	9.21	1.26	3.98	5.24		10677	10677	0.34	0.57	29	10884
Daily, Winter (Max)																		
Unmit.	3.82	332	16.8	38.1	0.04	0.46	5.94	6.41	0.43	1.41	1.84		10002	10002	0.38	0.57	0.75	10182
Average Daily (Max)																		
Unmit.	2.48	18.3	11	26.3	0.03	0.29	4.14	4.43	0.27	0.98	1.25		7136	7136	0.25	0.4	8.14	7272
Annual (Max)																		
Unmit.	0.45	3.33	2.02	4.8	0.01	0.05	0.76	0.81	0.05	0.18	0.23		1182	1182	0.04	0.07	1.35	1204

2.2. Construction Emissions by Year, Unmitigated

Year	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily - Summer (Max)																		
2025	4.03	3.46	31.7	46.5	0.06	1.37	7.84	9.21	1.26	3.98	5.24		10677	10677	0.34	0.57	29	10884
2026	3.84	23.36383	15.1	44.2	0.04	0.41	5.94	6.35	0.38	1.41	1.79		10514	10514	0.33	0.56	26.4	10714
Daily - Winter (Max)																		
2025	3.82	3.2	16.8	38.1	0.04	0.46	5.94	6.41	0.43	1.41	1.84		10002	10002	0.38	0.57	0.75	10182
2026	3.49	23.36383	15.7	36.4	0.04	0.41	5.94	6.35	0.38	1.41	1.79		9854	9854	0.36	0.57	0.69	10032
2027	3.36	23.36383	15	35	0.04	0.37	5.94	6.31	0.34	1.41	1.76		9711	9711	0.35	0.55	0.62	9884
Average Daily																		
2025	1.56	1.32	8.41	14.6	0.02	0.29	2.22	2.51	0.27	0.64	0.91		3681	3681	0.13	0.17	3.59	3738
2026	2.48	2.19	11	26.3	0.03	0.29	4.14	4.43	0.27	0.98	1.25		7136	7136	0.25	0.4	8.14	7272
2027	0.13	18.3	0.68	1.43	< 0.005	0.02	0.16	0.18	0.02	0.04	0.06		310	310	0.01	0.01	0.27	314
Annual																		
2025	0.29	0.24	1.53	2.66	< 0.005	0.05	0.41	0.46	0.05	0.12	0.17		609	609	0.02	0.03	0.59	619
2026	0.45	0.234342	2.02	4.8	0.01	0.05	0.76	0.81	0.05	0.18	0.23		1182	1182	0.04	0.07	1.35	1204
2027	0.02	0.234342	0.12	0.26	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01		51.4	51.4	< 0.005	< 0.005	0.04	52

3. Construction Emissions Details
3.1. Site Preparation (2025) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Off-Road Ei	3.94	3.31	31.6	30.2	0.05	1.37		1.37	1.26		1.26		5295	5295	0.21	0.04		5314
Dust From Material Movement							7.67	7.67		3.94	3.94							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Daily, Winter (Max)																		
Average Daily																		
Off-Road Ei	0.11	0.09	0.87	0.83	< 0.005	0.04		0.04	0.03		0.03		145	145	0.01	< 0.005		146
Dust From Material Movement							0.21	0.21		0.11	0.11							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Off-Road Ei	0.02	0.02	0.16	0.15	< 0.005	0.01		0.01	0.01		0.01		24	24	< 0.005	< 0.005		24.1
Dust From Material Movement							0.04	0.04		0.02	0.02							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Worker	0.08	0.07	0.05	1.05	0	0	0.18	0.18	0	0.04	0.04		199	199	< 0.005	0.01	0.76	202
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Daily, Winter (Max)																		
Average Daily																		
Worker	< 0.005	< 0.005	< 0.005	0.02	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005		4.96	4.96	< 0.005	< 0.005	0.01	5.03
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005		0.82	0.82	< 0.005	< 0.005	< 0.005	0.83
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0

3.3. Grading (2025) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		

Report Tables

Daily Max

Year	ROG	NOx	PM10	PM2.5	CO2	Pm10	Pm2.5
2025	3	32	9	5	619	0.46	0.17
2026	23	16	6	2	1204	0.81	0.23
2027	23	15	6	2	52	0.03	0.01

diesel PM

2025	1.37
2026	5.94
2027	0.37

Yearly

Emission per capita

Year	ROG	NOx	PM10	PM2.5	CO2
2025	0.002	0.015	0.004	0.003	0.30078
2026	0.011	0.008	0.003	0.001	0.58503
2027	0.011	0.007	0.003	0.001	0.02527
average	0.008	0.010	0.004	0.001	0.30369

Fuel Calcs

Tons/year

Note: gasoline = worker emissions; Diesel = vendor + offroad eq

Year	Gasoline	Diesel
2025	265.16	354.1
2026	644	560
2027	24.86	27.15

Daily, Summer (Max)																	
Off-Road Ei	3.8	3.2	29.7	28.3	0.06	1.23		1.23	1.14		1.14	6599	6599	0.27	0.05		6622
Dust From Material Movement							3.59	3.59		1.42	1.42						
Onsite truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily, Winter (Max)																	
Average Daily																	
Off-Road Ei	0.36	0.31	2.85	2.71	0.01	0.12		0.12	0.11		0.11	633	633	0.03	0.01		635
Dust From Material Movement							0.34	0.34		0.14	0.14						
Onsite truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual																	
Off-Road Ei	0.07	0.06	0.52	0.5	< 0.005	0.02		0.02	0.02		0.02	105	105	< 0.005	< 0.005		105
Dust From Material Movement							0.06	0.06		0.02	0.02						
Onsite truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Offsite																	
Daily, Summer (Max)																	
Worker	0.09	0.08	0.06	1.21	0	0	0.2	0.2	0	0.05	0.05	227	227	< 0.005	0.01	0.87	230
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily, Winter (Max)																	
Average Daily																	
Worker	0.01	0.01	0.01	0.09	0	0	0.02	0.02	0	< 0.005	< 0.005	19.8	19.8	< 0.005	< 0.005	0.04	20.1
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual																	
Worker	< 0.005	< 0.005	< 0.005	0.02	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005	3.28	3.28	< 0.005	< 0.005	0.01	3.33
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

3.5. Building Construction (2025) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Off-Road Ei	1.35	1.13	10.4	13	0.02	0.43		0.43	0.4		0.4		2398	2398	0.1	0.02		2406
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Daily, Winter (Max)																		
Off-Road Ei	1.35	1.13	10.4	13	0.02	0.43		0.43	0.4		0.4		2398	2398	0.1	0.02		2406
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Off-Road Ei	0.38	0.32	2.96	3.7	0.01	0.12		0.12	0.11		0.11		680	680	0.03	0.01		683
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Off-Road Ei	0.07	0.06	0.54	0.68	< 0.005	0.02		0.02	0.02		0.02		113	113	< 0.005	< 0.005		113
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Worker	2.44	2.24	1.54	31.9	0	0	5.35	5.35	0	1.25	1.25		6007	6007	0.09	0.21	23.1	6096
Vendor	0.25	0.1	4.12	1.53	0.02	0.03	0.6	0.63	0.03	0.16	0.19		2273	2273	0.15	0.34	5.91	2382
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Daily, Winter (Max)																		
Worker	2.23	1.99	1.96	23.5	0	0	5.35	5.35	0	1.25	1.25		5333	5333	0.13	0.21	0.6	5400
Vendor	0.25	0.08	4.4	1.56	0.02	0.03	0.6	0.63	0.03	0.16	0.19		2272	2272	0.15	0.34	0.15	2376
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Worker	0.63	0.57	0.49	6.81	0	0	1.48	1.48	0	0.35	0.35		1553	1553	0.03	0.06	2.82	1575
Vendor	0.07	0.03	1.23	0.44	< 0.005	0.01	0.17	0.17	0.01	0.04	0.05		645	645	0.04	0.1	0.72	675
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Worker	0.11	0.1	0.09	1.24	0	0	0.27	0.27	0	0.06	0.06		257	257	< 0.005	0.01	0.47	261
Vendor	0.01	0.01	0.22	0.08	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01		107	107	0.01	0.02	0.12	112
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0

3.7. Building Construction (2026) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Off-Road Ei	1.28	1.07	9.85	13	0.02	0.38		0.38	0.35		0.35		2397	2397	0.1	0.02		2405
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Daily, Winter (Max)																		
Off-Road Ei	1.28	1.07	9.85	13	0.02	0.38		0.38	0.35		0.35		2397	2397	0.1	0.02		2405
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Off-Road Ei	0.91	0.77	7.04	9.26	0.02	0.27		0.27	0.25		0.25		1712	1712	0.07	0.01		1718
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Off-Road Ei	0.17	0.14	1.28	1.69	< 0.005	0.05		0.05	0.05		0.05		283	283	0.01	< 0.005		284
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Worker	2.33	2.12	1.36	29.8	0	0	5.35	5.35	0	1.25	1.25		5890	5890	0.08	0.2	21	5973
Vendor	0.23	0.08	3.85	1.47	0.02	0.03	0.6	0.63	0.03	0.16	0.19		2227	2227	0.15	0.34	5.36	2336
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Daily, Winter (Max)																		
Worker	1.98	1.92	1.77	21.9	0	0	5.35	5.35	0	1.25	1.25		5231	5231	0.12	0.21	0.55	5298
Vendor	0.23	0.08	4.13	1.5	0.02	0.03	0.6	0.63	0.03	0.16	0.19		2226	2226	0.15	0.33	0.14	2329
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Worker	1.4	1.36	1.11	16	0	0	3.72	3.72	0	0.87	0.87		3834	3834	0.08	0.15	6.49	3888
Vendor	0.17	0.06	2.9	1.06	0.01	0.02	0.42	0.44	0.02	0.11	0.13		1590	1590	0.11	0.24	1.65	1666
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Worker	0.25	0.25	0.2	2.91	0	0	0.68	0.68	0	0.16	0.16		635	635	0.01	0.03	1.07	644
Vendor	0.03	0.01	0.53	0.19	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.02		263	263	0.02	0.04	0.27	276
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0

3.9. Building Construction (2027) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Off-Road Ei	1.23	1.03	9.39	12.9	0.02	0.34		0.34	0.31		0.31		2397	2397	0.1	0.02		2405
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Off-Road Ei	0.02	0.02	0.15	0.2	< 0.005	0.01		0.01	< 0.005		< 0.005		37.5	37.5	< 0.005	< 0.005		37.7
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Off-Road Ei	< 0.005	< 0.005	0.03	0.04	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		6.21	6.21	< 0.005	< 0.005		6.23
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Worker	1.9	1.67	1.74	20.6	0	0	5.35	5.35	0	1.25	1.25		5138	5138	0.12	0.21	0.5	5205
Vendor	0.23	0.08	3.86	1.45	0.02	0.03	0.6	0.63	0.03	0.16	0.19		2176	2176	0.13	0.32	0.12	2274
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Worker	0.03	0.03	0.02	0.33	0	0	0.08	0.08	0	0.02	0.02		82.5	82.5	< 0.005	< 0.005	0.13	83.6
Vendor	< 0.005	< 0.005	0.06	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005		34.1	34.1	< 0.005	< 0.005	0.03	35.6
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Worker	0.01	< 0.005	< 0.005	0.06	0	0	0.01	0.01	0	< 0.005	< 0.005		13.7	13.7	< 0.005	< 0.005	0.02	13.8
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005		5.64	5.64	< 0.005	< 0.005	0.01	5.9
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0

3.11. Paving (2027) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Off-Road Ei	0.88	0.74	6.94	9.95	0.01	0.3		0.3	0.27		0.27		1511	1511	0.06	0.01		1516
Paving		0																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Off-Road Ei	0.05	0.04	0.38	0.55	< 0.005	0.02		0.02	0.02		0.02		82.8	82.8	< 0.005	< 0.005		83.1
Paving		0																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Off-Road Ei	0.01	0.01	0.07	0.1	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		13.7	13.7	< 0.005	< 0.005		13.8
Paving		0																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Worker	0.05	0.05	0.05	0.58	0	0	0.15	0.15	0	0.04	0.04		146	146	< 0.005	0.01	0.01	148
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Worker	< 0.005	< 0.005	< 0.005	0.03	0	0	0.01	0.01	0	< 0.005	< 0.005		8.19	8.19	< 0.005	< 0.005	0.01	8.3
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Worker	< 0.005	< 0.005	< 0.005	0.01	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005		1.36	1.36	< 0.005	< 0.005	< 0.005	1.37
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0

3.13. Architectural Coating (2027) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Off-Road Ei	0.14	0.11	0.83	1.13	< 0.005	0.02		0.02	0.02		0.02		134	134	0.01	< 0.005		134
Architectural Coatings		331																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Off-Road Ei	0.01	0.01	0.05	0.06	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		7.32	7.32	< 0.005	< 0.005		7.34
Architectural Coatings		18.1																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Off-Road Ei	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		1.21	1.21	< 0.005	< 0.005		1.22
Architectural Coatings		3.31																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Worker	0.38	0.33	0.35	4.11	0	0	1.07	1.07	0	0.25	0.25		1028	1028	0.02	0.04	0.1	1041
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Worker	0.02	0.02	0.02	0.23	0	0	0.06	0.06	0	0.01	0.01		57.8	57.8	< 0.005	< 0.005	0.09	58.6
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Worker	< 0.005	< 0.005	< 0.005	0.04	0	0	0.01	0.01	0	< 0.005	< 0.005		9.57	9.57	< 0.005	< 0.005	0.01	9.69
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Vegetation	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Species	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		
Removed																		
Subtotal																		
Daily, Winter (Max)																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		
Removed																		
Subtotal																		
Annual																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		
Removed																		
Subtotal																		

5. Activity Data

5.1. Construction Schedule

Phase Nam	Phase Type	Start Date	End Date	Days Per W	Work Days	Phase Description
Site Prepar	Site Prepar	6/7/2025	6/20/2025	5	10	
Grading	Grading	6/21/2025	8/8/2025	5	35	
Building Cc	Building Cc	8/9/2025	1/8/2027	5	370	
Paving	Paving	1/9/2027	2/5/2027	5	20	
Architectur	Architectur	2/6/2027	3/5/2027	5	20	

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Nam	Equipment	Fuel Type	Engine Tier	Number pe	Hours Per I	Horsepow	Load Factor
Site Prepar	Rubber Tir	Diesel	Average	3	8	367	0.4
Site Prepar	Tractors/Lo	Diesel	Average	4	8	84	0.37
Grading	Graders	Diesel	Average	1	8	148	0.41
Grading	Excavators	Diesel	Average	2	8	36	0.38
Grading	Tractors/Lo	Diesel	Average	2	8	84	0.37
Grading	Rubber Tir	Diesel	Average	1	8	367	0.4
Grading	Scrapers	Diesel	Average	2	8	423	0.48
Building Cc	Cranes	Diesel	Average	1	7	367	0.29
Building Cc	Forklifts	Diesel	Average	3	8	82	0.2
Building Cc	Generator	Diesel	Average	1	8	14	0.74
Building Cc	Welders	Diesel	Average	1	8	46	0.45
Building Cc	Tractors/Lo	Diesel	Average	3	7	84	0.37
Paving	Pavers	Diesel	Average	2	8	81	0.42
Paving	Paving Equ	Diesel	Average	2	8	89	0.36
Paving	Rollers	Diesel	Average	2	8	36	0.38
Architectur	Air Compre	Diesel	Average	1	6	37	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Nam	Trip Type	One-Way T	Miles per Tr	Vehicle Mix
Site Preparation				
Site Prepar	Worker	17.5	14.3	LDA,LDT1,LDT2
Site Prepar	Vendor		8.8	HHDT,MHDT
Site Prepar	Hauling	0	20	HHDT
Site Prepar	Onsite truck			HHDT
Grading				
Grading	Worker	20	14.3	LDA,LDT1,LDT2
Grading	Vendor		8.8	HHDT,MHDT
Grading	Hauling	0	20	HHDT
Grading	Onsite truck			HHDT
Building Construction				
Building Cc	Worker	529	14.3	LDA,LDT1,LDT2
Building Cc	Vendor	78.6	8.8	HHDT,MHDT
Building Cc	Hauling	0	20	HHDT
Building Cc	Onsite truck			HHDT
Paving				

Paving	Worker	15	14.3	LDA,LDT1,LDT2
Paving	Vendor		8.8	HHDT,MHDT
Paving	Hauling	0	20	HHDT
Paving	Onsite truck			HHDT
Architectural Coating				
Architectur	Worker	106	14.3	LDA,LDT1,LDT2
Architectur	Vendor		8.8	HHDT,MHDT
Architectur	Hauling	0	20	HHDT
Architectur	Onsite truck			HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Str	PM10 Redu	PM2.5 Reduction

5.5. Architectural Coatings

Phase Nam	Residential	Residential	Non-Reside	Non-Reside	Parking Area Coated (sq ft)
Architectur	1428840	476280	0	0	

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Nam	Material Im	Material Ex	Acres Grade	Material Di	Acres Paved (acres)
Site Preparation			15		0
Grading			105		0
Paving	0	0	0		0

5.6.2. Construction Earthmoving Control Strategies

Control Str	Frequency	PM10 Redu	PM2.5 Reduction
Water Exp	2	61	61

5.7. Construction Paving

Land Use	Area Paved	% Asphalt
Apartments Mid Rise		0

5.8. Construction Electricity Consumption and Emissions Factors

Year	kWh per Y	CO2	CH4	N2O
2025	0	375	0.01	< 0.005
2026	0	375	0.01	< 0.005
2027	0	375	0.01	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation	Vegetation	Initial Acre	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Co	Initial Acre	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity S	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Ha	Result for F	Unit
Temperatu	21.8	annual days of extreme heat
Extreme Pr	6.35	annual days with precipitation above 20 mm
Sea Level Rise		meters of inundation depth
Wildfire	0	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell.

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGE

6.2. Initial Climate Risk Scores

Climate Ha	Exposure S	Sensitivity	Adaptive Ca	Vulnerability Score
Temperatu	1	0	0	N/A
Extreme Pr	2	0	0	N/A
Sea Level R	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack I	N/A	N/A	N/A	N/A
Air Quality	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Ha	Exposure S	Sensitivity	Adaptive Ca	Vulnerability Score
Temperatu	1	1	1	2
Extreme Pr	2	1	1	3
Sea Level R	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack I	N/A	N/A	N/A	N/A
Air Quality	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures
7. Health and Equity Details
7.1. CalEnviroScreen 4.0 Scores
The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	
AQ-Ozone	58.2
AQ-PM	37.4
AQ-DPM	27.5
Drinking W	61.1
Lead Risk H	92.2
Pesticides	7.24
Toxic Relea	21.8
Traffic	47
Effect Indicators	
CleanUp Si	80.9
Groundwat	99.2
Haz Waste	61.6
Impaired W	0
Solid Waste	52.9
Sensitive Population	
Asthma	93.4
Cardio-vas	69.2
Low Birth W	79.4
Socioeconomic Factor Indicators	
Education	62.9
Housing	73.4
Linguistic	39.2
Poverty	91.6
Unemployr	65.6

7.2. Healthy Places Index Scores
The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	
Above Pov	10.16297
Employed	6.274862
Median HI	6.672655
Education	
Bachelor's	19.73566
High schoo	12.79353
Preschool e	42.65366
Transportation	
Auto Acces	24.89414
Active com	74.06647
Social	
2-parent ho	39.00937
Voting	13.02451
Neighborhood	
Alcohol ava	41.65277
Park access	47.42718
Retail dens	38.27794
Supermark	72.19299
Tree canop	82.34313
Housing	
Homeowne	23.13615
Housing ha	24.9198
Low-inc ho	13.20416
Low-inc rer	43.79571
Uncrowdec	25.44591
Health Outcomes	
Insured adı	37.80316
Arthritis	0
Asthma ER	5.9
High Blood	0
Cancer (exc	0
Asthma	0
Coronary H	0
Chronic Ob	0
Diagnosed	0
Life Expect	5.5
Cognitively	4
Physically	5.6
Heart Attac	17
Mental Hea	0
Chronic Kid	0
Obesity	0
Pedestrian	97
Physical He	0
Stroke	0
Health Risk Behaviors	
Binge Drink	0
Current Sm	0
No Leisure	0
Climate Change Exposures	
Wildfire Ris	0
SLR Inunda	0
Children	16
Elderly	68
English Spe	43
Foreign-bo	30
Outdoor W	49
Climate Change Adaptive Capacity	

Impervious	51
Traffic Den	47
Traffic Acc	66
Other Indices	
Hardship	81
Other Decision Support	
2016 Votin	6.4

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroSc	83
Healthy Pla	13
Project Loc	Yes
Project Loc	Yes
Project Loc	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

Measure Ti	Co-Benefits Achieved

7.5. Evaluation Scorecard

Category	Number of	Total Point	Max Possibl	Weighted Score

7.6. Health & Equity Custom Measures

Measure Ti	Sponsor

8. User Changes to Default Data

Screen	Justification
Land Use	20% of total lot acreage is landscaped as in GP
Constructic	no demo

The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
:M2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

1. Basic Project Information
1.1. Basic Project Information

Data Field	Value
Project Nar	Sac Rezone Old Florin (rezoned)
Constructic	3/6/2027
Lead Agency	
Land Use S	Project/site
Analysis Le	County
Windspeec	3
Precipitatic	37.8
Location	38.49656099729435, -121.39733654991514
County	Sacramento
City	Unincorporated
Air District	Sacramento Metropolitan AQMD
Air Basin	Sacramento Valley
TAZ	774
EDFZ	13
Electric Uti	Sacramento Municipal Utility District
Gas Utility	Pacific Gas & Electric
App Versio	2022.1.1.21

1.2. Land Use Types

Land Use S	Size	Unit	Lot Acreage	Building Ar	Landscape	Special Lan	Population	Description
Apartment	777	Dwelling U	25.2	745920	219717		2176	

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title

2. Emissions Summary
2.1. Construction Emissions Compared Against Thresholds

Un/Mit.	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Unmit.	3.68	3.28	25.6	44.1	0.06	1.04	6.28	6.65	0.96	1.49	2.43		10812	10812	0.32	0.57	25.3	11016
Daily, Winter (Max)																		
Unmit.	3.69	390	28	36.2	0.06	1.17	7.84	9.01	1.08	3.98	5.06		10129	10129	0.36	0.58	0.66	10312
Average Daily (Max)																		
Unmit.	2.06	20.8	10.2	20.6	0.03	0.3	3.43	3.74	0.28	0.93	1.21		5674	5674	0.19	0.32	5.48	5778
Annual (Max)																		
Unmit.	0.38	3.79	1.87	3.76	< 0.005	0.06	0.63	0.68	0.05	0.17	0.22		939	939	0.03	0.05	0.91	957

2.2. Construction Emissions by Year, Unmitigated

Year	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily - Summer (Max)																		
2027	3.68	25.05353	25.6	44.1	0.06	1.04	6.28	6.65	0.96	1.49	2.43		10812	10812	0.32	0.57	25.3	11016
2028	3.54	25.05353	13.7	42.2	0.04	0.33	6.28	6.61	0.31	1.49	1.8		10626	10626	0.31	0.39	22.8	10774
Daily - Winter (Max)																		
2027	3.69	25.05353	28	36.2	0.06	1.17	7.84	9.01	1.08	3.98	5.06		10129	10129	0.36	0.58	0.66	10312
2028	3.35	25.05353	14.4	34.9	0.04	0.33	6.28	6.61	0.31	1.49	1.8		9957	9957	0.35	0.58	0.59	10140
Average Daily																		
2027	2.06	1.72	10.2	20.6	0.03	0.3	3.43	3.74	0.28	0.93	1.21		5585	5585	0.19	0.27	5.12	5676
2028	1.9	20.8	8.12	20.1	0.02	0.2	3.42	3.62	0.18	0.81	0.99		5674	5674	0.19	0.32	5.48	5778
Annual																		
2027	0.38	0.243469	1.87	3.76	< 0.005	0.06	0.63	0.68	0.05	0.17	0.22		925	925	0.03	0.05	0.85	940
2028	0.35	0.243469	1.48	3.67	< 0.005	0.04	0.62	0.66	0.03	0.15	0.18		939	939	0.03	0.05	0.91	957

3. Construction Emissions Details
3.1. Site Preparation (2027) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Off-Road Ei	3.63	3.05	28	28.3	0.05	1.17		1.17	1.08		1.08		5298	5298	0.21	0.04		5316
Dust From Material Movement							7.67	7.67		3.94	3.94							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Off-Road Ei	0.1	0.08	0.77	0.77	< 0.005	0.03		0.03	0.03		0.03		145	145	0.01	< 0.005		146
Dust From Material Movement							0.21	0.21		0.11	0.11							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Off-Road Ei	0.02	0.02	0.14	0.14	< 0.005	0.01		0.01	0.01		0.01		24	24	< 0.005	< 0.005		24.1
Dust From Material Movement							0.04	0.04		0.02	0.02							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Worker	0.06	0.06	0.06	0.68	0	0	0.18	0.18	0	0.04	0.04		170	170	< 0.005	0.01	0.02	172
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Worker	< 0.005	< 0.005	< 0.005	0.02	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005		4.78	4.78	< 0.005	< 0.005	0.01	4.84
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005		0.79	0.79	< 0.005	< 0.005	< 0.005	0.8
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0

3.3. Grading (2027) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Off-Road Ei	3.51	2.95	25.6	27.3	0.06	1.04		1.04	0.96		0.96		6598	6598	0.27	0.05		6621
Dust From Material Movement							3.59	3.59		1.42	1.42							

Report Tables

Daily Max

Year	ROG	NOx	PM10	PM2.5	CO2	PM10	PM2.5
2027	25	28	9	5	940	0.68	0.22
2028	25	14	7	2	957	0.66	0.18

diesel PM 1.17

Yearly

Year	ROG	NOx	PM10	PM2.5	CO2	PM10	PM2.5
2027	25	28	9	5	940	0.68	0.22
2028	25	14	7	2	957	0.66	0.18

Emissions Per Capita

Year	ROG	NOx	PM10	PM2.5	CO2
2027	0.0115	0.0129	0.0041	0.0023	0.43199
2028	0.0115	0.0066	0.0030	0.0008	0.43980
average	0.0115	0.0097	0.0036	0.0016	0.4359

Fuel Calcs

Tons/year Note: gasoline = worker emissions; Diesel = vendor + offroad eq

Year	Gasoline	Diesel
2027	440.01	500.1
2028	512.25	444.49

Onsite truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily, Winter (Max)																		
Off-Road Ei	3.51	2.95	25.6	27.3	0.06	1.04		1.04	0.96		0.96	6598	6598	0.27	0.05		6621	
Dust From Material Movement							3.59	3.59		1.42	1.42							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Average Daily																		
Off-Road Ei	0.34	0.28	2.45	2.62	0.01	0.1		0.1	0.09		0.09	633	633	0.03	0.01		635	
Dust From Material Movement							0.34	0.34		0.14	0.14							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual																		
Off-Road Ei	0.06	0.05	0.45	0.48	< 0.005	0.02		0.02	0.02		0.02	105	105	< 0.005	< 0.005		105	
Dust From Material Movement							0.06	0.06		0.02	0.02							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Worker	0.08	0.08	0.05	1.06	0	0	0.2	0.2	0	0.05	0.05	219	219	< 0.005	0.01	0.72	222	
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Daily, Winter (Max)																		
Worker	0.07	0.06	0.07	0.78	0	0	0.2	0.2	0	0.05	0.05	194	194	< 0.005	0.01	0.02	197	
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Average Daily																		
Worker	0.01	0.01	0.01	0.08	0	0	0.02	0.02	0	< 0.005	< 0.005	19.1	19.1	< 0.005	< 0.005	0.03	19.4	
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Annual																		
Worker	< 0.005	< 0.005	< 0.005	0.01	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005	3.16	3.16	< 0.005	< 0.005	< 0.005	3.21	
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

3.5. Building Construction (2027) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Off-Road Ei	1.23	1.03	9.39	12.9	0.02	0.34		0.34	0.31		0.31	2397	2397	0.1	0.02		2405	
Onsite truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily, Winter (Max)																		
Off-Road Ei	1.23	1.03	9.39	12.9	0.02	0.34		0.34	0.31		0.31	2397	2397	0.1	0.02		2405	
Onsite truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Average Daily																		
Off-Road Ei	0.57	0.48	4.37	6.03	0.01	0.16		0.16	0.14		0.14	1116	1116	0.05	0.01		1120	
Onsite truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual																		
Off-Road Ei	0.1	0.09	0.8	1.1	< 0.005	0.03		0.03	0.03		0.03	185	185	0.01	< 0.005		185	
Onsite truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Worker	2.2	2.17	1.42	29.7	0	0	5.65	5.65	0	1.32	1.32	6115	6115	0.09	0.21	20.2	6201	
Vendor	0.25	0.08	3.82	1.5	0.02	0.03	0.63	0.66	0.03	0.17	0.2	2300	2300	0.14	0.34	5.09	2409	
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Daily, Winter (Max)																		
Worker	2.01	1.77	1.84	21.7	0	0	5.65	5.65	0	1.32	1.32	5432	5432	0.12	0.23	0.52	5502	
Vendor	0.24	0.08	4.08	1.53	0.02	0.03	0.63	0.66	0.03	0.17	0.2	2300	2300	0.14	0.34	0.13	2404	
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Average Daily																		
Worker	0.93	0.82	0.75	10.4	0	0	2.57	2.57	0	0.6	0.6	2596	2596	0.05	0.1	4.06	2631	
Vendor	0.11	0.04	1.87	0.7	0.01	0.02	0.29	0.3	0.02	0.08	0.09	1071	1071	0.07	0.16	1.02	1121	
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Annual																		
Worker	0.17	0.15	0.14	1.89	0	0	0.47	0.47	0	0.11	0.11	430	430	0.01	0.02	0.67	436	
Vendor	0.02	0.01	0.34	0.13	< 0.005	< 0.005	0.05	0.06	< 0.005	0.01	0.02	177	177	0.01	0.03	0.17	186	
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

3.7. Building Construction (2028) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Off-Road Ei	1.18	0.99	8.92	12.9	0.02	0.3		0.3	0.28		0.28	2397	2397	0.1	0.02		2406	
Onsite truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily, Winter (Max)																		
Off-Road Ei	1.18	0.99	8.92	12.9	0.02	0.3		0.3	0.28		0.28	2397	2397	0.1	0.02		2406	
Onsite truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Average Daily																		
Off-Road Ei	0.65	0.54	4.89	7.09	0.01	0.16		0.16	0.15		0.15	1314	1314	0.05	0.01		1318	
Onsite truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual																		
Off-Road Ei	0.12	0.1	0.89	1.29	< 0.005	0.03		0.03	0.03		0.03	217	217	0.01	< 0.005		218	
Onsite truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Worker	2.13	1.92	1.23	27.9	0	0	5.65	5.65	0	1.32	1.32	5989	5989	0.07	0.04	18.3	6020	
Vendor	0.23	0.08	3.57	1.44	0.02	0.03	0.63	0.66	0.03	0.17	0.2	2239	2239	0.14	0.34	4.52	2348	
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Daily, Winter (Max)																		
Worker	1.94	1.72	1.64	20.5	0	0	5.65	5.65	0	1.32	1.32	5320	5320	0.11	0.23	0.47	5391	
Vendor	0.22	0.08	3.82	1.48	0.02	0.03	0.63	0.66	0.03	0.17	0.2	2239	2239	0.14	0.34	0.12	2343	
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Average Daily																		
Worker	1.06	0.94	0.78	11.5	0	0	3.02	3.02	0	0.71	0.71	2991	2991	0.05	0.12	4.33	3032	
Vendor	0.12	0.05	2.06	0.8	0.01	0.02	0.34	0.36	0.02	0.09	0.11	1227	1227	0.08	0.18	1.07	1285	
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Annual																		

Worker	0.19	0.17	0.14	2.09	0	0	0.55	0.55	0	0.13	0.13	495	495	0.01	0.02	0.72	502
Vendor	0.02	0.01	0.38	0.15	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	203	203	0.01	0.03	0.18	213
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

3.9. Paving (2028) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Off-Road Ei	0.82	0.69	6.63	9.91	0.01	0.26		0.26	0.24		0.24		1511	1511	0.06	0.01		1516
Paving		0																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Off-Road Ei	0.04	0.03	0.33	0.49	< 0.005	0.01		0.01	0.01		0.01		74.5	74.5	< 0.005	< 0.005		74.8
Paving		0																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Off-Road Ei	0.01	0.01	0.06	0.09	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		12.3	12.3	< 0.005	< 0.005		12.4
Paving		0																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Worker	0.05	0.05	0.04	0.55	0	0	0.15	0.15	0	0.04	0.04		143	143	< 0.005	0.01	0.01	145
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Worker	< 0.005	< 0.005	< 0.005	0.03	0	0	0.01	0.01	0	< 0.005	< 0.005		7.22	7.22	< 0.005	< 0.005	0.01	7.32
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Worker	< 0.005	< 0.005	< 0.005	0.01	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005		1.2	1.2	< 0.005	< 0.005	< 0.005	1.21
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0

3.11. Architectural Coating (2028) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Off-Road Ei	0.13	0.11	0.81	1.12	< 0.005	0.02		0.02	0.01		0.01		134	134	0.01	< 0.005		134
Architectural Coatings		389																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Off-Road Ei	0.01	0.01	0.04	0.06	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		6.58	6.58	< 0.005	< 0.005		6.61
Architectural Coatings		19.2																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Off-Road Ei	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		1.09	1.09	< 0.005	< 0.005		1.09
Architectural Coatings		3.5																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Worker	0.39	0.34	0.33	4.1	0	0	1.13	1.13	0	0.26	0.26		1064	1064	0.02	0.05	0.09	1078
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Worker	0.02	0.02	0.01	0.21	0	0	0.05	0.05	0	0.01	0.01		53.8	53.8	< 0.005	< 0.005	0.08	54.6
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Worker	< 0.005	< 0.005	< 0.005	0.04	0	0	0.01	0.01	0	< 0.005	< 0.005		8.91	8.91	< 0.005	< 0.005	0.01	9.04
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Vegetation	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Species	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		

Removed
Subtotal

Daily, Winter (Max)
Avoided
Subtotal
Sequestered
Subtotal
Removed
Subtotal

Annual
Avoided
Subtotal
Sequestered
Subtotal
Removed
Subtotal

5. Activity Data
5.1. Construction Schedule

Phase Nam	Phase Type	Start Date	End Date	Days Per W	Work Days	Phase Description
Site Prepar	Site Prepar	3/6/2027	3/19/2027	5	10	
Grading	Grading	3/20/2027	5/7/2027	5	35	
Building Cc	Building Cc	5/8/2027	10/6/2028	5	370	
Paving	Paving	10/7/2028	11/1/2028	5	18	
Architectur	Architectur	11/2/2028	11/27/2028	5	18	

5.2. Off-Road Equipment
5.2.1. Unmitigated

Phase Nam	Equipment	Fuel Type	Engine Tier	Number pe	Hours Per I	Horsepow	Load Factor
Site Prepar	Rubber Tir	Diesel	Average	3	8	367	0.4
Site Prepar	Tractors/Lc	Diesel	Average	4	8	84	0.37
Grading	Graders	Diesel	Average	1	8	148	0.41
Grading	Excavators	Diesel	Average	2	8	36	0.38
Grading	Tractors/Lc	Diesel	Average	2	8	84	0.37
Grading	Rubber Tir	Diesel	Average	1	8	367	0.4
Grading	Scrapers	Diesel	Average	2	8	423	0.48
Building Cc	Cranes	Diesel	Average	1	7	367	0.29
Building Cc	Forklifts	Diesel	Average	3	8	82	0.2
Building Cc	Generator	Diesel	Average	1	8	14	0.74
Building Cc	Welders	Diesel	Average	1	8	46	0.45
Building Cc	Tractors/Lc	Diesel	Average	3	7	84	0.37
Paving	Pavers	Diesel	Average	2	8	81	0.42
Paving	Paving Equ	Diesel	Average	2	8	89	0.36
Paving	Rollers	Diesel	Average	2	8	36	0.38
Architectur	Air Compre	Diesel	Average	1	6	37	0.48

5.3. Construction Vehicles
5.3.1. Unmitigated

Phase Nam	Trip Type	One-Way T	Miles per Trip	Vehicle Mix
Site Preparation				
Site Prepar	Worker	17.5	14.3	LDA,LDT1,LDT2
Site Prepar	Vendor		8.8	HHDT,MHDT
Site Prepar	Hauling	0	20	HHDT
Site Prepar	Onsite truck			HHDT
Grading				
Grading	Worker	20	14.3	LDA,LDT1,LDT2
Grading	Vendor		8.8	HHDT,MHDT
Grading	Hauling	0	20	HHDT
Grading	Onsite truck			HHDT
Building Construction				
Building Cc	Worker	559	14.3	LDA,LDT1,LDT2
Building Cc	Vendor	83.1	8.8	HHDT,MHDT
Building Cc	Hauling	0	20	HHDT
Building Cc	Onsite truck			HHDT
Paving				
Paving	Worker	15	14.3	LDA,LDT1,LDT2
Paving	Vendor		8.8	HHDT,MHDT
Paving	Hauling	0	20	HHDT
Paving	Onsite truck			HHDT
Architectural Coating				
Architectur	Worker	112	14.3	LDA,LDT1,LDT2
Architectur	Vendor		8.8	HHDT,MHDT
Architectur	Hauling	0	20	HHDT
Architectur	Onsite truck			HHDT

5.4. Vehicles
5.4.1. Construction Vehicle Control Strategies

Control Str	PM10 Redu	PM2.5 Reduction

5.5. Architectural Coatings

Phase Nam	Residential	Residential	Non-Residential	Non-Reside	Parking Area Coated (sq ft)
Architectur	1510488	503496	0	0	

5.6. Dust Mitigation
5.6.1. Construction Earthmoving Activities

Phase Nam	Material Im	Material Ex	Acres Graded (ac	Material Di	Acres Paved (acres)
Site Preparation			15	0	
Grading			105	0	
Paving	0	0	0	0	

5.6.2. Construction Earthmoving Control Strategies

Control Str	Frequency	PM10 Redu	PM2.5 Reduction
Water Expo	2	61	61

5.7. Construction Paving

Land Use	Area Pavec	% Asphalt
Apartments Mid Rise		0

5.8. Construction Electricity Consumption and Emissions Factors

Year	kWh per Yı	CO2	CH4	N2O
2027	0	375	0.01	< 0.005
2028	0	375	0.01	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation	Vegetation	Initial Acre	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cc	Initial Acre	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity S	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Ha	Result for F	Unit
Temperatu	19.3	annual days of extreme heat
Extreme Pr	5.7	annual days with precipitation above 20 mm
Sea Level Rise		meters of inundation depth
Wildfire	0	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the gric

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (I

6.2. Initial Climate Risk Scores

Climate Ha	Exposure S	Sensitivity	Adaptive Capaci	Vulnerability Score
Temperatu	1	0	0	N/A
Extreme Pr	2	0	0	N/A
Sea Level R	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack I	N/A	N/A	N/A	N/A
Air Quality	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Ha	Exposure S	Sensitivity	Adaptive Capaci	Vulnerability Score
Temperatu	1	1	1	2
Extreme Pr	2	1	1	3
Sea Level R	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack I	N/A	N/A	N/A	N/A
Air Quality	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	
AQ-Ozone	48.6
AQ-PM	23.7
AQ-DPM	22.3
Drinking W	78.8
Lead Risk H	41.2
Pesticides	73.8
Toxic Relea	30.3
Traffic	28.5
Effect Indicators	
CleanUp Si	86.5
Groundwat	88.9
Haz Waste	99.8
Impaired W	51.2
Solid Wast	99.9
Sensitive Population	
Asthma	50.2
Cardio-vas	53.9
Low Birth W	36.4
Socioeconomic Factor Indicators	
Education	47.5

Housing	61.9
Linguistic	43.9
Poverty	58.5
Unemployr	62.4

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	
Above Pov	36.84075
Employed	20.45425
Median HI	23.26447
Education	
Bachelor's	39.343
High schoo	100
Preschool e	18.64494
Transportation	
Auto Acces	37.45669
Active com	70.7943
Social	
2-parent ho	14.75683
Voting	58.51405
Neighborhood	
Alcohol ava	64.6221
Park access	12.70371
Retail dens	22.81535
Supermark	13.65328
Tree canop	2.065957
Housing	
Homeowne	60.60567
Housing ha	41.69126
Low-inc ho	38.58591
Low-inc rer	7.737713
Uncrowdec	46.38778
Health Outcomes	
Insured adı	43.96253
Arthritis	0
Asthma ER	50
High Blood	0
Cancer (exc	0
Asthma	0
Coronary H	0
Chronic Ob	0
Diagnosed	0
Life Expect	16
Cognitively	21
Physically	7.2
Heart Attac	54
Mental Hea	0
Chronic Kid	0
Obesity	0
Pedestrian	98
Physical He	0
Stroke	0
Health Risk Behaviors	
Binge Drink	0
Current Sm	0
No Leisure	0
Climate Change Exposures	
Wildfire Ris	0
SLR Inunda	0
Children	60
Elderly	21
English Spe	31
Foreign-bo	59
Outdoor W	29
Climate Change Adaptive Capacity	
Impervious	91
Traffic Den	38
Traffic Acc	23
Other Indices	
Hardship	62
Other Decision Support	
2016 Votin	64

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroSc	70
Healthy Pla	29
Project Loc	Yes
Project Loc	Yes
Project Loc	South Florin

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

Measure Ti	Co-Benefits Achieved

7.5. Evaluation Scorecard

Category	Number of	Total Point	Max Possible Po	Weighted Score

7.6. Health & Equity Custom Measures

Measure Ti	Sponsor

8. User Changes to Default Data

Screen	Justification
Constructic	No demo
Land Use	landscape area = 20% of total lot acreage

d cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Nar	Sac Rezone before (2025)
Constructic	1/1/2025
Lead Agency	
Land Use S	Project/site
Analysis Le	County
Windspeec	3
Precipitatic	36.4
Location	38.496999247768415, -121.41035190855798
County	Sacramento
City	Unincorporated
Air District	Sacramento Metropolitan AQMD
Air Basin	Sacramento Valley
TAZ	731
EDFZ	13
Electric Uti	Sacramento Municipal Utility District
Gas Utility	Pacific Gas & Electric
App Versio	2022.1.1.21

1.2. Land Use Types

Land Use S	Size	Unit	Lot Acreag	Building Ar	Landscape	Special Lan	Population	Description
Apartment	461	Dwelling U	37.5	488660	327122		1291	

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Un/Mit.	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Unmit.	3.03	28.00683	14	34	0.03	0.45	3.73	4.18	0.42	0.89	1.3		7591	7591	0.25	0.36	18.2	7724
Daily, Winter (Max)																		
Unmit.	4.01	28.00683	31.7	31	0.06	1.37	7.84	9.21	1.26	3.98	5.24		7167	7167	0.27	0.36	0.47	7283
Average Daily (Max)																		
Unmit.	1.98	14.2	10.6	19.2	0.02	0.36	2.44	2.81	0.34	0.65	0.99		4668	4668	0.17	0.21	4.51	4740
Annual (Max)																		
Unmit.	0.36	2.6	1.94	3.5	< 0.005	0.07	0.45	0.51	0.06	0.12	0.18		773	773	0.03	0.04	0.75	785

2.2. Construction Emissions by Year, Unmitigated

Year	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily - Summer (Max)																		
2025	3.03	28.00683	14	34	0.03	0.45	3.73	4.18	0.42	0.89	1.3		7591	7591	0.25	0.36	18.2	7724
Daily - Winter (Max)																		
2025	4.01	28.00683	31.7	31	0.06	1.37	7.84	9.21	1.26	3.98	5.24		7167	7167	0.27	0.36	0.47	7283
Average Daily																		
2025	1.98	14.2	10.6	19.2	0.02	0.36	2.44	2.81	0.34	0.65	0.99		4668	4668	0.17	0.21	4.51	4740
Annual																		
2025	0.36	2.6	1.94	3.5	< 0.005	0.07	0.45	0.51	0.06	0.12	0.18		773	773	0.03	0.04	0.75	785

3. Construction Emissions Details

3.1. Site Preparation (2025) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Off-Road Ei	3.94	3.31	31.6	30.2	0.05	1.37		1.37	1.26		1.26		5295	5295	0.21	0.04		5314
Dust From Material Movement							7.67	7.67		3.94	3.94							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Off-Road Ei	0.08	0.06	0.61	0.58	< 0.005	0.03		0.03	0.02		0.02		102	102	< 0.005	< 0.005		102
Dust From Material Movement							0.15	0.15		0.08	0.08							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Off-Road Ei	0.01	0.01	0.11	0.11	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		16.8	16.8	< 0.005	< 0.005		16.9
Dust From Material Movement							0.03	0.03		0.01	0.01							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Worker	0.07	0.07	0.06	0.78	0	0	0.18	0.18	0	0.04	0.04		176	176	< 0.005	0.01	0.02	179
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Worker	< 0.005	< 0.005	< 0.005	0.02	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005		3.47	3.47	< 0.005	< 0.005	0.01	3.52
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005		0.57	0.57	< 0.005	< 0.005	< 0.005	0.58
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0

3.3. Grading (2025) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Off-Road Ei	3.8	3.2	29.7	28.3	0.06	1.23		1.23	1.14		1.14		6599	6599	0.27	0.05		6622
Dust From Material Movement							3.59	3.59		1.42	1.42							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Off-Road Ei	0.21	0.18	1.63	1.55	< 0.005	0.07		0.07	0.06		0.06		362	362	0.01	< 0.005		363

Report Tables

Daily Max lb

Year	ROG	NOx	PM10	PM2.5	PM10	PM2.5	CO2
2025	28.00683	31.7	9.21	5.24	0.51	0.18	785

Yearly Tons

Fuel Calcs

Tons/year

Year	Gasoline	Diesel
2025	332.9	451.48

Dust From Material Movement							0.2	0.2		0.08	0.08							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual																		
Off-Road E	0.04	0.03	0.3	0.28	< 0.005	0.01		0.01	0.01		0.01	59.9	59.9	< 0.005	< 0.005			60.1
Dust From Material Movement							0.04	0.04		0.01	0.01							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Worker	0.08	0.08	0.07	0.89	0	0	0.2	0.2	0	0.05	0.05	202	202	< 0.005		0.01	0.02	204
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Average Daily																		
Worker	< 0.005	< 0.005	< 0.005	0.05	0	0	0.01	0.01	0	< 0.005	< 0.005	11.3	11.3	< 0.005	< 0.005	0.02		11.5
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual																		
Worker	< 0.005	< 0.005	< 0.005	0.01	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005	1.88	1.88	< 0.005	< 0.005	< 0.005		1.9
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

3.5. Building Construction (2025) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Off-Road E	1.35	1.13	10.4	13	0.02	0.43		0.43	0.4		0.4		2398	2398	0.1	0.02		2406
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Daily, Winter (Max)																		
Off-Road E	1.35	1.13	10.4	13	0.02	0.43		0.43	0.4		0.4		2398	2398	0.1	0.02		2406
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Off-Road E	0.76	0.64	5.89	7.36	0.01	0.24		0.24	0.22		0.22		1353	1353	0.05	0.01		1358
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Off-Road E	0.14	0.12	1.08	1.34	< 0.005	0.04		0.04	0.04		0.04		224	224	0.01	< 0.005		225
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Worker	1.53	1.4	0.97	20	0	0	3.35	3.35	0	0.79	0.79		3768	3768	0.06	0.13	14.5	3824
Vendor	0.16	0.06	2.58	0.96	0.01	0.02	0.37	0.39	0.02	0.1	0.12		1425	1425	0.09	0.21	3.71	1494
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Daily, Winter (Max)																		
Worker	1.4	1.25	1.23	14.7	0	0	3.35	3.35	0	0.79	0.79		3345	3345	0.08	0.13	0.38	3387
Vendor	0.15	0.05	2.76	0.98	0.01	0.02	0.37	0.39	0.02	0.1	0.12		1425	1425	0.09	0.21	0.1	1490
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Worker	0.78	0.71	0.62	8.49	0	0	1.85	1.85	0	0.43	0.43		1937	1937	0.04	0.08	3.52	1964
Vendor	0.09	0.03	1.53	0.54	0.01	0.01	0.21	0.22	0.01	0.06	0.07		804	804	0.05	0.12	0.9	842
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Worker	0.14	0.13	0.11	1.55	0	0	0.34	0.34	0	0.08	0.08		321	321	0.01	0.01	0.58	325
Vendor	0.02	0.01	0.28	0.1	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01		133	133	0.01	0.02	0.15	139
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0

3.7. Paving (2025) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Off-Road E	0.95	0.8	7.45	9.98	0.01	0.35		0.35	0.32		0.32		1511	1511	0.06	0.01		1517
Paving		0																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Off-Road E	0.04	0.03	0.29	0.38	< 0.005	0.01		0.01	0.01		0.01		58	58	< 0.005	< 0.005		58.2
Paving		0																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Off-Road E	0.01	0.01	0.05	0.07	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		9.6	9.6	< 0.005	< 0.005		9.63
Paving		0																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Worker	0.06	0.06	0.06	0.67	0	0	0.15	0.15	0	0.04	0.04		151	151	< 0.005		0.01	0.02	153
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Worker	< 0.005	< 0.005	< 0.005	0.03	0	0	0.01	0.01	0	< 0.005	< 0.005		5.95	5.95	< 0.005	< 0.005		0.01	6.03
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual																		
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005		0.99	0.99	< 0.005	< 0.005	< 0.005		1
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

3.9. Architectural Coating (2025) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Off-Road E	0.15	0.13	0.88	1.14	< 0.005	0.03		0.03	0.03		0.03		134	134	0.01	< 0.005		134
Architectural Coatings		328																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0

Average Daily																	
Off-Road Ei	0.01	< 0.005	0.03	0.04	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		5.12	5.12	< 0.005	< 0.005		5.14
Architectural Coatings		12.6																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Off-Road Ei	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		0.85	0.85	< 0.005	< 0.005		0.85
Architectural Coatings		2.29																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Worker	0.28	0.25	0.25	2.95	0	0	0.67	0.67	0	0.16	0.16		669	669	0.02	0.03	0.08	677
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Worker	0.01	0.01	0.01	0.12	0	0	0.03	0.03	0	0.01	0.01		26.3	26.3	< 0.005	< 0.005	0.05	26.7
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Worker	< 0.005	< 0.005	< 0.005	0.02	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005		4.36	4.36	< 0.005	< 0.005	0.01	4.42
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Vegetation	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Species	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		
Removed																		
Subtotal																		
Daily, Winter (Max)																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		
Removed																		
Subtotal																		
Annual																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		
Removed																		
Subtotal																		

5. Activity Data

5.1. Construction Schedule

Phase Nam	Phase Type	Start Date	End Date	Days Per W	Work Days	Phase Description
Site Prepar	Site Prepar	1/1/2025	1/9/2025	5	7	
Grading	Grading	1/10/2025	2/6/2025	5	20	
Building Cc	Building Cc	2/7/2025	########	5	206	
Paving	Paving	########	########	5	14	
Architectur	Architectur	########	########	5	14	

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Nam	Equipment	Fuel Type	Engine Tier	Number pe	Hours Per I	Horsepowe	Load Factor
Site Prepar	Rubber Tir	Diesel	Average	3	8	367	0.4
Site Prepar	Tractors/Lc	Diesel	Average	4	8	84	0.37
Grading	Graders	Diesel	Average	1	8	148	0.41
Grading	Excavators	Diesel	Average	2	8	36	0.38
Grading	Tractors/Lc	Diesel	Average	2	8	84	0.37
Grading	Scrapers	Diesel	Average	2	8	423	0.48
Grading	Rubber Tir	Diesel	Average	1	8	367	0.4
Building Cc	Forklifts	Diesel	Average	3	8	82	0.2
Building Cc	Generator	Diesel	Average	1	8	14	0.74
Building Cc	Cranes	Diesel	Average	1	7	367	0.29
Building Cc	Welders	Diesel	Average	1	8	46	0.45

Building Cc	Tractors/Lc	Diesel	Average	3	7	84	0.37
Paving	Pavers	Diesel	Average	2	8	81	0.42
Paving	Paving Equ	Diesel	Average	2	8	89	0.36
Paving	Rollers	Diesel	Average	2	8	36	0.38
Architectur	Air Compre	Diesel	Average	1	6	37	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Nam	Trip Type	One-Way T	Miles per T	Vehicle Mix
Site Preparation				
Site Prepar	Worker	17.5	14.3	LDA,LDT1,LDT2
Site Prepar	Vendor		8.8	HHDT,MHDT
Site Prepar	Hauling	0	20	HHDT
Site Prepar	Onsite truck			HHDT
Grading				
Grading	Worker	20	14.3	LDA,LDT1,LDT2
Grading	Vendor		8.8	HHDT,MHDT
Grading	Hauling	0	20	HHDT
Grading	Onsite truck			HHDT
Building Construction				
Building Cc	Worker	332	14.3	LDA,LDT1,LDT2
Building Cc	Vendor	49.3	8.8	HHDT,MHDT
Building Cc	Hauling	0	20	HHDT
Building Cc	Onsite truck			HHDT
Paving				
Paving	Worker	15	14.3	LDA,LDT1,LDT2
Paving	Vendor		8.8	HHDT,MHDT
Paving	Hauling	0	20	HHDT
Paving	Onsite truck			HHDT
Architectural Coating				
Architectur	Worker	66.4	14.3	LDA,LDT1,LDT2
Architectur	Vendor		8.8	HHDT,MHDT
Architectur	Hauling	0	20	HHDT
Architectur	Onsite truck			HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Str	PM10 Redı	PM2.5 Reduction

5.5. Architectural Coatings

Phase Nam	Residential	Residential	Non-Reside	Non-Reside	Parking Area Coated (sq ft)
Architectur	989537	329846	0	0	

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Nam	Material In	Material E	Acres Grad	Material D	Acres Paved (acres)
Site Preparation			10.5	0	
Grading			60	0	
Paving	0	0	0	0	

5.6.2. Construction Earthmoving Control Strategies

Control Str	Frequency	PM10 Redı	PM2.5 Reduction
Water Exp	2	61	61

5.7. Construction Paving

Land Use	Area Pavec	% Asphalt
Apartments Low Rise		0

5.8. Construction Electricity Consumption and Emissions Factors

Year	kWh per Y	CO2	CH4	N2O
2025	0	375	0.01	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation	Vegetation	Initial Acre	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cc	Initial Acre	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity S	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Ha	Result for F	Unit
Temperatu	19.3	annual days of extreme heat
Extreme Pr	5.7	annual days with precipitation above 20 mm
Sea Level Rise		meters of inundation depth
Wildfire	0	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid ce

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (Had

6.2. Initial Climate Risk Scores

Climate Ha	Exposure S	Sensitivity	Adaptive C	Vulnerability Score
Temperatu	1	0	0	N/A
Extreme Pr	2	0	0	N/A
Sea Level R	N/A	N/A	N/A	N/A

Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack I	N/A	N/A	N/A	N/A
Air Quality	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Ha	Exposure S	Sensitivity	Adaptive C	Vulnerability Score
Temperatu	1	1	1	2
Extreme Pr	2	1	1	3
Sea Level R	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack I	N/A	N/A	N/A	N/A
Air Quality	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	
AQ-Ozone	42.6
AQ-PM	34
AQ-DPM	24.2
Drinking W	87.7
Lead Risk H	46.5
Pesticides	0
Toxic Relea	22
Traffic	61.2
Effect Indicators	
CleanUp Sit	40.8
Groundwat	55.3
Haz Waste	30.2
Impaired W	43.8
Solid Waste	39
Sensitive Population	
Asthma	91.3
Cardio-vasc	90.3
Low Birth W	79.8
Socioeconomic Factor Indicators	
Education	75.7
Housing	77.6
Linguistic	77.4
Poverty	89.5
Unemployr	95.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	
Above Pov	9.072244
Employed	15.56525
Median HI	12.40857
Education	
Bachelor's	17.50289
High schoo	14.67984
Preschool e	74.27178
Transportation	
Auto Acces	16.95111
Active com	49.8396
Social	
2-parent ho	10.38111
Voting	30.89953
Neighborhood	
Alcohol ava	49.86526
Park access	57.48749
Retail dens	47.01655
Supermark	29.53933
Tree canop	84.60157
Housing	
Homeowne	30.1681
Housing ha	28.23046
Low-inc ho	26.71628
Low-inc ren	30.95085
Uncrowdec	20.0308
Health Outcomes	
Insured adu	19.91531
Arthritis	12
Asthma ER	10
High Blood	6
Cancer (exc	50
Asthma	8.7
Coronary H	16
Chronic Ob	5
Diagnosed	10

Life Expect	9
Cognitively	18
Physically	44
Heart Attac	11
Mental Hea	16
Chronic Kid	11
Obesity	23
Pedestrian	55
Physical He	14
Stroke	6.5
Health Risk Behaviors	
Binge Drinl	94
Current Sm	5.6
No Leisure	14
Climate Change Exposures	
Wildfire Ris	0
SLR Inunda	0
Children	42
Elderly	68
English Spe	13
Foreign-bo	70
Outdoor W	4.6
Climate Change Adaptive Capacity	
Impervious	47
Traffic Den	45
Traffic Acce	60
Other Indices	
Hardship	91
Other Decision Support	
2016 Votin	14

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroSc	80
Healthy Pla	13
Project Loc	Yes
Project Loc	Yes
Project Loc	South Florin

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

Measure Ti	Co-Benefits Achieved

7.5. Evaluation Scorecard

Category	Number of	Total Point	Max Possit	Weighted Score

7.6. Health & Equity Custom Measures

Measure Ti	Sponsor

8. User Changes to Default Data

Screen	Justification
Land Use	20 percent of total before rezone
Constructic	1/5 of total project

ll. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
lGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Nar	Sac Rezone before (2026)
Constructic	1/1/2026
Lead Agency	
Land Use S	Project/site
Analysis Le	County
Windspeec	3
Precipitatic	36.4
Location	38.496999247768415, -121.41035190855798
County	Sacramento
City	Unincorporated
Air District	Sacramento Metropolitan AQMD
Air Basin	Sacramento Valley
TAZ	731
EDFZ	13
Electric Uti	Sacramento Municipal Utility District
Gas Utility	Pacific Gas & Electric
App Versio	2022.1.1.21

1.2. Land Use Types

Land Use S	Size	Unit	Lot Acreag	Building Ar	Landscape	Special Lan	Population	Description
Apartment	461	Dwelling U	37.5	488660	327122		1291	

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Un/Mit.	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Unmit.	2.89	28.00683	13.1	32.6	0.03	0.4	3.73	4.12	0.37	0.89	1.25		7488	7488	0.24	0.36	16.6	7617
Daily, Winter (Max)																		
Unmit.	3.81	28.00683	29.2	29.5	0.06	1.24	7.84	9.09	1.14	3.98	5.12		7074	7074	0.27	0.36	0.43	7189
Average Daily (Max)																		
Unmit.	1.82	14.2	9.92	18.4	0.02	0.32	2.44	2.77	0.3	0.65	0.95		4613	4613	0.17	0.21	4.11	4685
Annual (Max)																		
Unmit.	0.33	2.58	1.81	3.37	< 0.005	0.06	0.45	0.51	0.05	0.12	0.17		764	764	0.03	0.03	0.68	776

2.2. Construction Emissions by Year, Unmitigated

Year	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily - Summer (Max)																		
2026	2.89	28.00683	13.1	32.6	0.03	0.4	3.73	4.12	0.37	0.89	1.25		7488	7488	0.24	0.36	16.6	7617
Daily - Winter (Max)																		
2026	3.81	28.00683	29.2	29.5	0.06	1.24	7.84	9.09	1.14	3.98	5.12		7074	7074	0.27	0.36	0.43	7189
Average Daily																		
2026	1.82	14.2	9.92	18.4	0.02	0.32	2.44	2.77	0.3	0.65	0.95		4613	4613	0.17	0.21	4.11	4685
Annual																		
2026	0.33	2.58	1.81	3.37	< 0.005	0.06	0.45	0.51	0.05	0.12	0.17		764	764	0.03	0.03	0.68	776

3. Construction Emissions Details

3.1. Site Preparation (2026) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Off-Road Ei	3.74	3.14	29.2	28.8	0.05	1.24		1.24	1.14		1.14		5298	5298	0.21	0.04		5316
Dust From Material Movement							7.67	7.67		3.94	3.94							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Off-Road Ei	0.07	0.06	0.56	0.55	< 0.005	0.02		0.02	0.02		0.02		102	102	< 0.005	< 0.005		102
Dust From Material Movement							0.15	0.15		0.08	0.08							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Off-Road Ei	0.01	0.01	0.1	0.1	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		16.8	16.8	< 0.005	< 0.005		16.9
Dust From Material Movement							0.03	0.03		0.01	0.01							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Worker	0.07	0.06	0.06	0.73	0	0	0.18	0.18	0	0.04	0.04		173	173	< 0.005	0.01	0.02	175
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Worker	< 0.005	< 0.005	< 0.005	0.01	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005		3.4	3.4	< 0.005	< 0.005	0.01	3.45
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005		0.56	0.56	< 0.005	< 0.005	< 0.005	0.57
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0

3.3. Grading (2026) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Off-Road Ei	3.62	3.04	27.2	27.6	0.06	1.12		1.12	1.03		1.03		6599	6599	0.27	0.05		6621
Dust From Material Movement							3.59	3.59		1.42	1.42							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Off-Road Ei	0.2	0.17	1.49	1.51	< 0.005	0.06		0.06	0.06		0.06		362	362	0.01	< 0.005		363

Report Tables

Daily Max lb

Year	ROG	NOx	PM10	PM2.5	PM10	PM2.5	CO2
2026	28.00683	29.2	9.09	5.12	0.51	0.17	776

Yearly Tons

Fuel Calcs

Tons/year

Year	Gasoline	Diesel
2026	326.76	449.48

	Off road	Vendor/haul
SP	16.9	
Grading	60.1	
BC	225	137
Paving	9.63	
AC	0.85	
total	449.48	

Dust From Material Movement							0.2	0.2		0.08	0.08							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual																		
Off-Road E	0.04	0.03	0.27	0.28	< 0.005	0.01		0.01	0.01		0.01	59.9	59.9	< 0.005	< 0.005			60.1
Dust From Material Movement							0.04	0.04		0.01	0.01							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Worker	0.07	0.07	0.07	0.83	0	0	0.2	0.2	0	0.05	0.05	198	198	< 0.005		0.01	0.02	200
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Average Daily																		
Worker	< 0.005	< 0.005	< 0.005	0.05	0	0	0.01	0.01	0	< 0.005	< 0.005	11.1	11.1	< 0.005	< 0.005	0.02	11.3	
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual																		
Worker	< 0.005	< 0.005	< 0.005	0.01	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005	1.84	1.84	< 0.005	< 0.005	< 0.005	1.87	
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

3.5. Building Construction (2026) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Off-Road E	1.28	1.07	9.85	13	0.02	0.38		0.38	0.35		0.35	2397	2397	0.1	0.02			2405
Onsite truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily, Winter (Max)																		
Off-Road E	1.28	1.07	9.85	13	0.02	0.38		0.38	0.35		0.35	2397	2397	0.1	0.02			2405
Onsite truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Average Daily																		
Off-Road E	0.72	0.6	5.56	7.32	0.01	0.21		0.21	0.2		0.2	1353	1353	0.05	0.01			1358
Onsite truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual																		
Off-Road E	0.13	0.11	1.01	1.34	< 0.005	0.04		0.04	0.04		0.04	224	224	0.01	< 0.005			225
Onsite truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Worker	1.46	1.33	0.85	18.7	0	0	3.35	3.35	0	0.79	0.79	3694	3694	0.05	0.13	13.2	3746	
Vendor	0.15	0.05	2.42	0.92	0.01	0.02	0.37	0.39	0.02	0.1	0.12	1397	1397	0.09	0.21	3.36	1465	
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily, Winter (Max)																		
Worker	1.24	1.2	1.11	13.8	0	0	3.35	3.35	0	0.79	0.79	3281	3281	0.07	0.13	0.34	3323	
Vendor	0.14	0.05	2.59	0.94	0.01	0.02	0.37	0.39	0.02	0.1	0.12	1396	1396	0.09	0.21	0.09	1461	
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Average Daily																		
Worker	0.69	0.68	0.55	7.91	0	0	1.85	1.85	0	0.43	0.43	1900	1900	0.04	0.08	3.22	1927	
Vendor	0.08	0.03	1.44	0.53	0.01	0.01	0.21	0.22	0.01	0.06	0.07	788	788	0.05	0.12	0.82	826	
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual																		
Worker	0.13	0.12	0.1	1.44	0	0	0.34	0.34	0	0.08	0.08	315	315	0.01	0.01	0.53	319	
Vendor	0.01	0.01	0.26	0.1	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	130	130	0.01	0.02	0.14	137	
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

3.7. Paving (2026) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Off-Road E	0.91	0.76	7.12	9.94	0.01	0.32		0.32	0.29		0.29	1511	1511	0.06	0.01			1516
Paving		0																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Average Daily																		
Off-Road E	0.03	0.03	0.27	0.38	< 0.005	0.01		0.01	0.01		0.01	57.9	57.9	< 0.005	< 0.005			58.1
Paving		0																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual																		
Off-Road E	0.01	0.01	0.05	0.07	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005	9.59	9.59	< 0.005	< 0.005			9.63
Paving		0																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Worker	0.06	0.05	0.05	0.62	0	0	0.15	0.15	0	0.04	0.04	148	148	< 0.005		0.01	0.02	150
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Average Daily																		
Worker	< 0.005	< 0.005	< 0.005	0.02	0	0	0.01	0.01	0	< 0.005	< 0.005	5.84	5.84	< 0.005	< 0.005	0.01	5.92	
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual																		
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005	0.97	0.97	< 0.005	< 0.005	< 0.005	0.98	
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

3.9. Architectural Coating (2026) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Off-Road E	0.15	0.12	0.86	1.13	< 0.005	0.02		0.02	0.02		0.02	134	134	0.01	< 0.005			134
Architectural Coatings		328																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Average Daily																		
Off-Road Ei	0.01	< 0.005	0.03	0.04	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		5.12	5.12	< 0.005	< 0.005		5.14
Architectural Coatings		12.6																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Off-Road Ei	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		0.85	0.85	< 0.005	< 0.005		0.85
Architectural Coatings		2.29																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Worker	0.25	0.24	0.22	2.75	0	0	0.67	0.67	0	0.16	0.16		656	656	0.01	0.03	0.07	665
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Worker	0.01	0.01	0.01	0.11	0	0	0.03	0.03	0	0.01	0.01		25.8	25.8	< 0.005	< 0.005	0.04	26.2
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Worker	< 0.005	< 0.005	< 0.005	0.02	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005		4.28	4.28	< 0.005	< 0.005	0.01	4.34
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Vegetation	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Species	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		
Removed																		
Subtotal																		
Daily, Winter (Max)																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		
Removed																		
Subtotal																		
Annual																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		
Removed																		
Subtotal																		

5. Activity Data

5.1. Construction Schedule

Phase Nam	Phase Type	Start Date	End Date	Days Per W	Work Days	Phase Description
Site Prepar	Site Prepar	1/1/2026	1/9/2026	5	7	
Grading	Grading	1/10/2026	2/6/2026	5	20	
Building Cc	Building Cc	2/7/2026	########	5	206	
Paving	Paving	########	########	5	14	
Architectur	Architectur	########	########	5	14	

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Nam	Equipment	Fuel Type	Engine Tier	Number pe	Hours Per I	Horsepowe	Load Factor
Site Prepar	Rubber Tir	Diesel	Average	3	8	367	0.4
Site Prepar	Tractors/Lc	Diesel	Average	4	8	84	0.37
Grading	Graders	Diesel	Average	1	8	148	0.41
Grading	Excavators	Diesel	Average	2	8	36	0.38
Grading	Tractors/Lc	Diesel	Average	2	8	84	0.37
Grading	Scrapers	Diesel	Average	2	8	423	0.48
Grading	Rubber Tir	Diesel	Average	1	8	367	0.4
Building Cc	Forklifts	Diesel	Average	3	8	82	0.2
Building Cc	Generator	Diesel	Average	1	8	14	0.74
Building Cc	Cranes	Diesel	Average	1	7	367	0.29
Building Cc	Welders	Diesel	Average	1	8	46	0.45

Building Cc	Tractors/Lc	Diesel	Average	3	7	84	0.37
Paving	Pavers	Diesel	Average	2	8	81	0.42
Paving	Paving Equ	Diesel	Average	2	8	89	0.36
Paving	Rollers	Diesel	Average	2	8	36	0.38
Architectur	Air Compre	Diesel	Average	1	6	37	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Nam	Trip Type	One-Way T	Miles per T	Vehicle Mix
Site Preparation				
Site Prepar	Worker	17.5	14.3	LDA,LDT1,LDT2
Site Prepar	Vendor		8.8	HHDT,MHDT
Site Prepar	Hauling	0	20	HHDT
Site Prepar	Onsite truck			HHDT
Grading				
Grading	Worker	20	14.3	LDA,LDT1,LDT2
Grading	Vendor		8.8	HHDT,MHDT
Grading	Hauling	0	20	HHDT
Grading	Onsite truck			HHDT
Building Construction				
Building Cc	Worker	332	14.3	LDA,LDT1,LDT2
Building Cc	Vendor	49.3	8.8	HHDT,MHDT
Building Cc	Hauling	0	20	HHDT
Building Cc	Onsite truck			HHDT
Paving				
Paving	Worker	15	14.3	LDA,LDT1,LDT2
Paving	Vendor		8.8	HHDT,MHDT
Paving	Hauling	0	20	HHDT
Paving	Onsite truck			HHDT
Architectural Coating				
Architectur	Worker	66.4	14.3	LDA,LDT1,LDT2
Architectur	Vendor		8.8	HHDT,MHDT
Architectur	Hauling	0	20	HHDT
Architectur	Onsite truck			HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Str	PM10 Redı	PM2.5 Reduction

5.5. Architectural Coatings

Phase Nam	Residential	Residential	Non-Reside	Non-Reside	Parking Area Coated (sq ft)
Architectur	989537	329846	0	0	0

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Nam	Material In	Material E>	Acres Grad	Material D	Acres Paved (acres)
Site Preparation			10.5	0	
Grading			60	0	
Paving	0	0	0	0	

5.6.2. Construction Earthmoving Control Strategies

Control Str	Frequency	PM10 Redı	PM2.5 Reduction
Water Exp	2	61	61

5.7. Construction Paving

Land Use	Area Pavec	% Asphalt
Apartments Low Rise		0

5.8. Construction Electricity Consumption and Emissions Factors

Year	kWh per Y	CO2	CH4	N2O
2026	0	375	0.01	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation	Vegetation	Initial Acre	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cc	Initial Acre	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity S	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Ha	Result for F	Unit
Temperatu	19.3	annual days of extreme heat
Extreme Pr	5.7	annual days with precipitation above 20 mm
Sea Level Rise		meters of inundation depth
Wildfire	0	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid ce

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (Had

6.2. Initial Climate Risk Scores

Climate Ha	Exposure S	Sensitivity	Adaptive C	Vulnerability Score
Temperatu	1	0	0	N/A
Extreme Pr	2	0	0	N/A
Sea Level R	N/A	N/A	N/A	N/A

Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack I	N/A	N/A	N/A	N/A
Air Quality	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Ha	Exposure S	Sensitivity	Adaptive C	Vulnerability Score
Temperatu	1	1	1	2
Extreme Pr	2	1	1	3
Sea Level R	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack I	N/A	N/A	N/A	N/A
Air Quality	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	
AQ-Ozone	42.6
AQ-PM	34
AQ-DPM	24.2
Drinking W	87.7
Lead Risk H	46.5
Pesticides	0
Toxic Relea	22
Traffic	61.2
Effect Indicators	
CleanUp Sit	40.8
Groundwat	55.3
Haz Waste	30.2
Impaired W	43.8
Solid Waste	39
Sensitive Population	
Asthma	91.3
Cardio-vasc	90.3
Low Birth W	79.8
Socioeconomic Factor Indicators	
Education	75.7
Housing	77.6
Linguistic	77.4
Poverty	89.5
Unemployr	95.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	
Above Pov	9.072244
Employed	15.56525
Median HI	12.40857
Education	
Bachelor's	17.50289
High schoo	14.67984
Preschool e	74.27178
Transportation	
Auto Acces	16.95111
Active com	49.8396
Social	
2-parent ho	10.38111
Voting	30.89953
Neighborhood	
Alcohol ava	49.86526
Park access	57.48749
Retail dens	47.01655
Supermark	29.53933
Tree canop	84.60157
Housing	
Homeowne	30.1681
Housing ha	28.23046
Low-inc ho	26.71628
Low-inc ren	30.95085
Uncrowdec	20.0308
Health Outcomes	
Insured adu	19.91531
Arthritis	12
Asthma ER	10
High Blood	6
Cancer (exc	50
Asthma	8.7
Coronary H	16
Chronic Ob	5
Diagnosed	10

Life Expect	9
Cognitively	18
Physically	44
Heart Attac	11
Mental Hea	16
Chronic Kid	11
Obesity	23
Pedestrian	55
Physical He	14
Stroke	6.5
Health Risk Behaviors	
Binge Drinl	94
Current Sm	5.6
No Leisure	14
Climate Change Exposures	
Wildfire Ris	0
SLR Inunda	0
Children	42
Elderly	68
English Spe	13
Foreign-bo	70
Outdoor W	4.6
Climate Change Adaptive Capacity	
Impervious	47
Traffic Den	45
Traffic Acce	60
Other Indices	
Hardship	91
Other Decision Support	
2016 Votin	14

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroSc	80
Healthy Pla	13
Project Loc	Yes
Project Loc	Yes
Project Loc	South Florin

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

Measure Ti	Co-Benefits Achieved

7.5. Evaluation Scorecard

Category	Number of	Total Point	Max Possit	Weighted Score

7.6. Health & Equity Custom Measures

Measure Ti	Sponsor

8. User Changes to Default Data

Screen	Justification
Land Use	one fifth of total project
Constructic	1/5 of total project
Screen	Justification
Land Use	25 percent of total before rezone
Constructic	1/5 of total project

ll. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
lGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Nar	Sac Rezone before (2027)
Constructic	1/1/2027
Lead Agency	
Land Use S	Project/site
Analysis Le	County
Windspeec	3
Precipitatic	36.4
Location	38.496999247768415, -121.41035190855798
County	Sacramento
City	Unincorporated
Air District	Sacramento Metropolitan AQMD
Air Basin	Sacramento Valley
TAZ	731
EDFZ	13
Electric Uti	Sacramento Municipal Utility District
Gas Utility	Pacific Gas & Electric
App Versio	2022.1.1.21

1.2. Land Use Types

Land Use S	Size	Unit	Lot Acreag	Building Ar	Landscape	Special Lan	Population	Description
Apartment	461	Dwelling U	37.5	488660	327122		1291	

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Un/Mit.	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Unmit.	2.68	28.00683	12.5	31.4	0.03	0.36	3.73	4.08	0.33	0.89	1.22		7390	7390	0.23	0.35	15	7514
Daily, Winter (Max)																		
Unmit.	3.69	28.00683	28	29	0.06	1.17	7.84	9.01	1.08	3.98	5.06		6984	6984	0.27	0.35	0.39	7096
Average Daily (Max)																		
Unmit.	1.76	14	9.43	17.9	0.02	0.29	2.44	2.74	0.27	0.65	0.92		4561	4561	0.16	0.2	3.73	4629
Annual (Max)																		
Unmit.	0.32	2.56	1.72	3.27	< 0.005	0.05	0.45	0.5	0.05	0.12	0.17		755	755	0.03	0.03	0.62	766

2.2. Construction Emissions by Year, Unmitigated

Year	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily - Summer (Max)																		
2027	2.68	28.00683	12.5	31.4	0.03	0.36	3.73	4.08	0.33	0.89	1.22		7390	7390	0.23	0.35	15	7514
Daily - Winter (Max)																		
2027	3.69	28.00683	28	29	0.06	1.17	7.84	9.01	1.08	3.98	5.06		6984	6984	0.27	0.35	0.39	7096
Average Daily																		
2027	1.76	14	9.43	17.9	0.02	0.29	2.44	2.74	0.27	0.65	0.92		4561	4561	0.16	0.2	3.73	4629
Annual																		
2027	0.32	2.56	1.72	3.27	< 0.005	0.05	0.45	0.5	0.05	0.12	0.17		755	755	0.03	0.03	0.62	766

3. Construction Emissions Details

3.1. Site Preparation (2027) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Off-Road Ei	3.63	3.05	28	28.3	0.05	1.17		1.17	1.08		1.08		5298	5298	0.21	0.04		5316
Dust From Material Movement							7.67	7.67		3.94	3.94							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Off-Road Ei	0.07	0.06	0.54	0.54	< 0.005	0.02		0.02	0.02		0.02		102	102	< 0.005	< 0.005		102
Dust From Material Movement							0.15	0.15		0.08	0.08							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Off-Road Ei	0.01	0.01	0.1	0.1	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		16.8	16.8	< 0.005	< 0.005		16.9
Dust From Material Movement							0.03	0.03		0.01	0.01							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Worker	0.06	0.06	0.06	0.68	0	0	0.18	0.18	0	0.04	0.04		170	170	< 0.005	0.01	0.02	172
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Worker	< 0.005	< 0.005	< 0.005	0.01	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005		3.34	3.34	< 0.005	< 0.005	0.01	3.39
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005		0.55	0.55	< 0.005	< 0.005	< 0.005	0.56
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0

3.3. Grading (2027) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Off-Road Ei	3.51	2.95	25.6	27.3	0.06	1.04		1.04	0.96		0.96		6598	6598	0.27	0.05		6621
Dust From Material Movement							3.59	3.59		1.42	1.42							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Off-Road Ei	0.19	0.16	1.4	1.49	< 0.005	0.06		0.06	0.05		0.05		362	362	0.01	< 0.005		363

Report Tables

Daily Max lb

Year	ROG	NOx	PM10	PM2.5	PM10	PM2.5	CO2
2027	28.00683	28	9.01	5.06	0.5	0.17	766

Yearly Tons

Fuel Calcs

Tons/year

Year	Gasoline	Diesel
2027	320.61	445.48

Dust From Material Movement							0.2	0.2		0.08	0.08							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual																		
Off-Road E	0.04	0.03	0.26	0.27	< 0.005	0.01		0.01	0.01		0.01	59.9	59.9	< 0.005	< 0.005			60.1
Dust From Material Movement							0.04	0.04		0.01	0.01							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Worker	0.07	0.06	0.07	0.78	0	0	0.2	0.2	0	0.05	0.05	194	194	< 0.005		0.01	0.02	197
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Average Daily																		
Worker	< 0.005	< 0.005	< 0.005	0.04	0	0	0.01	0.01	0	< 0.005	< 0.005	10.9	10.9	< 0.005	< 0.005		0.02	11.1
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual																		
Worker	< 0.005	< 0.005	< 0.005	0.01	0	0	< 0.005	< 0.005		0	< 0.005	< 0.005	1.81	1.81	< 0.005	< 0.005	< 0.005	1.83
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

3.5. Building Construction (2027) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Off-Road E	1.23	1.03	9.39	12.9	0.02	0.34		0.34	0.31		0.31	2397	2397	0.1	0.02			2405
Onsite truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily, Winter (Max)																		
Off-Road E	1.23	1.03	9.39	12.9	0.02	0.34		0.34	0.31		0.31	2397	2397	0.1	0.02			2405
Onsite truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Average Daily																		
Off-Road E	0.69	0.58	5.3	7.3	0.01	0.19		0.19	0.17		0.17	1353	1353	0.05	0.01			1358
Onsite truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual																		
Off-Road E	0.13	0.11	0.97	1.33	< 0.005	0.03		0.03	0.03		0.03	224	224	0.01	< 0.005			225
Onsite truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Worker	1.31	1.28	0.84	17.6	0	0	3.35	3.35	0	0.79	0.79	3628	3628	0.05	0.13	12		3679
Vendor	0.15	0.05	2.27	0.89	0.01	0.02	0.37	0.39	0.02	0.1	0.12	1365	1365	0.08	0.2	3.02		1430
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily, Winter (Max)																		
Worker	1.19	1.05	1.09	12.9	0	0	3.35	3.35	0	0.79	0.79	3223	3223	0.07	0.13	0.31		3265
Vendor	0.14	0.05	2.42	0.91	0.01	0.02	0.37	0.39	0.02	0.1	0.12	1365	1365	0.08	0.2	0.08		1426
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Average Daily																		
Worker	0.67	0.59	0.54	7.46	0	0	1.85	1.85	0	0.43	0.43	1866	1866	0.03	0.07	2.92		1891
Vendor	0.08	0.03	1.34	0.5	0.01	0.01	0.21	0.22	0.01	0.06	0.07	770	770	0.05	0.11	0.74		806
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual																		
Worker	0.12	0.11	0.1	1.36	0	0	0.34	0.34	0	0.08	0.08	309	309	0.01	0.01	0.48		313
Vendor	0.01	0.01	0.25	0.09	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	128	128	0.01	0.02	0.12		133
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

3.7. Paving (2027) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Off-Road E	0.88	0.74	6.94	9.95	0.01	0.3		0.3	0.27		0.27	1511	1511	0.06	0.01			1516
Paving		0																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Average Daily																		
Off-Road E	0.03	0.03	0.27	0.38	< 0.005	0.01		0.01	0.01		0.01	58	58	< 0.005	< 0.005			58.2
Paving		0																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual																		
Off-Road E	0.01	0.01	0.05	0.07	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005	9.6	9.6	< 0.005	< 0.005			9.63
Paving		0																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Worker	0.05	0.05	0.05	0.58	0	0	0.15	0.15	0	0.04	0.04	146	146	< 0.005		0.01	0.01	148
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Average Daily																		
Worker	< 0.005	< 0.005	< 0.005	0.02	0	0	0.01	0.01	0	< 0.005	< 0.005	5.73	5.73	< 0.005	< 0.005		0.01	5.81
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual																		
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0	0	< 0.005	< 0.005		0	< 0.005	< 0.005	0.95	0.95	< 0.005	< 0.005	< 0.005	0.96
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

3.9. Architectural Coating (2027) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Off-Road E	0.14	0.11	0.83	1.13	< 0.005	0.02		0.02	0.02		0.02	134	134	0.01	< 0.005			134
Architectural Coatings		328																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Average Daily																		
Off-Road Ei	0.01	< 0.005	0.03	0.04	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		5.12	5.12	< 0.005	< 0.005		5.14
Architectural Coatings		12.6																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Off-Road Ei	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		0.85	0.85	< 0.005	< 0.005		0.85
Architectural Coatings		2.29																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Worker	0.24	0.21	0.22	2.58	0	0	0.67	0.67	0	0.16	0.16		645	645	0.01	0.03	0.06	653
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Worker	0.01	0.01	0.01	0.1	0	0	0.03	0.03	0	0.01	0.01		25.4	25.4	< 0.005	< 0.005	0.04	25.7
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Worker	< 0.005	< 0.005	< 0.005	0.02	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005		4.2	4.2	< 0.005	< 0.005	0.01	4.26
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Vegetation	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Species	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		
Removed																		
Subtotal																		
Daily, Winter (Max)																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		
Removed																		
Subtotal																		
Annual																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		
Removed																		
Subtotal																		

5. Activity Data

5.1. Construction Schedule

Phase Nam	Phase Type	Start Date	End Date	Days Per W	Work Days	Phase Description
Site Prepar	Site Prepar	1/1/2027	1/11/2027	5	7	
Grading	Grading	1/12/2027	2/8/2027	5	20	
Building Cc	Building Cc	2/9/2027	########	5	206	
Paving	Paving	########	########	5	14	
Architectur	Architectur	########	########	5	14	

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Nam	Equipment	Fuel Type	Engine Tier	Number pe	Hours Per I	Horsepow	Load Factor
Site Prepar	Rubber Tir	Diesel	Average	3	8	367	0.4
Site Prepar	Tractors/Lc	Diesel	Average	4	8	84	0.37
Grading	Graders	Diesel	Average	1	8	148	0.41
Grading	Excavators	Diesel	Average	2	8	36	0.38
Grading	Tractors/Lc	Diesel	Average	2	8	84	0.37
Grading	Scrapers	Diesel	Average	2	8	423	0.48
Grading	Rubber Tir	Diesel	Average	1	8	367	0.4
Building Cc	Forklifts	Diesel	Average	3	8	82	0.2
Building Cc	Generator	Diesel	Average	1	8	14	0.74
Building Cc	Cranes	Diesel	Average	1	7	367	0.29
Building Cc	Welders	Diesel	Average	1	8	46	0.45

Building Cc	Tractors/Lc	Diesel	Average	3	7	84	0.37
Paving	Pavers	Diesel	Average	2	8	81	0.42
Paving	Paving Equ	Diesel	Average	2	8	89	0.36
Paving	Rollers	Diesel	Average	2	8	36	0.38
Architectur	Air Compre	Diesel	Average	1	6	37	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Nam	Trip Type	One-Way T	Miles per T	Vehicle Mix
Site Preparation				
Site Prepar	Worker	17.5	14.3	LDA,LDT1,LDT2
Site Prepar	Vendor		8.8	HHDT,MHDT
Site Prepar	Hauling	0	20	HHDT
Site Prepar	Onsite truck			HHDT
Grading				
Grading	Worker	20	14.3	LDA,LDT1,LDT2
Grading	Vendor		8.8	HHDT,MHDT
Grading	Hauling	0	20	HHDT
Grading	Onsite truck			HHDT
Building Construction				
Building Cc	Worker	332	14.3	LDA,LDT1,LDT2
Building Cc	Vendor	49.3	8.8	HHDT,MHDT
Building Cc	Hauling	0	20	HHDT
Building Cc	Onsite truck			HHDT
Paving				
Paving	Worker	15	14.3	LDA,LDT1,LDT2
Paving	Vendor		8.8	HHDT,MHDT
Paving	Hauling	0	20	HHDT
Paving	Onsite truck			HHDT
Architectural Coating				
Architectur	Worker	66.4	14.3	LDA,LDT1,LDT2
Architectur	Vendor		8.8	HHDT,MHDT
Architectur	Hauling	0	20	HHDT
Architectur	Onsite truck			HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Str	PM10 Redı	PM2.5 Reduction

5.5. Architectural Coatings

Phase Nam	Residential	Residential	Non-Reside	Non-Reside	Parking Area Coated (sq ft)
Architectur	989537	329846	0	0	0

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Nam	Material In	Material E>	Acres Grad	Material D	Acres Paved (acres)
Site Preparation			10.5	0	
Grading			60	0	
Paving	0	0	0	0	

5.6.2. Construction Earthmoving Control Strategies

Control Str	Frequency	PM10 Redı	PM2.5 Reduction
Water Exp	2	61	61

5.7. Construction Paving

Land Use	Area Pavec	% Asphalt
Apartments Low Rise		0

5.8. Construction Electricity Consumption and Emissions Factors

Year	kWh per Y	CO2	CH4	N2O
2027	0	375	0.01	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation	Vegetation	Initial Acre	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cc	Initial Acre	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity S	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Ha	Result for F	Unit
Temperatu	19.3	annual days of extreme heat
Extreme Pr	5.7	annual days with precipitation above 20 mm
Sea Level Rise		meters of inundation depth
Wildfire	0	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid ce

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (Had

6.2. Initial Climate Risk Scores

Climate Ha	Exposure S	Sensitivity	Adaptive C	Vulnerability Score
Temperatu	1	0	0	N/A
Extreme Pr	2	0	0	N/A
Sea Level R	N/A	N/A	N/A	N/A

Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack I	N/A	N/A	N/A	N/A
Air Quality	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Ha	Exposure S	Sensitivity	Adaptive C	Vulnerability Score
Temperatu	1	1	1	2
Extreme Pr	2	1	1	3
Sea Level R	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack I	N/A	N/A	N/A	N/A
Air Quality	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	
AQ-Ozone	42.6
AQ-PM	34
AQ-DPM	24.2
Drinking W	87.7
Lead Risk H	46.5
Pesticides	0
Toxic Relea	22
Traffic	61.2
Effect Indicators	
CleanUp Sit	40.8
Groundwat	55.3
Haz Waste	30.2
Impaired W	43.8
Solid Waste	39
Sensitive Population	
Asthma	91.3
Cardio-vasc	90.3
Low Birth W	79.8
Socioeconomic Factor Indicators	
Education	75.7
Housing	77.6
Linguistic	77.4
Poverty	89.5
Unemployr	95.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	
Above Pov	9.072244
Employed	15.56525
Median HI	12.40857
Education	
Bachelor's	17.50289
High schoo	14.67984
Preschool e	74.27178
Transportation	
Auto Acces	16.95111
Active com	49.8396
Social	
2-parent ho	10.38111
Voting	30.89953
Neighborhood	
Alcohol ava	49.86526
Park access	57.48749
Retail dens	47.01655
Supermark	29.53933
Tree canop	84.60157
Housing	
Homeowne	30.1681
Housing ha	28.23046
Low-inc ho	26.71628
Low-inc ren	30.95085
Uncrowdec	20.0308
Health Outcomes	
Insured adu	19.91531
Arthritis	12
Asthma ER	10
High Blood	6
Cancer (exc	50
Asthma	8.7
Coronary H	16
Chronic Ob	5
Diagnosed	10

Life Expect	9
Cognitively	18
Physically	44
Heart Attac	11
Mental Hea	16
Chronic Kid	11
Obesity	23
Pedestrian	55
Physical He	14
Stroke	6.5
Health Risk Behaviors	
Binge Drinl	94
Current Sm	5.6
No Leisure	14
Climate Change Exposures	
Wildfire Ris	0
SLR Inunda	0
Children	42
Elderly	68
English Spe	13
Foreign-bo	70
Outdoor W	4.6
Climate Change Adaptive Capacity	
Impervious	47
Traffic Den	45
Traffic Acce	60
Other Indices	
Hardship	91
Other Decision Support	
2016 Votin	14

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroSc	80
Healthy Pla	13
Project Loc	Yes
Project Loc	Yes
Project Loc	South Florin

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

Measure Ti	Co-Benefits Achieved

7.5. Evaluation Scorecard

Category	Number of	Total Point	Max Possit	Weighted Score

7.6. Health & Equity Custom Measures

Measure Ti	Sponsor

8. User Changes to Default Data

Screen	Justification
Land Use	fifth of total project
Constructic	1/5 of total project
Screen	Justification
Land Use	25 percent of total before rezone
Constructic	1/5 of total project

ll. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
lGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Nar	Sac Rezone before (2028)
Constructic	1/1/2028
Lead Agency	
Land Use S	Project/site
Analysis Le	County
Windspeec	3
Precipitatic	36.4
Location	38.496999247768415, -121.41035190855798
County	Sacramento
City	Unincorporated
Air District	Sacramento Metropolitan AQMD
Air Basin	Sacramento Valley
TAZ	731
EDFZ	13
Electric Uti	Sacramento Municipal Utility District
Gas Utility	Pacific Gas & Electric
App Versio	2022.1.1.21

1.2. Land Use Types

Land Use S	Size	Unit	Lot Acreag	Building Ar	Landscape	Special Lan	Population	Description
Apartment	461	Dwelling U	37.5	488660	327122		1291	

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Un/Mit.	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Unmit.	2.58	28.16028	11.8	30.3	0.03	0.32	3.73	4.05	0.3	0.89	1.18		7279	7279	0.22	0.24	13.5	7370
Daily, Winter (Max)																		
Unmit.	3.67	28.16028	27.5	29	0.06	1.14	7.84	8.99	1.05	3.98	5.03		6882	6882	0.27	0.35	0.35	6994
Average Daily (Max)																		
Unmit.	1.7	14	8.93	17.4	0.02	0.27	2.44	2.71	0.25	0.65	0.9		4500	4500	0.16	0.2	3.36	4567
Annual (Max)																		
Unmit.	0.31	2.55	1.63	3.18	< 0.005	0.05	0.45	0.49	0.04	0.12	0.16		745	745	0.03	0.03	0.56	756

2.2. Construction Emissions by Year, Unmitigated

Year	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily - Summer (Max)																		
2028	2.58	28.16028	11.8	30.3	0.03	0.32	3.73	4.05	0.3	0.89	1.18		7279	7279	0.22	0.24	13.5	7370
Daily - Winter (Max)																		
2028	3.67	28.16028	27.5	29	0.06	1.14	7.84	8.99	1.05	3.98	5.03		6882	6882	0.27	0.35	0.35	6994
Average Daily																		
2028	1.7	14	8.93	17.4	0.02	0.27	2.44	2.71	0.25	0.65	0.9		4500	4500	0.16	0.2	3.36	4567
Annual																		
2028	0.31	2.55	1.63	3.18	< 0.005	0.05	0.45	0.49	0.04	0.12	0.16		745	745	0.03	0.03	0.56	756

3. Construction Emissions Details

3.1. Site Preparation (2028) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Off-Road Ei	3.61	3.04	27.5	28.4	0.05	1.14		1.14	1.05		1.05		5300	5300	0.21	0.04		5318
Dust From Material Movement							7.67	7.67		3.94	3.94							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Off-Road Ei	0.07	0.06	0.53	0.54	< 0.005	0.02		0.02	0.02		0.02		102	102	< 0.005	< 0.005		102
Dust From Material Movement							0.15	0.15		0.08	0.08							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Off-Road Ei	0.01	0.01	0.1	0.1	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		16.8	16.8	< 0.005	< 0.005		16.9
Dust From Material Movement							0.03	0.03		0.01	0.01							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Worker	0.06	0.05	0.05	0.64	0	0	0.18	0.18	0	0.04	0.04		166	166	< 0.005	0.01	0.01	169
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Worker	< 0.005	< 0.005	< 0.005	0.01	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005		3.28	3.28	< 0.005	< 0.005	< 0.005	3.32
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005		0.54	0.54	< 0.005	< 0.005	< 0.005	0.55
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0

3.3. Grading (2028) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Off-Road Ei	3.43	2.88	24.3	27.2	0.06	0.99		0.99	0.91		0.91		6598	6598	0.27	0.05		6621
Dust From Material Movement							3.59	3.59		1.42	1.42							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Off-Road Ei	0.19	0.16	1.33	1.49	< 0.005	0.05		0.05	0.05		0.05		362	362	0.01	< 0.005		363

Report Tables

Daily Max lb

Year	ROG	NOx	PM10	PM2.5	PM10	PM2.5	CO2
2028	28.16028	27.5	8.99	5.03	0.49	0.16	756

Yearly Tons

Fuel Calcs

Tons/year

Year	Gasoline	Diesel
2028	314.15	442.42

Dust From Material Movement							0.2	0.2		0.08	0.08							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual																		
Off-Road E	0.03	0.03	0.24	0.27	< 0.005	0.01		0.01	0.01		0.01	59.9	59.9	< 0.005	< 0.005			60.1
Dust From Material Movement							0.04	0.04		0.01	0.01							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Worker	0.07	0.06	0.06	0.73	0	0	0.2	0.2	0	0.05	0.05	190	190	< 0.005		0.01	0.02	193
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Average Daily																		
Worker	< 0.005	< 0.005	< 0.005	0.04	0	0	0.01	0.01	0	< 0.005	< 0.005	10.7	10.7	< 0.005	< 0.005	0.02	10.8	
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual																		
Worker	< 0.005	< 0.005	< 0.005	0.01	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005	1.77	1.77	< 0.005	< 0.005	< 0.005	1.79	
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

3.5. Building Construction (2028) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Off-Road E	1.18	0.99	8.92	12.9	0.02	0.3		0.3	0.28		0.28	2397	2397	0.1	0.02			2406
Onsite truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily, Winter (Max)																		
Off-Road E	1.18	0.99	8.92	12.9	0.02	0.3		0.3	0.28		0.28	2397	2397	0.1	0.02			2406
Onsite truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Average Daily																		
Off-Road E	0.67	0.56	5.04	7.3	0.01	0.17		0.17	0.16		0.16	1353	1353	0.05	0.01			1358
Onsite truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual																		
Off-Road E	0.12	0.1	0.92	1.33	< 0.005	0.03		0.03	0.03		0.03	224	224	0.01	< 0.005			225
Onsite truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Worker	1.26	1.14	0.73	16.5	0	0	3.35	3.35	0	0.79	0.79	3553	3553	0.04	0.02	10.8	3572	
Vendor	0.13	0.05	2.12	0.85	0.01	0.02	0.37	0.39	0.02	0.1	0.12	1329	1329	0.08	0.2	2.68	1393	
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily, Winter (Max)																		
Worker	1.15	1.02	0.97	12.2	0	0	3.35	3.35	0	0.79	0.79	3157	3157	0.07	0.13	0.28	3198	
Vendor	0.13	0.05	2.27	0.88	0.01	0.02	0.37	0.39	0.02	0.1	0.12	1328	1328	0.08	0.2	0.07	1390	
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Average Daily																		
Worker	0.65	0.58	0.48	7.01	0	0	1.85	1.85	0	0.43	0.43	1828	1828	0.03	0.07	2.64	1853	
Vendor	0.08	0.03	1.26	0.49	0.01	0.01	0.21	0.22	0.01	0.06	0.07	750	750	0.05	0.11	0.65	785	
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual																		
Worker	0.12	0.1	0.09	1.28	0	0	0.34	0.34	0	0.08	0.08	303	303	0.01	0.01	0.44	307	
Vendor	0.01	0.01	0.23	0.09	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	124	124	0.01	0.02	0.11	130	
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

3.7. Paving (2028) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Off-Road E	0.82	0.69	6.63	9.91	0.01	0.26		0.26	0.24		0.24	1511	1511	0.06	0.01			1516
Paving		0																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Average Daily																		
Off-Road E	0.03	0.03	0.25	0.38	< 0.005	0.01		0.01	0.01		0.01	58	58	< 0.005	< 0.005			58.2
Paving		0																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual																		
Off-Road E	0.01	< 0.005	0.05	0.07	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005	9.6	9.6	< 0.005	< 0.005			9.63
Paving		0																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Worker	0.05	0.05	0.04	0.55	0	0	0.15	0.15	0	0.04	0.04	143	143	< 0.005		0.01	0.01	145
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Average Daily																		
Worker	< 0.005	< 0.005	< 0.005	0.02	0	0	0.01	0.01	0	< 0.005	< 0.005	5.61	5.61	< 0.005	< 0.005	0.01	5.69	
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual																		
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005	0.93	0.93	< 0.005	< 0.005	< 0.005	0.94	
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

3.9. Architectural Coating (2028) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Off-Road E	0.13	0.11	0.81	1.12	< 0.005	0.02		0.02	0.01		0.01	134	134	0.01	< 0.005			134
Architectural Coatings		353																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Average Daily																		
Off-Road Ei	< 0.005	< 0.005	0.03	0.04	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		4.76	4.76	< 0.005	< 0.005		4.77
Architectural Coatings		12.6																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Off-Road Ei	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		0.79	0.79	< 0.005	< 0.005		0.79
Architectural Coatings		2.29																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Worker	0.23	0.2	0.19	2.43	0	0	0.67	0.67	0	0.16	0.16		631	631	0.01	0.03	0.06	640
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Worker	0.01	0.01	0.01	0.09	0	0	0.02	0.02	0	0.01	0.01		23.1	23.1	< 0.005	< 0.005	0.03	23.4
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Worker	< 0.005	< 0.005	< 0.005	0.02	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005		3.82	3.82	< 0.005	< 0.005	0.01	3.87
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Vegetation	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Species	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		
Removed																		
Subtotal																		
Daily, Winter (Max)																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		
Removed																		
Subtotal																		
Annual																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		
Removed																		
Subtotal																		

5. Activity Data

5.1. Construction Schedule

Phase Nam	Phase Type	Start Date	End Date	Days Per W	Work Days	Phase Description
Site Prepar	Site Prepar	1/1/2028	1/11/2028	5	7	
Grading	Grading	1/12/2028	2/8/2028	5	20	
Building Cc	Building Cc	2/9/2028	########	5	206	
Paving	Paving	########	########	5	14	
Architectur	Architectur	########	########	5	13	

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Nam	Equipment	Fuel Type	Engine Tier	Number pe	Hours Per I	Horsepow	Load Factor
Site Prepar	Rubber Tir	Diesel	Average	3	8	367	0.4
Site Prepar	Tractors/Lc	Diesel	Average	4	8	84	0.37
Grading	Graders	Diesel	Average	1	8	148	0.41
Grading	Excavators	Diesel	Average	2	8	36	0.38
Grading	Tractors/Lc	Diesel	Average	2	8	84	0.37
Grading	Scrapers	Diesel	Average	2	8	423	0.48
Grading	Rubber Tir	Diesel	Average	1	8	367	0.4
Building Cc	Forklifts	Diesel	Average	3	8	82	0.2
Building Cc	Generator	Diesel	Average	1	8	14	0.74
Building Cc	Cranes	Diesel	Average	1	7	367	0.29
Building Cc	Welders	Diesel	Average	1	8	46	0.45

Building Cc	Tractors/Lc	Diesel	Average	3	7	84	0.37
Paving	Pavers	Diesel	Average	2	8	81	0.42
Paving	Paving Equ	Diesel	Average	2	8	89	0.36
Paving	Rollers	Diesel	Average	2	8	36	0.38
Architectur	Air Compre	Diesel	Average	1	6	37	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Nam	Trip Type	One-Way T	Miles per T	Vehicle Mix
Site Preparation				
Site Prepar	Worker	17.5	14.3	LDA,LDT1,LDT2
Site Prepar	Vendor		8.8	HHDT,MHDT
Site Prepar	Hauling	0	20	HHDT
Site Prepar	Onsite truck			HHDT
Grading				
Grading	Worker	20	14.3	LDA,LDT1,LDT2
Grading	Vendor		8.8	HHDT,MHDT
Grading	Hauling	0	20	HHDT
Grading	Onsite truck			HHDT
Building Construction				
Building Cc	Worker	332	14.3	LDA,LDT1,LDT2
Building Cc	Vendor	49.3	8.8	HHDT,MHDT
Building Cc	Hauling	0	20	HHDT
Building Cc	Onsite truck			HHDT
Paving				
Paving	Worker	15	14.3	LDA,LDT1,LDT2
Paving	Vendor		8.8	HHDT,MHDT
Paving	Hauling	0	20	HHDT
Paving	Onsite truck			HHDT
Architectural Coating				
Architectur	Worker	66.4	14.3	LDA,LDT1,LDT2
Architectur	Vendor		8.8	HHDT,MHDT
Architectur	Hauling	0	20	HHDT
Architectur	Onsite truck			HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Str	PM10 Redı	PM2.5 Reduction

5.5. Architectural Coatings

Phase Nam	Residential	Residential	Non-Reside	Non-Reside	Parking Area Coated (sq ft)
Architectur	989537	329846	0	0	

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Nam	Material In	Material E	Acres Grad	Material D	Acres Paved (acres)
Site Preparation			10.5	0	
Grading			60	0	
Paving	0	0	0	0	

5.6.2. Construction Earthmoving Control Strategies

Control Str	Frequency	PM10 Redı	PM2.5 Reduction
Water Exp	2	61	61

5.7. Construction Paving

Land Use	Area Pavec	% Asphalt
Apartments Low Rise		0

5.8. Construction Electricity Consumption and Emissions Factors

Year	kWh per Y	CO2	CH4	N2O
2028	0	375	0.01	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation	Vegetation	Initial Acre	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cc	Initial Acre	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity S	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Ha	Result for F	Unit
Temperatu	19.3	annual days of extreme heat
Extreme Pr	5.7	annual days with precipitation above 20 mm
Sea Level Rise		meters of inundation depth
Wildfire	0	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid ce

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (Had

6.2. Initial Climate Risk Scores

Climate Ha	Exposure S	Sensitivity	Adaptive C	Vulnerability Score
Temperatu	1	0	0	N/A
Extreme Pr	2	0	0	N/A
Sea Level R	N/A	N/A	N/A	N/A

Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack I	N/A	N/A	N/A	N/A
Air Quality	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Ha	Exposure S	Sensitivity	Adaptive C	Vulnerability Score
Temperatu	1	1	1	2
Extreme Pr	2	1	1	3
Sea Level R	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack I	N/A	N/A	N/A	N/A
Air Quality	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	
AQ-Ozone	42.6
AQ-PM	34
AQ-DPM	24.2
Drinking W	87.7
Lead Risk H	46.5
Pesticides	0
Toxic Relea	22
Traffic	61.2
Effect Indicators	
CleanUp Sit	40.8
Groundwat	55.3
Haz Waste	30.2
Impaired W	43.8
Solid Waste	39
Sensitive Population	
Asthma	91.3
Cardio-vasc	90.3
Low Birth W	79.8
Socioeconomic Factor Indicators	
Education	75.7
Housing	77.6
Linguistic	77.4
Poverty	89.5
Unemployr	95.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	
Above Pov	9.072244
Employed	15.56525
Median HI	12.40857
Education	
Bachelor's	17.50289
High schoo	14.67984
Preschool e	74.27178
Transportation	
Auto Acces	16.95111
Active com	49.8396
Social	
2-parent ho	10.38111
Voting	30.89953
Neighborhood	
Alcohol ava	49.86526
Park access	57.48749
Retail dens	47.01655
Supermark	29.53933
Tree canop	84.60157
Housing	
Homeowne	30.1681
Housing ha	28.23046
Low-inc ho	26.71628
Low-inc ren	30.95085
Uncrowdec	20.0308
Health Outcomes	
Insured adu	19.91531
Arthritis	12
Asthma ER	10
High Blood	6
Cancer (exc	50
Asthma	8.7
Coronary H	16
Chronic Ob	5
Diagnosed	10

Life Expect	9
Cognitively	18
Physically	44
Heart Attac	11
Mental Hea	16
Chronic Kid	11
Obesity	23
Pedestrian	55
Physical He	14
Stroke	6.5
Health Risk Behaviors	
Binge Drinl	94
Current Sm	5.6
No Leisure	14
Climate Change Exposures	
Wildfire Ris	0
SLR Inunda	0
Children	42
Elderly	68
English Spe	13
Foreign-bo	70
Outdoor W	4.6
Climate Change Adaptive Capacity	
Impervious	47
Traffic Den	45
Traffic Acce	60
Other Indices	
Hardship	91
Other Decision Support	
2016 Votin	14

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroSc	80
Healthy Pla	13
Project Loc	Yes
Project Loc	Yes
Project Loc	South Florin

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

Measure Ti	Co-Benefits Achieved

7.5. Evaluation Scorecard

Category	Number of	Total Point	Max Possit	Weighted Score

7.6. Health & Equity Custom Measures

Measure Ti	Sponsor

8. User Changes to Default Data

Screen	Justification
Land Use	fifth of total project
Constructic	1/5 of total project
Screen	Justification
Land Use	25 percent of total before rezone
Constructic	1/5 of total project

ll. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
lGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Nar	Sac Rezone before (2029)
Constructic	1/1/2029
Lead Agency	
Land Use S	Project/site
Analysis Le	County
Windspeec	3
Precipitatic	36.4
Location	38.496999247768415, -121.41035190855798
County	Sacramento
City	Unincorporated
Air District	Sacramento Metropolitan AQMD
Air Basin	Sacramento Valley
TAZ	731
EDFZ	13
Electric Uti	Sacramento Municipal Utility District
Gas Utility	Pacific Gas & Electric
App Versio	2022.1.1.21

1.2. Land Use Types

Land Use S	Size	Unit	Lot Acreag	Building Ar	Landscape	Special Lan	Population	Description
Apartment	461	Dwelling U	37.5	488660	327122		1291	

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Un/Mit.	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Unmit.	2.49	28.00683	11.3	29.3	0.03	0.29	3.73	4.02	0.27	0.89	1.16		7175	7175	0.22	0.23	12.1	7262
Daily, Winter (Max)																		
Unmit.	3.59	28.00683	26	28.7	0.06	1.09	7.84	8.93	1	3.98	4.98		6786	6786	0.27	0.34	0.31	6895
Average Daily (Max)																		
Unmit.	1.65	13.9	8.46	17	0.02	0.25	2.44	2.69	0.23	0.65	0.88		4446	4446	0.15	0.2	2.99	4511
Annual (Max)																		
Unmit.	0.3	2.54	1.54	3.1	< 0.005	0.05	0.45	0.49	0.04	0.12	0.16		736	736	0.03	0.03	0.5	747

2.2. Construction Emissions by Year, Unmitigated

Year	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily - Summer (Max)																		
2029	2.49	28.00683	11.3	29.3	0.03	0.29	3.73	4.02	0.27	0.89	1.16		7175	7175	0.22	0.23	12.1	7262
Daily - Winter (Max)																		
2029	3.59	28.00683	26	28.7	0.06	1.09	7.84	8.93	1	3.98	4.98		6786	6786	0.27	0.34	0.31	6895
Average Daily																		
2029	1.65	13.9	8.46	17	0.02	0.25	2.44	2.69	0.23	0.65	0.88		4446	4446	0.15	0.2	2.99	4511
Annual																		
2029	0.3	2.54	1.54	3.1	< 0.005	0.05	0.45	0.49	0.04	0.12	0.16		736	736	0.03	0.03	0.5	747

3. Construction Emissions Details

3.1. Site Preparation (2029) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Off-Road Ei	3.53	2.97	25.9	28.1	0.05	1.09		1.09	1		1		5296	5296	0.21	0.04		5314
Dust From Material Movement							7.67	7.67		3.94	3.94							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Off-Road Ei	0.07	0.06	0.5	0.54	< 0.005	0.02		0.02	0.02		0.02		102	102	< 0.005	< 0.005		102
Dust From Material Movement							0.15	0.15		0.08	0.08							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Off-Road Ei	0.01	0.01	0.09	0.1	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		16.8	16.8	< 0.005	< 0.005		16.9
Dust From Material Movement							0.03	0.03		0.01	0.01							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Worker	0.06	0.05	0.05	0.6	0	0	0.18	0.18	0	0.04	0.04		163	163	< 0.005	0.01	0.01	166
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Worker	< 0.005	< 0.005	< 0.005	0.01	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005		3.22	3.22	< 0.005	< 0.005	< 0.005	3.26
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005		0.53	0.53	< 0.005	< 0.005	< 0.005	0.54
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0

3.3. Grading (2029) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Off-Road Ei	3.32	2.79	22.7	26.9	0.06	0.92		0.92	0.84		0.84		6596	6596	0.27	0.05		6619
Dust From Material Movement							3.59	3.59		1.42	1.42							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Off-Road Ei	0.18	0.15	1.25	1.47	< 0.005	0.05		0.05	0.05		0.05		361	361	0.01	< 0.005		363

Report Tables

Daily Max lb

Year	ROG	NOx	PM10	PM2.5	PM10	PM2.5	CO2
2029	28.00683	26	8.93	4.98	0.49	0.16	747

Yearly Tons

Fuel Calcs

Tons/year

Year	Gasoline	Diesel
2029	308.33	438.38

Dust From Material Movement							0.2	0.2		0.08	0.08							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual																		
Off-Road E	0.03	0.03	0.23	0.27	< 0.005	0.01		0.01	0.01		0.01	59.8	59.8	< 0.005	< 0.005			60
Dust From Material Movement							0.04	0.04		0.01	0.01							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Worker	0.07	0.06	0.05	0.69	0	0	0.2	0.2	0	0.05	0.05	187	187	< 0.005		0.01	0.02	189
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Average Daily																		
Worker	< 0.005	< 0.005	< 0.005	0.04	0	0	0.01	0.01	0	< 0.005	< 0.005	10.5	10.5	< 0.005	< 0.005	0.01	10.6	
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual																		
Worker	< 0.005	< 0.005	< 0.005	0.01	0	0	< 0.005	< 0.005		0	< 0.005	< 0.005	1.74	1.74	< 0.005	< 0.005	< 0.005	1.76
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

3.5. Building Construction (2029) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Off-Road E	1.15	0.97	8.58	12.9	0.02	0.28		0.28	0.25		0.25	2397	2397	0.1	0.02			2405
Onsite truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily, Winter (Max)																		
Off-Road E	1.15	0.97	8.58	12.9	0.02	0.28		0.28	0.25		0.25	2397	2397	0.1	0.02			2405
Onsite truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Average Daily																		
Off-Road E	0.65	0.54	4.84	7.28	0.01	0.16		0.16	0.14		0.14	1353	1353	0.05	0.01			1357
Onsite truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual																		
Off-Road E	0.12	0.1	0.88	1.33	< 0.005	0.03		0.03	0.03		0.03	224	224	0.01	< 0.005			225
Onsite truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Worker	1.21	1.09	0.71	15.6	0	0	3.35	3.35	0	0.79	0.79	3489	3489	0.04	0.02	9.73	3507	
Vendor	0.13	0.04	1.98	0.82	0.01	0.02	0.37	0.39	0.02	0.1	0.12	1289	1289	0.08	0.19	2.34	1350	
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily, Winter (Max)																		
Worker	1.1	0.97	0.86	11.4	0	0	3.35	3.35	0	0.79	0.79	3101	3101	0.07	0.13	0.25	3142	
Vendor	0.12	0.04	2.12	0.84	0.01	0.02	0.37	0.39	0.02	0.1	0.12	1289	1289	0.08	0.19	0.06	1348	
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Average Daily																		
Worker	0.63	0.55	0.41	6.63	0	0	1.85	1.85	0	0.43	0.43	1796	1796	0.03	0.07	2.36	1820	
Vendor	0.07	0.02	1.18	0.47	0.01	0.01	0.21	0.22	0.01	0.06	0.07	728	728	0.05	0.11	0.57	761	
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual																		
Worker	0.11	0.1	0.07	1.21	0	0	0.34	0.34	0	0.08	0.08	297	297	< 0.005		0.01	0.39	301
Vendor	0.01	< 0.005	0.21	0.09	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	120	120	0.01	0.02	0.09	126	
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

3.7. Paving (2029) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Off-Road E	0.8	0.67	6.46	9.92	0.01	0.24		0.24	0.22		0.22	1511	1511	0.06	0.01			1516
Paving		0																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Average Daily																		
Off-Road E	0.03	0.03	0.25	0.38	< 0.005	0.01		0.01	0.01		0.01	57.9	57.9	< 0.005	< 0.005			58.1
Paving		0																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual																		
Off-Road E	0.01	< 0.005	0.05	0.07	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005	9.59	9.59	< 0.005	< 0.005			9.63
Paving		0																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Worker	0.05	0.04	0.04	0.52	0	0	0.15	0.15	0	0.04	0.04	140	140	< 0.005		0.01	0.01	142
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Average Daily																		
Worker	< 0.005	< 0.005	< 0.005	0.02	0	0	0.01	0.01	0	< 0.005	< 0.005	5.51	5.51	< 0.005	< 0.005	0.01	5.59	
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual																		
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0	0	< 0.005	< 0.005		0	< 0.005	< 0.005	0.91	0.91	< 0.005	< 0.005	< 0.005	0.93
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

3.9. Architectural Coating (2029) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Off-Road E	0.12	0.1	0.79	1.11	< 0.005	0.01		0.01	0.01		0.01	134	134	0.01	< 0.005			134
Architectural Coatings		328																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Average Daily																		
Off-Road Ei	< 0.005	< 0.005		0.03	0.04	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		5.12	5.12	< 0.005	< 0.005		5.14
Architectural Coatings		12.6																	
Onsite truc	0	0	0	0	0	0	0	0	0	0	0			0	0	0	0	0	0
Annual																			
Off-Road Ei	< 0.005	< 0.005		0.01	0.01	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		0.85	0.85	< 0.005	< 0.005		0.85
Architectural Coatings		2.29																	
Onsite truc	0	0	0	0	0	0	0	0	0	0	0			0	0	0	0	0	0
Offsite																			
Daily, Summer (Max)																			
Daily, Winter (Max)																			
Worker	0.22	0.19	0.17	2.29	0	0	0.67	0.67	0	0.16	0.16			620	620	0.01	0.03	0.05	628
Vendor	0	0	0	0	0	0	0	0	0	0	0			0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0			0	0	0	0	0	0
Average Daily																			
Worker	0.01	0.01	0.01	0.09	0	0	0.03	0.03	0	0.01	0.01			24.4	24.4	< 0.005	< 0.005	0.03	24.7
Vendor	0	0	0	0	0	0	0	0	0	0	0			0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0			0	0	0	0	0	0
Annual																			
Worker	< 0.005	< 0.005	< 0.005	0.02	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005			4.04	4.04	< 0.005	< 0.005	0.01	4.1
Vendor	0	0	0	0	0	0	0	0	0	0	0			0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0			0	0	0	0	0	0

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Vegetation	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Species	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		
Removed																		
Subtotal																		
Daily, Winter (Max)																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		
Removed																		
Subtotal																		
Annual																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		
Removed																		
Subtotal																		

5. Activity Data

5.1. Construction Schedule

Phase Nam	Phase Type	Start Date	End Date	Days Per W	Work Days	Phase Description
Site Prepar	Site Prepar	1/1/2029	1/9/2029	5	7	
Grading	Grading	1/10/2029	2/6/2029	5	20	
Building Cc	Building Cc	2/7/2029	########	5	206	
Paving	Paving	########	########	5	14	
Architectur	Architectur	########	########	5	14	

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Nam	Equipment	Fuel Type	Engine Tier	Number pe	Hours Per I	Horsepow	Load Factor
Site Prepar	Rubber Tir	Diesel	Average	3	8	367	0.4
Site Prepar	Tractors/Lc	Diesel	Average	4	8	84	0.37
Grading	Graders	Diesel	Average	1	8	148	0.41
Grading	Excavators	Diesel	Average	2	8	36	0.38
Grading	Tractors/Lc	Diesel	Average	2	8	84	0.37
Grading	Scrapers	Diesel	Average	2	8	423	0.48
Grading	Rubber Tir	Diesel	Average	1	8	367	0.4
Building Cc	Forklifts	Diesel	Average	3	8	82	0.2
Building Cc	Generator	Diesel	Average	1	8	14	0.74
Building Cc	Cranes	Diesel	Average	1	7	367	0.29
Building Cc	Welders	Diesel	Average	1	8	46	0.45

Building Cc	Tractors/Lc	Diesel	Average	3	7	84	0.37
Paving	Pavers	Diesel	Average	2	8	81	0.42
Paving	Paving Equ	Diesel	Average	2	8	89	0.36
Paving	Rollers	Diesel	Average	2	8	36	0.38
Architectur	Air Compre	Diesel	Average	1	6	37	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Nam	Trip Type	One-Way T	Miles per T	Vehicle Mix
Site Preparation				
Site Prepar	Worker	17.5	14.3	LDA,LDT1,LDT2
Site Prepar	Vendor		8.8	HHDT,MHDT
Site Prepar	Hauling	0	20	HHDT
Site Prepar	Onsite truck			HHDT
Grading				
Grading	Worker	20	14.3	LDA,LDT1,LDT2
Grading	Vendor		8.8	HHDT,MHDT
Grading	Hauling	0	20	HHDT
Grading	Onsite truck			HHDT
Building Construction				
Building Cc	Worker	332	14.3	LDA,LDT1,LDT2
Building Cc	Vendor	49.3	8.8	HHDT,MHDT
Building Cc	Hauling	0	20	HHDT
Building Cc	Onsite truck			HHDT
Paving				
Paving	Worker	15	14.3	LDA,LDT1,LDT2
Paving	Vendor		8.8	HHDT,MHDT
Paving	Hauling	0	20	HHDT
Paving	Onsite truck			HHDT
Architectural Coating				
Architectur	Worker	66.4	14.3	LDA,LDT1,LDT2
Architectur	Vendor		8.8	HHDT,MHDT
Architectur	Hauling	0	20	HHDT
Architectur	Onsite truck			HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Str	PM10 Redı	PM2.5 Reduction

5.5. Architectural Coatings

Phase Nam	Residential	Residential	Non-Reside	Non-Reside	Parking Area Coated (sq ft)
Architectur	989537	329846	0	0	

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Nam	Material In	Material E>	Acres Grad	Material D	Acres Paved (acres)
Site Preparation			10.5	0	
Grading			60	0	
Paving	0	0	0	0	

5.6.2. Construction Earthmoving Control Strategies

Control Str	Frequency	PM10 Redı	PM2.5 Reduction
Water Exp	2	61	61

5.7. Construction Paving

Land Use	Area Pavec	% Asphalt
Apartments Low Rise		0

5.8. Construction Electricity Consumption and Emissions Factors

Year	kWh per Y	CO2	CH4	N2O
2029	0	375	0.01	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation	Vegetation	Initial Acre	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cc	Initial Acre	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity S	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Ha	Result for F	Unit
Temperatu	19.3	annual days of extreme heat
Extreme Pr	5.7	annual days with precipitation above 20 mm
Sea Level Rise		meters of inundation depth
Wildfire	0	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid ce

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (Had

6.2. Initial Climate Risk Scores

Climate Ha	Exposure S	Sensitivity	Adaptive C	Vulnerability Score
Temperatu	1	0	0	N/A
Extreme Pr	2	0	0	N/A
Sea Level R	N/A	N/A	N/A	N/A

Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack I	N/A	N/A	N/A	N/A
Air Quality	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Ha	Exposure S	Sensitivity	Adaptive C	Vulnerability Score
Temperatu	1	1	1	2
Extreme Pr	2	1	1	3
Sea Level R	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack I	N/A	N/A	N/A	N/A
Air Quality	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	
AQ-Ozone	42.6
AQ-PM	34
AQ-DPM	24.2
Drinking W	87.7
Lead Risk H	46.5
Pesticides	0
Toxic Relea	22
Traffic	61.2
Effect Indicators	
CleanUp Sit	40.8
Groundwat	55.3
Haz Waste	30.2
Impaired W	43.8
Solid Waste	39
Sensitive Population	
Asthma	91.3
Cardio-vasc	90.3
Low Birth W	79.8
Socioeconomic Factor Indicators	
Education	75.7
Housing	77.6
Linguistic	77.4
Poverty	89.5
Unemployr	95.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	
Above Pov	9.072244
Employed	15.56525
Median HI	12.40857
Education	
Bachelor's	17.50289
High schoo	14.67984
Preschool e	74.27178
Transportation	
Auto Acces	16.95111
Active com	49.8396
Social	
2-parent ho	10.38111
Voting	30.89953
Neighborhood	
Alcohol ava	49.86526
Park access	57.48749
Retail dens	47.01655
Supermark	29.53933
Tree canop	84.60157
Housing	
Homeowne	30.1681
Housing ha	28.23046
Low-inc ho	26.71628
Low-inc ren	30.95085
Uncrowdec	20.0308
Health Outcomes	
Insured adu	19.91531
Arthritis	12
Asthma ER	10
High Blood	6
Cancer (exc	50
Asthma	8.7
Coronary H	16
Chronic Ob	5
Diagnosed	10

Life Expect	9
Cognitively	18
Physically	44
Heart Attac	11
Mental Hea	16
Chronic Kid	11
Obesity	23
Pedestrian	55
Physical He	14
Stroke	6.5
Health Risk Behaviors	
Binge Drinl	94
Current Sm	5.6
No Leisure	14
Climate Change Exposures	
Wildfire Ris	0
SLR Inunda	0
Children	42
Elderly	68
English Spe	13
Foreign-bo	70
Outdoor W	4.6
Climate Change Adaptive Capacity	
Impervious	47
Traffic Den	45
Traffic Acce	60
Other Indices	
Hardship	91
Other Decision Support	
2016 Votin	14

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroSc	80
Healthy Pla	13
Project Loc	Yes
Project Loc	Yes
Project Loc	South Florin

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

Measure Ti	Co-Benefits Achieved

7.5. Evaluation Scorecard

Category	Number of	Total Point	Max Possit	Weighted Score

7.6. Health & Equity Custom Measures

Measure Ti	Sponsor

8. User Changes to Default Data

Screen	Justification
Land Use	fifth of total project before rezone
Constructic	1/5 of total project
Screen	Justification
Land Use	25 percent of total before rezone
Constructic	1/5 of total project

ll. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
lGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Nar	Sac Rezone Fair Oaks (before)
Constructic	1/1/2025
Lead Agency	
Land Use S	Project/site
Analysis Le	County
Windspeec	3.5
Precipitatic	39.2
Location	38.637469230516956, -121.32836613666706
County	Sacramento
City	Unincorporated
Air District	Sacramento Metropolitan AQMD
Air Basin	Sacramento Valley
TAZ	619
EDFZ	13
Electric Uti	Sacramento Municipal Utility District
Gas Utility	Pacific Gas & Electric
App Versio	2022.1.1.21

1.2. Land Use Types

Land Use S	Size	Unit	Lot Acreag	Building Ar	Landscape	Special Lan	Population	Description
Apartment	25	Dwelling U	1.25	26500	10890		70	

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Un/Mit.	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Unmit.		1.37	49.9	9.14	11.2	0.02	0.33	0.2	0.53	0.3	0.05	0.35	2083	2083	0.08	0.03	0.99	2096
Daily, Winter (Max)																		
Unmit.		1.84	1.55	14.1	15	0.02	0.64	2.86	3.51	0.59	1.36	1.95	2555	2555	0.1	0.03	0.03	2565
Average Daily (Max)																		
Unmit.		0.4	1.01	2.69	3.22	0.01	0.1	0.08	0.18	0.09	0.02	0.11	603	603	0.02	0.01	0.12	607
Annual (Max)																		
Unmit.		0.07	0.19	0.49	0.59	< 0.005	0.02	0.01	0.03	0.02	< 0.005	0.02	99.9	99.9	< 0.005	< 0.005	0.02	100

2.2. Construction Emissions by Year, Unmitigated

Year	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily - Summer (Max)																		
2025	1.37	3.282895	9.14	11.2	0.02	0.33	0.2	0.53	0.3	0.05	0.35		2083	2083	0.08	0.03	0.99	2096
Daily - Winter (Max)																		
2025	1.84	3.282895	14.1	15	0.02	0.64	2.86	3.51	0.59	1.36	1.95		2555	2555	0.1	0.03	0.03	2565
Average Daily																		
2025	0.4	1.01	2.69	3.22	0.01	0.1	0.08	0.18	0.09	0.02	0.11		603	603	0.02	0.01	0.12	607
Annual																		
2025	0.07	0.0125	0.49	0.59	< 0.005	0.02	0.01	0.03	0.02	< 0.005	0.02		99.9	99.9	< 0.005	< 0.005	0.02	100

3. Construction Emissions Details

3.1. Site Preparation (2025) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Off-Road E		1.56	1.31	12.1	12.1	0.02	0.56		0.56	0.52		0.52	2065	2065	0.08	0.02		2072
Dust From Material Movement								2.44	2.44		1.17	1.17						
Onsite truc		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Average Daily																		
Off-Road E	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		5.66	5.66	< 0.005	< 0.005		5.68
Dust From Material Movement								0.01	0.01		< 0.005	< 0.005						
Onsite truc		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual																		
Off-Road E	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		0.94	0.94	< 0.005	< 0.005		0.94
Dust From Material Movement								< 0.005	< 0.005		< 0.005	< 0.005						
Onsite truc		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Worker		0.03	0.03	0.03	0.33	0	0	0.08	0.08	0	0.02	0.02	75.6	75.6	< 0.005	< 0.005	0.01	76.5
Vendor		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hauling		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Average Daily																		
Worker	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005	0.21	0.21	< 0.005	< 0.005	< 0.005	0.22
Vendor		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hauling		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual																		
Worker	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005	0.04	0.04	< 0.005	< 0.005	< 0.005	0.04
Vendor		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hauling		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

3.3. Grading (2025) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Off-Road E		1.8	1.51	14.1	14.5	0.02	0.64		0.64	0.59		0.59	2455	2455	0.1	0.02		2463
Dust From Material Movement								2.76	2.76		1.34	1.34						
Onsite truc		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Average Daily																		
Off-Road E		0.01	0.01	0.08	0.08	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005	13.5	13.5	< 0.005	< 0.005		13.5
Dust From Material Movement								0.02	0.02		0.01	0.01						
Onsite truc		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual																		
Off-Road E	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		2.23	2.23	< 0.005	< 0.005		2.23
Dust From Material Movement								< 0.005	< 0.005		< 0.005	< 0.005						
Onsite truc		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Worker		0.04	0.04	0.04	0.44	0	0	0.1	0.1	0	0.02	0.02	101	101	< 0.005	< 0.005	0.01	102
Vendor		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hauling		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Report Tables

Daily Max

Year	ROG	NOx	PM10	PM2.5	CO2	PM10	PM2.5
2025	3	14	4	2	100	0.03	0.02

Yearly

Year	ROG	NOx	PM10	PM2.5	CO2	PM10	PM2.5
2025	0.47	2.01	0.50	0.28	14.28571		

Emissions per capita

ROG	NOx	PM10	PM2.5	CO2
0.047	0.201	0.050	0.028	1.428571

Fuel Calcs

Tons/year

Year	Gasoline	Diesel
2025	9.09	91.4

Note: gasoline = worker emissions; Diesel = vendor + offroad eq

Average Daily																		
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005	0.57	0.57	< 0.005	< 0.005	< 0.005	0.57	
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Annual																		
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005	0.09	0.09	< 0.005	< 0.005	< 0.005	0.1	
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

3.5. Building Construction (2025) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Off-Road E		1.28	1.07	8.95	10	0.02	0.33		0.33	0.3		0.3	1801	1801	0.07	0.01		1807
Onsite truc		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily, Winter (Max)																		
Off-Road E		1.28	1.07	8.95	10	0.02	0.33		0.33	0.3		0.3	1801	1801	0.07	0.01		1807
Onsite truc		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Average Daily																		
Off-Road E		0.35	0.29	2.45	2.75	0.01	0.09		0.09	0.08		0.08	493	493	0.02	< 0.005		495
Onsite truc		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual																		
Off-Road E		0.06	0.05	0.45	0.5	< 0.005	0.02		0.02	0.02		0.02	81.7	81.7	< 0.005	< 0.005		82
Onsite truc		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Worker		0.08	0.08	0.05	1.08	0	0	0.18	0.18	0	0.04	0.04	204	204	< 0.005	0.01	0.78	207
Vendor		0.01	< 0.005	0.14	0.05	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	77.3	77.3	0.01	0.01	0.2	81
Hauling		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily, Winter (Max)																		
Worker		0.08	0.07	0.07	0.8	0	0	0.18	0.18	0	0.04	0.04	181	181	< 0.005	0.01	0.02	184
Vendor		0.01	< 0.005	0.15	0.05	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	77.3	77.3	0.01	0.01	0.01	80.8
Hauling		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Average Daily																		
Worker		0.02	0.02	0.02	0.22	0	0	0.05	0.05	0	0.01	0.01	51	51	< 0.005	< 0.005	0.09	51.7
Vendor		< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	21.2	21.2	< 0.005	< 0.005	0.02	22.2
Hauling		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual																		
Worker		< 0.005	< 0.005	< 0.005	0.04	0	0	0.01	0.01	0	< 0.005	< 0.005	8.44	8.44	< 0.005	< 0.005	0.02	8.56
Vendor		< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	3.51	3.51	< 0.005	< 0.005	< 0.005	3.67
Hauling		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

3.7. Paving (2025) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Off-Road E		0.59	0.49	4.63	6.5	0.01	0.2		0.2	0.19		0.19	992	992	0.04	0.01		995
Paving			0															
Onsite truc		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily, Winter (Max)																		
Average Daily																		
Off-Road E		0.01	0.01	0.06	0.09	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005	13.6	13.6	< 0.005	< 0.005		13.6
Paving			0															
Onsite truc		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual																		
Off-Road E		< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005	2.25	2.25	< 0.005	< 0.005		2.26
Paving			0															
Onsite truc		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Worker		0.06	0.05	0.04	0.75	0	0	0.13	0.13	0	0.03	0.03	142	142	< 0.005	0.01	0.54	144
Vendor		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hauling		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily, Winter (Max)																		
Average Daily																		
Worker		< 0.005	< 0.005	< 0.005	0.01	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005	1.77	1.77	< 0.005	< 0.005	< 0.005	1.8
Vendor		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hauling		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual																		
Worker		< 0.005	< 0.005	< 0.005	< 0.005	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005	0.29	0.29	< 0.005	< 0.005	< 0.005	0.3
Vendor		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hauling		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

3.9. Architectural Coating (2025) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Off-Road E		0.15	0.13	0.88	1.14	< 0.005	0.03		0.03	0.03		0.03	134	134	0.01	< 0.005		134
Architectural Coatings			49.8															
Onsite truc		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily, Winter (Max)																		
Average Daily																		
Off-Road E		< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005	1.83	1.83	< 0.005	< 0.005		1.84
Architectural Coatings			0.68															
Onsite truc		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual																		
Off-Road E		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005	0.3	0.3	< 0.005	< 0.005		0.3
Architectural Coatings			0.12															
Onsite truc		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Worker		0.02	0.02	0.01	0.22	0	0	0.04	0.04	0	0.01	0.01	40.9	40.9	< 0.005	< 0.005	0.16	41.5
Vendor		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hauling		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily, Winter (Max)																		
Average Daily																		
Worker		< 0.005	< 0.005	< 0.005	< 0.005	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005	0.51	0.51	< 0.005	< 0.005	< 0.005	0.52
Vendor		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hauling		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual																		
Worker		< 0.005	< 0.005	< 0.005	< 0.005	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005	0.08	0.08	< 0.005	< 0.005	< 0.005	0.09
Vendor		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hauling		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Vegetation	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Species	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		
Removed																		
Subtotal																		
Daily, Winter (Max)																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		
Removed																		
Subtotal																		
Annual																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		
Removed																		
Subtotal																		

5. Activity Data

5.1. Construction Schedule

Phase Nam	Phase Type	Start Date	End Date	Days Per W	Work Days	Phase Description
Site Prepar	Site Prepar	1/1/2025	1/1/2025	5	1	
Grading	Grading	1/2/2025	1/3/2025	5	2	
Building Co	Building Co	1/4/2025	########	5	100	
Paving	Paving	########	########	5	5	
Architectur	Architectur	########	6/6/2025	5	5	

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Nam	Equipment	Fuel Type	Engine Tier	Number pe	Hours Per I	Horsepow	Load Factor
Site Prepar	Graders	Diesel	Average	1	8	148	0.41
Site Prepar	Tractors/Lc	Diesel	Average	1	8	84	0.37
Site Prepar	Rubber Tire	Diesel	Average	1	7	367	0.4
Grading	Graders	Diesel	Average	1	8	148	0.41
Grading	Rubber Tire	Diesel	Average	1	8	367	0.4
Grading	Tractors/Lc	Diesel	Average	2	7	84	0.37
Building Co	Cranes	Diesel	Average	1	6	367	0.29
Building Co	Forklifts	Diesel	Average	1	6	82	0.2
Building Co	Tractors/Lc	Diesel	Average	1	6	84	0.37
Building Co	Generator	Diesel	Average	1	8	14	0.74
Building Co	Welders	Diesel	Average	3	8	46	0.45
Paving	Tractors/Lc	Diesel	Average	1	8	84	0.37
Paving	Cement an	Diesel	Average	1	6	10	0.56
Paving	Pavers	Diesel	Average	1	6	81	0.42
Paving	Rollers	Diesel	Average	1	7	36	0.38
Paving	Paving Equ	Diesel	Average	1	8	89	0.36
Architectur	Air Compre	Diesel	Average	1	6	37	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Nam	Trip Type	One-Way T	Miles per T	Vehicle Mix
Site Preparation				
Site Prepar	Worker	7.5	14.3	LDA,LDT1,LDT2
Site Prepar	Vendor		8.8	HHDT,MHDT
Site Prepar	Hauling	0	20	HHDT
Site Prepar	Onsite truck			HHDT
Grading				
Grading	Worker	10	14.3	LDA,LDT1,LDT2
Grading	Vendor		8.8	HHDT,MHDT
Grading	Hauling	0	20	HHDT
Grading	Onsite truck			HHDT
Building Construction				
Building Co	Worker	18	14.3	LDA,LDT1,LDT2
Building Co	Vendor	2.67	8.8	HHDT,MHDT
Building Co	Hauling	0	20	HHDT
Building Co	Onsite truck			HHDT
Paving				
Paving	Worker	12.5	14.3	LDA,LDT1,LDT2
Paving	Vendor		8.8	HHDT,MHDT
Paving	Hauling	0	20	HHDT
Paving	Onsite truck			HHDT
Architectural Coating				
Architectur	Worker	3.6	14.3	LDA,LDT1,LDT2
Architectur	Vendor		8.8	HHDT,MHDT
Architectur	Hauling	0	20	HHDT
Architectur	Onsite truck			HHDT

5.4. Vehicles
5.4.1. Construction Vehicle Control Strategies
Control Str PM10 Redu PM2.5 Reduction

5.5. Architectural Coatings
Phase Nam Residential Residential Non-Residei Non-Residi Parking Area Coated (sq ft)
Architectur 53663 17888 0 0

5.6. Dust Mitigation
5.6.1. Construction Earthmoving Activities
Phase Nam Material Im Material Ex Acres Grad Material Di Acres Paved (acres)
Site Preparation 0.94 0
Grading 2 0
Paving 0 0 0 0

5.6.2. Construction Earthmoving Control Strategies
Control Str Frequency PM10 Redu PM2.5 Reduction
Water Exp 2 61 61
Water Den 2 36 36

5.7. Construction Paving
Land Use Area Paved % Asphalt
Apartments Low Rise 0

5.8. Construction Electricity Consumption and Emissions Factors
Year kWh per Yea CO2 CH4 N2O
2025 0 375 0.01 < 0.005

5.18. Vegetation
5.18.1. Land Use Change
5.18.1.1. Unmitigated
Vegetation Vegetation Initial Acres Final Acres

5.18.1. Biomass Cover Type
5.18.1.1. Unmitigated
Biomass Co Initial Acres Final Acres

5.18.2. Sequestration
5.18.2.1. Unmitigated
Tree Type Number Electricity S Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report
6.1. Climate Risk Summary
Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.
Climate Ha Result for F Unit
Temperatu 24.1 annual days of extreme heat
Extreme Pr 6.45 annual days with precipitation above 20 mm
Sea Level Rise meters of inundation depth
Wildfire 0.69 annual hectares burned
Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 m
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (Ca

6.2. Initial Climate Risk Scores
Climate Ha Exposure S Sensitivity S Adaptive C Vulnerability Score
Temperatu 2 0 0 N/A
Extreme Pr 2 0 0 N/A
Sea Level R N/A N/A N/A N/A
Wildfire 1 0 0 N/A
Flooding 0 0 0 N/A
Drought 0 0 0 N/A
Snowpack N/A N/A N/A N/A
Air Quality 0 0 0 N/A
The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores
Climate Ha Exposure S Sensitivity S Adaptive C Vulnerability Score
Temperatu 2 1 1 3
Extreme Pr 2 1 1 3
Sea Level R N/A N/A N/A N/A
Wildfire 1 1 1 2
Flooding 1 1 1 2
Drought 1 1 1 2
Snowpack N/A N/A N/A N/A
Air Quality 1 1 1 2
The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures
7. Health and Equity Details
7.1. CalEnviroScreen 4.0 Scores
The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
Indicator Result for Project Census Tract
Exposure Indicators
AQ-Ozone 59.7
AQ-PM 39.5
AQ-DPM 50.3
Drinking W 47.8
Lead Risk H 54.5
Pesticides 0
Toxic Relea 20.9
Traffic 21.4
Effect Indicators
CleanUp Si 18.7
Groundwa 78.3
Haz Waste 59.8
Impaired W 77.3
Solid Waste 0
Sensitive Population
Asthma 88.7
Cardio-vas 62.6

Low Birth V	7.38
Socioeconomic Factor Indicators	
Education	25.1
Housing	70.2
Linguistic	37
Poverty	67.4
Unemployr	14.4

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	
Above Pov	37.16156
Employed	15.56525
Median HI	23.82908
Education	
Bachelor's	54.33081
High schoo	26.62646
Preschool e	15.20595
Transportation	
Auto Acces	28.94906
Active com	46.06698
Social	
2-parent h	11.18953
Voting	74.93905
Neighborhood	
Alcohol ava	37.77749
Park access	30.25792
Retail dens	94.59772
Supermark	42.71782
Tree canop	91.62069
Housing	
Homeowne	51.98255
Housing ha	41.55011
Low-inc ho	37.45669
Low-inc re	6.736815
Uncrowdec	66.91903
Health Outcomes	
Insured ad	47.9148
Arthritis	0
Asthma ER	6
High Blood	0
Cancer (ex	0
Asthma	0
Coronary H	0
Chronic Ob	0
Diagnosed	0
Life Expect	11
Cognitively	14
Physically	27
Heart Atta	49
Mental He	0
Chronic Kic	0
Obesity	0
Pedestrian	53
Physical He	0
Stroke	0
Health Risk Behaviors	
Binge Drink	0
Current Sm	0
No Leisure	0
Climate Change Exposures	
Wildfire Ris	0
SLR Inunda	0
Children	67
Elderly	28
English Spe	75
Foreign-bo	11
Outdoor W	47
Climate Change Adaptive Capacity	
Impervious	61
Traffic Den	60
Traffic Acc	23
Other Indices	
Hardship	64
Other Decision Support	
2016 Votin	65

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroSc	47
Healthy Pla	30
Project Loc	No
Project Loc	Yes
Project Loc	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

Measure Ti	Co-Benefits Achieved

7.5. Evaluation Scorecard

Category	Number of	Total Point	Max Possibl	Weighted Score

7.6. Health & Equity Custom Measures

Measure Ti	Sponsor

8. User Changes to Default Data

Screen	Justification
Constructic	no demo
Land Use	PD

ıeters
nESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Nar	Sac Rezone North Watt (before)
Constructic	6/7/2025
Lead Agency	
Land Use S	Project/site
Analysis Le	County
Windspeec	3.5
Precipitatic	39.2
Location	38.66735756395545, -121.38321539651498
County	Sacramento
City	Unincorporated
Air District	Sacramento Metropolitan AQMD
Air Basin	Sacramento Valley
TAZ	657
EDFZ	13
Electric Uti	Sacramento Municipal Utility District
Gas Utility	Pacific Gas & Electric
App Versio	2022.1.1.21

1.2. Land Use Types

Land Use S	Size	Unit	Lot Acreag	Building Ar	Landscape	Special Lan	Population	Description
Apartment	505	Dwelling U	21.3	535300	185653		1414	

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Un/Mit.	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Unmit.		4.02	3.38	31.7	36	0.06	1.37	7.84	9.21	1.26	3.98	5.24	8086	8086	0.27	0.4	19.9	8231
Daily, Winter (Max)																		
Unmit.		3.05	252	14.8	30.3	0.03	0.45	4.08	4.54	0.42	0.97	1.39	7623	7623	0.29	0.4	0.52	7749
Average Daily (Max)																		
Unmit.		1.99	13.9	9.79	21	0.02	0.29	2.84	3.13	0.26	0.68	0.94	5439	5439	0.19	0.28	5.59	5534
Annual (Max)																		
Unmit.		0.36	2.53	1.79	3.83	< 0.005	0.05	0.52	0.57	0.05	0.12	0.17	901	901	0.03	0.05	0.93	916

2.2. Construction Emissions by Year, Unmitigated

Year	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily - Summer (Max)																		
2025	4.02	3.38	31.7	36	0.06	1.37	7.84	9.21	1.26	3.98	5.24		8086	8086	0.27	0.4	19.9	8231
2026	3.04	17.73399	13.4	34.5	0.03	0.4	4.08	4.48	0.37	0.97	1.34		7974	7974	0.25	0.39	18.1	8114
Daily - Winter (Max)																		
2025	3.05	2.55	14.8	30.3	0.03	0.45	4.08	4.54	0.42	0.97	1.39		7623	7623	0.29	0.4	0.52	7749
2026	2.8	17.73399	13.9	29.1	0.03	0.4	4.08	4.48	0.37	0.97	1.34		7520	7520	0.28	0.4	0.47	7646
2027	2.69	17.73399	13.2	28.1	0.03	0.36	4.08	4.44	0.33	0.97	1.3		7422	7422	0.27	0.39	0.43	7544
Average Daily																		
2025	1.35	1.14	7.87	12.3	0.02	0.28	1.71	1.99	0.26	0.52	0.78		2993	2993	0.11	0.12	2.48	3034
2026	1.99	1.74	9.79	21	0.02	0.29	2.84	3.13	0.26	0.68	0.94		5439	5439	0.19	0.28	5.59	5534
2027	0.11	13.9	0.64	1.24	< 0.005	0.02	0.11	0.13	0.02	0.03	0.05		256	256	0.01	0.01	0.19	259
Annual																		
2025	0.25	0.21	1.44	2.25	< 0.005	0.05	0.31	0.36	0.05	0.09	0.14		496	496	0.02	0.02	0.41	502
2026	0.36	0.178044	1.79	3.83	< 0.005	0.05	0.52	0.57	0.05	0.12	0.17		901	901	0.03	0.05	0.93	916
2027	0.02	0.178044	0.12	0.23	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01		42.3	42.3	< 0.005	< 0.005	0.03	42.8

3. Construction Emissions Details

3.1. Site Preparation (2025) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Off-Road E		3.94	3.31	31.6	30.2	0.05	1.37		1.37	1.26		1.26	5295	5295	0.21	0.04		5314
Dust From Material Movement								7.67	7.67		3.94	3.94						
Onsite truc		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily, Winter (Max)																		
Average Daily																		
Off-Road E		0.11	0.09	0.87	0.83	< 0.005	0.04		0.04	0.03		0.03	145	145	0.01	< 0.005		146
Dust From Material Movement								0.21	0.21		0.11	0.11						
Onsite truc		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual																		
Off-Road E		0.02	0.02	0.16	0.15	< 0.005	0.01		0.01	0.01		0.01	24	24	< 0.005	< 0.005		24.1
Dust From Material Movement								0.04	0.04		0.02	0.02						
Onsite truc		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Worker		0.08	0.07	0.05	1.05	0	0	0.18	0.18	0	0.04	0.04	199	199	< 0.005	0.01	0.76	202
Vendor		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hauling		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily, Winter (Max)																		
Average Daily																		
Worker		< 0.005	< 0.005	< 0.005	0.02	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005	4.96	4.96	< 0.005	< 0.005	0.01	5.03
Vendor		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hauling		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual																		
Worker		< 0.005	< 0.005	< 0.005	< 0.005	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005	0.82	0.82	< 0.005	< 0.005	< 0.005	0.83
Vendor		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hauling		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

3.3. Grading (2025) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Off-Road E		3.8	3.2	29.7	28.3	0.06	1.23		1.23	1.14		1.14	6599	6599	0.27	0.05		6622
Dust From Material Movement								3.59	3.59		1.42	1.42						
Onsite truc		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily, Winter (Max)																		
Average Daily																		
Off-Road E		0.36	0.31	2.85	2.71	0.01	0.12		0.12	0.11		0.11	633	633	0.03	0.01		635
Dust From Material Movement								0.34	0.34		0.14	0.14						
Onsite truc		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual																		
Off-Road E		0.07	0.06	0.52	0.5	< 0.005	0.02		0.02	0.02		0.02	105	105	< 0.005	< 0.005		105
Dust From Material Movement								0.06	0.06		0.02	0.02						

Report Tables

Daily Max

Year	ROG	NOx	PM10	PM2.5	CO2	PM10	PM2.5
2025	3	32	9	5	502	0.36	0.14
2026	18	14	4	1	916	0.57	0.17
2027	18	13	4	1	42.8	0.02	0.01

Yearly

Year	ROG	NOx	PM10	PM2.5	CO2	PM10	PM2.5
2025	3	32	9	5	502	0.36	0.14
2026	18	14	4	1	916	0.57	0.17
2027	18	13	4	1	42.8	0.02	0.01

Emissions Per Capita

Year	ROG	NOx	PM10	PM2.5	CO2
2025	0.002	0.022	0.007	0.004	0.35502
2026	0.013	0.010	0.003	0.001	0.64781
2027	0.013	0.009	0.003	0.001	0.03027
Average	0.009	0.014	0.004	0.002	0.34437

Fuel Calcs

Tons/year Note: gasoline = worker emissions; Diesel = vendor + offroad eq

Year	Gasoline	Diesel
2025	183.16	318.9
2026	442	473
2027	17.55	25.3

Onsite truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Offsite																	
Daily, Summer (Max)																	
Worker	0.09	0.08	0.06	1.21	0	0	0.2	0.2	0	0.05	0.05	227	227	< 0.005	0.01	0.87	230
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily, Winter (Max)																	
Average Daily																	
Worker	0.01	0.01	0.01	0.09	0	0	0.02	0.02	0	< 0.005	< 0.005	19.8	19.8	< 0.005	< 0.005	0.04	20.1
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual																	
Worker	< 0.005	< 0.005	< 0.005	0.02	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005	3.28	3.28	< 0.005	< 0.005	0.01	3.33
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

3.5. Building Construction (2025) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Off-Road E	1.35	1.13	10.4	13	0.02	0.43		0.43	0.4		0.4		2398	2398	0.1	0.02		2406
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Daily, Winter (Max)																		
Off-Road E	1.35	1.13	10.4	13	0.02	0.43		0.43	0.4		0.4		2398	2398	0.1	0.02		2406
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Off-Road E	0.38	0.32	2.96	3.7	0.01	0.12		0.12	0.11		0.11		680	680	0.03	0.01		683
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Off-Road E	0.07	0.06	0.54	0.68	< 0.005	0.02		0.02	0.02		0.02		113	113	< 0.005	< 0.005		113
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Worker	1.67	1.54	1.06	21.9	0	0	3.67	3.67	0	0.86	0.86		4127	4127	0.06	0.15	15.9	4188
Vendor	0.17	0.07	2.83	1.05	0.01	0.02	0.41	0.43	0.02	0.11	0.13		1561	1561	0.1	0.23	4.06	1637
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Daily, Winter (Max)																		
Worker	1.53	1.37	1.34	16.1	0	0	3.67	3.67	0	0.86	0.86		3664	3664	0.09	0.15	0.41	3711
Vendor	0.17	0.05	3.03	1.07	0.01	0.02	0.41	0.43	0.02	0.11	0.13		1561	1561	0.1	0.23	0.11	1632
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Worker	0.43	0.39	0.34	4.68	0	0	1.02	1.02	0	0.24	0.24		1067	1067	0.02	0.04	1.94	1082
Vendor	0.05	0.02	0.85	0.3	< 0.005	0.01	0.11	0.12	0.01	0.03	0.04		443	443	0.03	0.07	0.5	464
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Worker	0.08	0.07	0.06	0.85	0	0	0.19	0.19	0	0.04	0.04		177	177	< 0.005	0.01	0.32	179
Vendor	0.01	< 0.005	0.15	0.05	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01		73.3	73.3	< 0.005	0.01	0.08	76.8
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0

3.7. Building Construction (2026) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Off-Road E	1.28	1.07	9.85	13	0.02	0.38		0.38	0.35		0.35		2397	2397	0.1	0.02		2405
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Daily, Winter (Max)																		
Off-Road E	1.28	1.07	9.85	13	0.02	0.38		0.38	0.35		0.35		2397	2397	0.1	0.02		2405
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Off-Road E	0.91	0.77	7.04	9.26	0.02	0.27		0.27	0.25		0.25		1712	1712	0.07	0.01		1718
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Off-Road E	0.17	0.14	1.28	1.69	< 0.005	0.05		0.05	0.05		0.05		283	283	0.01	< 0.005		284
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Worker	1.6	1.46	0.94	20.5	0	0	3.67	3.67	0	0.86	0.86		4047	4047	0.06	0.14	14.5	4104
Vendor	0.16	0.06	2.65	1.01	0.01	0.02	0.41	0.43	0.02	0.11	0.13		1530	1530	0.1	0.23	3.68	1605
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Daily, Winter (Max)																		
Worker	1.36	1.32	1.21	15.1	0	0	3.67	3.67	0	0.86	0.86		3594	3594	0.08	0.15	0.38	3640
Vendor	0.16	0.05	2.84	1.03	0.01	0.02	0.41	0.43	0.02	0.11	0.13		1529	1529	0.1	0.23	0.1	1600
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Worker	0.96	0.94	0.76	11	0	0	2.56	2.56	0	0.6	0.6		2634	2634	0.05	0.1	4.46	2671
Vendor	0.11	0.04	1.99	0.73	0.01	0.02	0.29	0.3	0.01	0.08	0.09		1093	1093	0.07	0.16	1.13	1144
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Worker	0.18	0.17	0.14	2	0	0	0.47	0.47	0	0.11	0.11		436	436	0.01	0.02	0.74	442
Vendor	0.02	0.01	0.36	0.13	< 0.005	< 0.005	0.05	0.06	< 0.005	0.01	0.02		181	181	0.01	0.03	0.19	189
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0

3.9. Building Construction (2027) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Off-Road E	1.23	1.03	9.39	12.9	0.02	0.34		0.34	0.31		0.31		2397	2397	0.1	0.02		2405
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Off-Road E	0.02	0.02	0.15	0.2	< 0.005	0.01		0.01	< 0.005		< 0.005		37.5	37.5	< 0.005	< 0.005		37.7
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Off-Road E	< 0.005	< 0.005	0.03	0.04	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		6.21	6.21	< 0.005	< 0.005		6.23
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Worker	1.3	1.15	1.2	14.1	0	0	3.67	3.67	0	0.86	0.86		3530	3530	0.08	0.15	0.34	3576
Vendor	0.16	0.05	2.65	1	0.01	0.02	0.41	0.43	0.02	0.11	0.13		1495	1495	0.09	0.22	0.09	1562
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Worker	0.02	0.02	0.02	0.23	0	0	0.06	0.06	0	0.01	0.01		56.7	56.7	< 0.005	< 0.005	0.09	57.5
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005		23.4	23.4	< 0.005	< 0.005	0.02	24.5
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0

Annual																				
Worker	< 0.005	< 0.005	< 0.005	0.04	0	0	0.01	0.01	0	< 0.005	< 0.005		9.39	9.39	< 0.005	< 0.005	0.01	9.52		
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005		3.87	3.87	< 0.005	< 0.005	< 0.005	4.05		
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0		

3.11. Paving (2027) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Off-Road E	0.88	0.74	6.94	9.95	0.01	0.3		0.3	0.27		0.27		1511	1511	0.06	0.01		1516
Paving		0																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Off-Road E	0.05	0.04	0.38	0.55	< 0.005	0.02		0.02	0.02		0.02		82.8	82.8	< 0.005	< 0.005		83.1
Paving		0																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Off-Road E	0.01	0.01	0.07	0.1	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		13.7	13.7	< 0.005	< 0.005		13.8
Paving		0																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Worker	0.05	0.05	0.05	0.58	0	0	0.15	0.15	0	0.04	0.04		146	146	< 0.005	0.01	0.01	148
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Worker	< 0.005	< 0.005	< 0.005	0.03	0	0	0.01	0.01	0	< 0.005	< 0.005		8.19	8.19	< 0.005	< 0.005	0.01	8.3
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Worker	< 0.005	< 0.005	< 0.005	0.01	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005		1.36	1.36	< 0.005	< 0.005	< 0.005	1.37
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0

3.13. Architectural Coating (2027) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Off-Road E	0.14	0.11	0.83	1.13	< 0.005	0.02		0.02	0.02		0.02		134	134	0.01	< 0.005		134
Architectural Coatings		251																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Off-Road E	0.01	0.01	0.05	0.06	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		7.32	7.32	< 0.005	< 0.005		7.34
Architectural Coatings		13.8																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Off-Road E	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		1.21	1.21	< 0.005	< 0.005		1.22
Architectural Coatings		2.51																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Worker	0.26	0.23	0.24	2.83	0	0	0.73	0.73	0	0.17	0.17		706	706	0.02	0.03	0.07	715
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Worker	0.01	0.01	0.01	0.16	0	0	0.04	0.04	0	0.01	0.01		39.7	39.7	< 0.005	< 0.005	0.06	40.2
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Worker	< 0.005	< 0.005	< 0.005	0.03	0	0	0.01	0.01	0	< 0.005	< 0.005		6.57	6.57	< 0.005	< 0.005	0.01	6.66
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Vegetation	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Species	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		
Removed																		
Subtotal																		
Daily, Winter (Max)																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		
Removed																		
Subtotal																		

Annual
Avoided
Subtotal
Sequestered
Subtotal
Removed
Subtotal

5. Activity Data
5.1. Construction Schedule

Phase Nam	Phase Type	Start Date	End Date	Days Per W	Work Days	Phase Description
Site Prepar	Site Prepar	6/7/2025	########	5	10	
Grading	Grading	########	8/8/2025	5	35	
Building Co	Building Co	8/9/2025	1/8/2027	5	370	
Paving	Paving	1/9/2027	2/5/2027	5	20	
Architectur	Architectur	2/6/2027	3/5/2027	5	20	

5.2. Off-Road Equipment
5.2.1. Unmitigated

Phase Nam	Equipment	Fuel Type	Engine Tier	Number pe	Hours Per I	Horsepow	Load Factor
Site Prepar	Rubber Tire	Diesel	Average	3	8	367	0.4
Site Prepar	Tractors/Lo	Diesel	Average	4	8	84	0.37
Grading	Graders	Diesel	Average	1	8	148	0.41
Grading	Excavators	Diesel	Average	2	8	36	0.38
Grading	Tractors/Lo	Diesel	Average	2	8	84	0.37
Grading	Rubber Tire	Diesel	Average	1	8	367	0.4
Grading	Scrapers	Diesel	Average	2	8	423	0.48
Building Co	Cranes	Diesel	Average	1	7	367	0.29
Building Co	Forklifts	Diesel	Average	3	8	82	0.2
Building Co	Generator	Diesel	Average	1	8	14	0.74
Building Co	Welders	Diesel	Average	1	8	46	0.45
Building Co	Tractors/Lo	Diesel	Average	3	7	84	0.37
Paving	Pavers	Diesel	Average	2	8	81	0.42
Paving	Paving Equ	Diesel	Average	2	8	89	0.36
Paving	Rollers	Diesel	Average	2	8	36	0.38
Architectur	Air Compre	Diesel	Average	1	6	37	0.48

5.3. Construction Vehicles
5.3.1. Unmitigated

Phase Nam	Trip Type	One-Way T	Miles per T	Vehicle Mix
Site Preparation				
Site Prepar	Worker	17.5	14.3	LDA,LDT1,LDT2
Site Prepar	Vendor		8.8	HHDT,MHDT
Site Prepar	Hauling	0	20	HHDT
Site Prepar	Onsite truck			HHDT
Grading				
Grading	Worker	20	14.3	LDA,LDT1,LDT2
Grading	Vendor		8.8	HHDT,MHDT
Grading	Hauling	0	20	HHDT
Grading	Onsite truck			HHDT
Building Construction				
Building Co	Worker	364	14.3	LDA,LDT1,LDT2
Building Co	Vendor	54	8.8	HHDT,MHDT
Building Co	Hauling	0	20	HHDT
Building Co	Onsite truck			HHDT
Paving				
Paving	Worker	15	14.3	LDA,LDT1,LDT2
Paving	Vendor		8.8	HHDT,MHDT
Paving	Hauling	0	20	HHDT
Paving	Onsite truck			HHDT
Architectural Coating				
Architectur	Worker	72.7	14.3	LDA,LDT1,LDT2
Architectur	Vendor		8.8	HHDT,MHDT
Architectur	Hauling	0	20	HHDT
Architectur	Onsite truck			HHDT

5.4. Vehicles
5.4.1. Construction Vehicle Control Strategies

Control Str	PM10 Redu	PM2.5 Reduction

5.5. Architectural Coatings

Phase Nam	Residential	Residential	Non-Reside	Non-Reside	Parking Area Coated (sq ft)
Architectur	1083983	361328	0	0	

5.6. Dust Mitigation
5.6.1. Construction Earthmoving Activities

Phase Nam	Material Im	Material Ex	Acres Grad	Material De	Acres Paved (acres)
Site Preparation			15	0	
Grading			105	0	
Paving	0	0	0	0	

5.6.2. Construction Earthmoving Control Strategies

Control Str	Frequency	PM10 Redu	PM2.5 Reduction
Water Exp	2	61	61

5.7. Construction Paving

Land Use	Area Paved	% Asphalt
Apartments Low Rise		0

5.8. Construction Electricity Consumption and Emissions Factors

Year	kWh per Yr	CO2	CH4	N2O
2025	0	375	0.01	< 0.005
2026	0	375	0.01	< 0.005
2027	0	375	0.01	< 0.005

5.18. Vegetation
5.18.1. Land Use Change
5.18.1.1. Unmitigated

Vegetation	Vegetation	Initial Acre	Final Acres

5.18.1. Biomass Cover Type
5.18.1.1. Unmitigated

Biomass Cc	Initial Acre	Final Acres

5.18.2. Sequestration
5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report
6.1. Climate Risk Summary
Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Ha	Result for F	Unit
Temperatu	21.8	annual days of extreme heat
Extreme Pr	6.35	annual days with precipitation above 20 mm
Sea Level Rise		meters of inundation depth
Wildfire	0	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 m
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (Ca

6.2. Initial Climate Risk Scores

Climate Ha	Exposure S	Sensitivity	Adaptive C	Vulnerability Score
Temperatu	1	0	0	N/A
Extreme Pr	2	0	0	N/A
Sea Level R	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack	N/A	N/A	N/A	N/A
Air Quality	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Ha	Exposure S	Sensitivity	Adaptive C	Vulnerability Score
Temperatu	1	1	1	2
Extreme Pr	2	1	1	3
Sea Level R	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack	N/A	N/A	N/A	N/A
Air Quality	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures
7. Health and Equity Details
7.1. CalEnviroScreen 4.0 Scores
The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	
AQ-Ozone	58.2
AQ-PM	37.4
AQ-DPM	27.5
Drinking W	61.1
Lead Risk H	92.2
Pesticides	7.24
Toxic Relea	21.8
Traffic	47
Effect Indicators	
CleanUp Si	80.9
Groundwa	99.2
Haz Waste	61.6
Impaired W	0
Solid Waste	52.9
Sensitive Population	
Asthma	93.4
Cardio-vas	69.2
Low Birth W	79.4
Socioeconomic Factor Indicators	
Education	62.9
Housing	73.4
Linguistic	39.2
Poverty	91.6
Unemployr	65.6

7.2. Healthy Places Index Scores
The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	
Above Pov	10.16297
Employed	6.274862
Median HI	6.672655
Education	
Bachelor's	19.73566
High schoo	12.79353
Preschool e	42.65366
Transportation	
Auto Acces	24.89414
Active com	74.06647
Social	
2-parent h	39.00937
Voting	13.02451
Neighborhood	
Alcohol ava	41.65277
Park access	47.42718
Retail dens	38.27794
Supermark	72.19299
Tree canop	82.34313
Housing	
Homeowne	23.13615
Housing ha	24.9198
Low-inc ho	13.20416
Low-inc re	43.79571
Uncrowdec	25.44591

Health Outcomes	
Insured ad	37.80316
Arthritis	0
Asthma ER	5.9
High Blood	0
Cancer (ex	0
Asthma	0
Coronary H	0
Chronic Ob	0
Diagnosed	0
Life Expect	5.5
Cognitively	4
Physically	5.6
Heart Atta	17
Mental He	0
Chronic Kid	0
Obesity	0
Pedestrian	97
Physical He	0
Stroke	0
Health Risk Behaviors	
Binge Drink	0
Current Sm	0
No Leisure	0
Climate Change Exposures	
Wildfire Ris	0
SLR Inunda	0
Children	16
Elderly	68
English Spe	43
Foreign-bo	30
Outdoor W	49
Climate Change Adaptive Capacity	
Impervious	51
Traffic Den	47
Traffic Acce	66
Other Indices	
Hardship	81
Other Decision Support	
2016 Votin	6.4

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroSc	83
Healthy Pla	13
Project Loc	Yes
Project Loc	Yes
Project Loc	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

Measure Ti	Co-Benefits Achieved

7.5. Evaluation Scorecard

Category	Number of	Total Point	Max Possib	Weighted Score

7.6. Health & Equity Custom Measures

Measure Ti	Sponsor

8. User Changes to Default Data

Screen	Justification
Land Use	20% of total lot acreage is landscaped as in GP
Constructic	no demo

neters
nESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

1. Basic Project Information
1.1. Basic Project Information

Data Field	Value
Project Nar	Sac Rezone Old Florin (before)
Constructic	3/6/2027
Lead Agency	
Land Use S	Project/site
Analysis Le	County
Windspeec	3
Precipitatic	37.8
Location	38.49656099729435, -121.39733654991514
County	Sacramento
City	Unincorporated
Air District	Sacramento Metropolitan AQMD
Air Basin	Sacramento Valley
TAZ	774
EDFZ	13
Electric Uti	Sacramento Municipal Utility District
Gas Utility	Pacific Gas & Electric
App Versio	2022.1.1.21

1.2. Land Use Types

Land Use S	Size	Unit	Lot Acreag	Building Ar	Landscape	Special Lan	Population	Description
Apartment	503	Dwelling U	25.2	533180	219717		1408	

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title

2. Emissions Summary
2.1. Construction Emissions Compared Against Thresholds

Un/Mit.	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Unmit.	3.58	3.02	25.6	33.1	0.06	1.04	4.07	4.83	0.96	1.47	2.43		7845	7845	0.27	0.38	16.4	7979
Daily, Winter (Max)																		
Unmit.	3.69	251	28	29	0.06	1.17	7.84	9.01	1.08	3.98	5.06		7402	7402	0.27	0.38	0.43	7524
Average Daily (Max)																		
Unmit.	1.69	15	9.3	16.7	0.02	0.3	2.43	2.73	0.28	0.69	0.96		4292	4292	0.15	0.21	3.56	4354
Annual (Max)																		
Unmit.	0.31	2.73	1.7	3.04	< 0.005	0.05	0.44	0.5	0.05	0.13	0.18		711	711	0.02	0.03	0.59	721

2.2. Construction Emissions by Year, Unmitigated

Year	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily - Summer (Max)																		
2027	3.58	16.1242	25.6	33.1	0.06	1.04	4.07	4.83	0.96	1.47	2.43		7845	7845	0.27	0.38	16.4	7979
2028	2.71	16.1242	12	31.9	0.03	0.32	4.07	4.39	0.3	0.97	1.26		7724	7724	0.24	0.26	14.7	7823
Daily - Winter (Max)																		
2027	3.69	16.1242	28	29	0.06	1.17	7.84	9.01	1.08	3.98	5.06		7402	7402	0.27	0.38	0.43	7524
2028	2.59	16.1242	12.5	27.2	0.03	0.32	4.07	4.39	0.3	0.97	1.26		7291	7291	0.26	0.38	0.38	7412
Average Daily																		
2027	1.69	1.41	9.3	16.7	0.02	0.3	2.43	2.73	0.28	0.69	0.96		4292	4292	0.15	0.18	3.33	4354
2028	1.48	15	7.15	15.8	0.02	0.19	2.22	2.41	0.18	0.53	0.7		4181	4181	0.14	0.21	3.56	4251
Annual																		
2027	0.31	0.175375	1.7	3.04	< 0.005	0.05	0.44	0.5	0.05	0.13	0.18		711	711	0.02	0.03	0.55	721
2028	0.27	0.175375	1.3	2.89	< 0.005	0.03	0.41	0.44	0.03	0.1	0.13		692	692	0.02	0.03	0.59	704

3. Construction Emissions Details
3.1. Site Preparation (2027) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Off-Road E	3.63	3.05	28	28.3	0.05	1.17		1.17	1.08		1.08		5298	5298	0.21	0.04		5316
Dust From Material Movement							7.67	7.67		3.94	3.94							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Off-Road E	0.1	0.08	0.77	0.77	< 0.005	0.03		0.03	0.03		0.03		145	145	0.01	< 0.005		146
Dust From Material Movement							0.21	0.21		0.11	0.11							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Off-Road E	0.02	0.02	0.14	0.14	< 0.005	0.01		0.01	0.01		0.01		24	24	< 0.005	< 0.005		24.1
Dust From Material Movement							0.04	0.04		0.02	0.02							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Worker	0.06	0.06	0.06	0.68	0	0	0.18	0.18	0	0.04	0.04		170	170	< 0.005	0.01	0.02	172
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Worker	< 0.005	< 0.005	< 0.005	0.02	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005		4.78	4.78	< 0.005	< 0.005	0.01	4.84
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005		0.79	0.79	< 0.005	< 0.005	< 0.005	0.8
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0

3.3. Grading (2027) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Off-Road E	3.51	2.95	25.6	27.3	0.06	1.04		1.04	0.96		0.96		6598	6598	0.27	0.05		6621
Dust From Material Movement							3.59	3.59		1.42	1.42							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Daily, Winter (Max)																		
Off-Road E	3.51	2.95	25.6	27.3	0.06	1.04		1.04	0.96		0.96		6598	6598	0.27	0.05		6621
Dust From Material Movement							3.59	3.59		1.42	1.42							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Off-Road E	0.34	0.28	2.45	2.62	0.01	0.1		0.1	0.09		0.09		633	633	0.03	0.01		635
Dust From Material Movement							0.34	0.34		0.14	0.14							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Off-Road E	0.06	0.05	0.45	0.48	< 0.005	0.02		0.02	0.02		0.02		105	105	< 0.005	< 0.005		105
Dust From Material Movement							0.06	0.06		0.02	0.02							

Report Tables

Daily Max

Year	ROG	NOx	PM10	PM2.5	CO2	PM10	PM2.5
2027	16	28	9	5	721	0.5	0.18
2028	16	13	4	1	704	0.44	0.13

Yearly

Year	ROG	NOx	PM10	PM2.5	CO2	PM10	PM2.5
2027	16	28	9	5	721	0.5	0.18
2028	16	13	4	1	704	0.44	0.13

Emissions Per Capita

Year	ROG	NOx	PM10	PM2.5	CO2
2027	0.0115	0.0199	0.0064	0.0036	0.51207
2028	0.0115	0.0089	0.0031	0.0009	0.50000
average	0.0115	0.0144	0.0048	0.0022	0.5060

Fuel Calcs

Tons/year

Note: gasoline = worker emissions; Diesel = vendor + offroad eq

Year	Gasoline	Diesel
2027	286.01	434.1
2028	332.85	371.02

Onsite truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Offsite																	
Daily, Summer (Max)																	
Worker	0.08	0.08	0.05	1.06	0	0	0.2	0.2	0	0.05	0.05	219	219	< 0.005	0.01	0.72	222
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily, Winter (Max)																	
Worker	0.07	0.06	0.07	0.78	0	0	0.2	0.2	0	0.05	0.05	194	194	< 0.005	0.01	0.02	197
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Average Daily																	
Worker	0.01	0.01	0.01	0.08	0	0	0.02	0.02	0	< 0.005	< 0.005	19.1	19.1	< 0.005	< 0.005	0.03	19.4
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual																	
Worker	< 0.005	< 0.005	< 0.005	0.01	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005	3.16	3.16	< 0.005	< 0.005	< 0.005	3.21
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

3.5. Building Construction (2027) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Off-Road E	1.23	1.03	9.39	12.9	0.02	0.34		0.34	0.31		0.31		2397	2397	0.1	0.02		2405
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Daily, Winter (Max)																		
Off-Road E	1.23	1.03	9.39	12.9	0.02	0.34		0.34	0.31		0.31		2397	2397	0.1	0.02		2405
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Off-Road E	0.57	0.48	4.37	6.03	0.01	0.16		0.16	0.14		0.14		1116	1116	0.05	0.01		1120
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Off-Road E	0.1	0.09	0.8	1.1	< 0.005	0.03		0.03	0.03		0.03		185	185	0.01	< 0.005		185
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Worker	1.43	1.4	0.92	19.2	0	0	3.66	3.66	0	0.86	0.86		3959	3959	0.06	0.14	13.1	4014
Vendor	0.16	0.06	2.48	0.97	0.01	0.02	0.41	0.43	0.02	0.11	0.13		1489	1489	0.09	0.22	3.3	1560
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Daily, Winter (Max)																		
Worker	1.3	1.14	1.19	14.1	0	0	3.66	3.66	0	0.86	0.86		3516	3516	0.08	0.15	0.34	3562
Vendor	0.16	0.05	2.64	0.99	0.01	0.02	0.41	0.43	0.02	0.11	0.13		1489	1489	0.09	0.22	0.09	1556
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Worker	0.6	0.53	0.49	6.71	0	0	1.66	1.66	0	0.39	0.39		1680	1680	0.03	0.06	2.63	1703
Vendor	0.07	0.03	1.21	0.45	< 0.005	0.01	0.19	0.2	0.01	0.05	0.06		694	694	0.04	0.1	0.66	726
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Worker	0.11	0.1	0.09	1.23	0	0	0.3	0.3	0	0.07	0.07		278	278	< 0.005	0.01	0.44	282
Vendor	0.01	< 0.005	0.22	0.08	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01		115	115	0.01	0.02	0.11	120
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0

3.7. Building Construction (2028) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Off-Road E	1.18	0.99	8.92	12.9	0.02	0.3		0.3	0.28		0.28		2397	2397	0.1	0.02		2406
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Daily, Winter (Max)																		
Off-Road E	1.18	0.99	8.92	12.9	0.02	0.3		0.3	0.28		0.28		2397	2397	0.1	0.02		2406
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Off-Road E	0.65	0.54	4.89	7.09	0.01	0.16		0.16	0.15		0.15		1314	1314	0.05	0.01		1318
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Off-Road E	0.12	0.1	0.89	1.29	< 0.005	0.03		0.03	0.03		0.03		217	217	0.01	< 0.005		218
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Worker	1.38	1.24	0.79	18	0	0	3.66	3.66	0	0.86	0.86		3877	3877	0.05	0.02	11.8	3897
Vendor	0.15	0.06	2.31	0.93	0.01	0.02	0.41	0.43	0.02	0.11	0.13		1450	1450	0.09	0.22	2.92	1520
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Daily, Winter (Max)																		
Worker	1.26	1.11	1.06	13.3	0	0	3.66	3.66	0	0.86	0.86		3444	3444	0.07	0.15	0.31	3490
Vendor	0.14	0.05	2.47	0.96	0.01	0.02	0.41	0.43	0.02	0.11	0.13		1449	1449	0.09	0.22	0.08	1517
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Worker	0.69	0.61	0.51	7.43	0	0	1.96	1.96	0	0.46	0.46		1937	1937	0.03	0.08	2.8	1963
Vendor	0.08	0.03	1.33	0.52	0.01	0.01	0.22	0.23	0.01	0.06	0.07		794	794	0.05	0.12	0.69	832
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Worker	0.13	0.11	0.09	1.36	0	0	0.36	0.36	0	0.08	0.08		321	321	0.01	0.01	0.46	325
Vendor	0.01	0.01	0.24	0.09	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01		131	131	0.01	0.02	0.11	138
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0

3.9. Paving (2028) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Off-Road E	0.82	0.69	6.63	9.91	0.01	0.26		0.26	0.24		0.24		1511	1511	0.06	0.01		1516
Paving		0																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Off-Road E	0.04	0.04	0.36	0.54	< 0.005	0.01		0.01	0.01		0.01		82.8	82.8	< 0.005	< 0.005		83.1
Paving		0																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Off-Road E	0.01	0.01	0.07	0.1	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		13.7	13.7	< 0.005	< 0.005		13.8
Paving		0																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Worker	0.05	0.05	0.04	0.55	0	0	0.15	0.15	0	0.04	0.04		143	143	< 0.005	0.01	0.01	145

Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Average Daily																		
Worker	< 0.005	< 0.005	< 0.005	0.03	0	0	0.01	0.01	0	< 0.005	< 0.005	8.02	8.02	< 0.005	< 0.005	0.01	8.13	
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual																		
Worker	< 0.005	< 0.005	< 0.005	0.01	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005	1.33	1.33	< 0.005	< 0.005	< 0.005	1.35	
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

3.11. Architectural Coating (2028) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Off-Road E	0.13	0.11	0.81	1.12	< 0.005	0.02		0.02	0.01		0.01		134	134	0.01	< 0.005		134
Architectural Coatings		250																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Average Daily																		
Off-Road E	0.01	0.01	0.04	0.06	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		7.32	7.32	< 0.005	< 0.005		7.34
Architectural Coatings		13.7																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual																		
Off-Road E	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		1.21	1.21	< 0.005	< 0.005		1.22
Architectural Coatings		2.5																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Worker	0.25	0.22	0.21	2.66	0	0	0.73	0.73	0	0.17	0.17		689	689	0.01	0.03	0.06	698
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Worker	0.01	0.01	0.01	0.15	0	0	0.04	0.04	0	0.01	0.01		38.7	38.7	< 0.005	< 0.005	0.06	39.3
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Worker	< 0.005	< 0.005	< 0.005	0.03	0	0	0.01	0.01	0	< 0.005	< 0.005		6.41	6.41	< 0.005	< 0.005	0.01	6.5
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Vegetation	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Species	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		
Removed																		
Subtotal																		
Daily, Winter (Max)																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		
Removed																		
Subtotal																		
Annual																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		
Removed																		
Subtotal																		

5. Activity Data

5.1. Construction Schedule

Phase Nam	Phase Type	Start Date	End Date	Days Per W	Work Days	Phase Description
Site Prepar	Site Preparat	3/6/2027	########	5	10	
Grading	Grading	########	5/7/2027	5	35	
Building Co	Building Con	5/8/2027	########	5	370	
Paving	Paving	########	########	5	20	
Architectur	Architectura	########	########	5	20	

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Nam	Equipment T	Fuel Type	Engine Tier	Number pe	Hours Per I	Horsepow	Load Factor
Site Prepar	Rubber Tired	Diesel	Average	3	8	367	0.4
Site Prepar	Tractors/Loa	Diesel	Average	4	8	84	0.37
Grading	Graders	Diesel	Average	1	8	148	0.41
Grading	Excavators	Diesel	Average	2	8	36	0.38

Grading	Tractors/Loa	Diesel	Average	2	8	84	0.37
Grading	Rubber Tired	Diesel	Average	1	8	367	0.4
Grading	Scrapers	Diesel	Average	2	8	423	0.48
Building Co	Cranes	Diesel	Average	1	7	367	0.29
Building Co	Forklifts	Diesel	Average	3	8	82	0.2
Building Co	Generator Se	Diesel	Average	1	8	14	0.74
Building Co	Welders	Diesel	Average	1	8	46	0.45
Building Co	Tractors/Loa	Diesel	Average	3	7	84	0.37
Paving	Pavers	Diesel	Average	2	8	81	0.42
Paving	Paving Equip	Diesel	Average	2	8	89	0.36
Paving	Rollers	Diesel	Average	2	8	36	0.38
Architectur	Air Compres	Diesel	Average	1	6	37	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Nam	Trip Type	One-Way T	Miles per T	Vehicle Mix
Site Preparation				
Site Prepar	Worker	17.5	14.3	LDA,LDT1,LDT2
Site Prepar	Vendor		8.8	HHDT,MHDT
Site Prepar	Hauling	0	20	HHDT
Site Prepar	Onsite truck			HHDT
Grading				
Grading	Worker	20	14.3	LDA,LDT1,LDT2
Grading	Vendor		8.8	HHDT,MHDT
Grading	Hauling	0	20	HHDT
Grading	Onsite truck			HHDT
Building Construction				
Building Co	Worker	362	14.3	LDA,LDT1,LDT2
Building Co	Vendor	53.8	8.8	HHDT,MHDT
Building Co	Hauling	0	20	HHDT
Building Co	Onsite truck			HHDT
Paving				
Paving	Worker	15	14.3	LDA,LDT1,LDT2
Paving	Vendor		8.8	HHDT,MHDT
Paving	Hauling	0	20	HHDT
Paving	Onsite truck			HHDT
Architectural Coating				
Architectur	Worker	72.4	14.3	LDA,LDT1,LDT2
Architectur	Vendor		8.8	HHDT,MHDT
Architectur	Hauling	0	20	HHDT
Architectur	Onsite truck			HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Str	PM10 Reduc	PM2.5 Reduction

5.5. Architectural Coatings

Phase Nam	Residential Ir	Residential	Non-Reside	Non-Reside	Parking Area Coated (sq ft)
Architectur	1079690	359897	0	0	

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Nam	Material Imp	Material Ex	Acres Grad	Material Dı	Acres Paved (acres)
Site Preparation			15	0	
Grading			105	0	
Paving	0	0	0	0	

5.6.2. Construction Earthmoving Control Strategies

Control Str	Frequency (p	PM10 Redu	PM2.5 Reduction
Water Exp	2	61	61

5.7. Construction Paving

Land Use	Area Paved (	% Asphalt
Apartments Low Rise	0	

5.8. Construction Electricity Consumption and Emissions Factors

Year	kWh per Yea	CO2	CH4	N2O
2027	0	375	0.01	< 0.005
2028	0	375	0.01	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation	Vegetation S	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cc	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity S	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Ha	Result for Pro	Unit
Temperatu	19.3	annual days of extreme heat
Extreme Pr	5.7	annual days with precipitation above 20 mm
Sea Level Rise		meters of inundation depth
Wildfire	0	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 me

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanI

6.2. Initial Climate Risk Scores

Climate Ha	Exposure Sc	Sensitivity S	Adaptive C	Vulnerability Score
Temperatu	1	0	0	N/A
Extreme Pr	2	0	0	N/A
Sea Level R	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack	N/A	N/A	N/A	N/A

Air Quality	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Ha	Exposure Scc	Sensitivity !	Adaptive C	Vulnerability Score
Temperatu	1	1	1	2
Extreme Pr	2	1	1	3
Sea Level R	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack	N/A	N/A	N/A	N/A
Air Quality	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	
AQ-Ozone	48.6
AQ-PM	23.7
AQ-DPM	22.3
Drinking W	78.8
Lead Risk H	41.2
Pesticides	73.8
Toxic Relea	30.3
Traffic	28.5
Effect Indicators	
CleanUp Sit	86.5
Groundwat	88.9
Haz Waste	99.8
Impaired W	51.2
Solid Wast	99.9
Sensitive Population	
Asthma	50.2
Cardio-vas	53.9
Low Birth W	36.4
Socioeconomic Factor Indicators	
Education	47.5
Housing	61.9
Linguistic	43.9
Poverty	58.5
Unemployr	62.4

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	
Above Pov	36.840755
Employed	20.454254
Median HI	23.264468
Education	
Bachelor's	39.343
High schoo	100
Preschool e	18.644938
Transportation	
Auto Acces	37.456692
Active com	70.794303
Social	
2-parent h	14.756833
Voting	58.514051
Neighborhood	
Alcohol ava	64.622097
Park access	12.703708
Retail dens	22.815347
Supermark	13.653279
Tree canop	2.0659566
Housing	
Homeowne	60.605672
Housing ha	41.691261
Low-inc ho	38.58591
Low-inc rer	7.7377133
Uncrowdec	46.387784
Health Outcomes	
Insured ad	43.96253
Arthritis	0
Asthma ER	50
High Blood	0
Cancer (exc	0
Asthma	0
Coronary H	0
Chronic Ob	0
Diagnosed	0
Life Expect	16
Cognitively	21
Physically	7.2
Heart Attac	54
Mental Hea	0
Chronic Kic	0
Obesity	0
Pedestrian	98
Physical He	0
Stroke	0
Health Risk Behaviors	
Binge Drink	0
Current Sm	0
No Leisure	0
Climate Change Exposures	
Wildfire Ris	0

SLR Inunda	0
Children	60
Elderly	21
English Spe	31
Foreign-bo	59
Outdoor W	29
Climate Change Adaptive Capacity	
Impervious	91
Traffic Den	38
Traffic Acce	23
Other Indices	
Hardship	62
Other Decision Support	
2016 Votin	64

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroSc	70
Healthy Pla	29
Project Loc	Yes
Project Loc	Yes
Project Loc	South Florin

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

Measure Ti	Co-Benefits Achieved

7.5. Evaluation Scorecard

Category	Number of A	Total Point	Max Possib	Weighted Score

7.6. Health & Equity Custom Measures

Measure Ti	Sponsor

8. User Changes to Default Data

Screen	Justification
Constructic	No demo
Land Use	landscape area = 20% of total lot acreage

ters
ESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Nar	Sac Rezone Largest Site
Constructio	1/1/2025
Operationa	2027
Lead Agency	
Land Use S	Project/site
Analysis Le	County
Windspeec	2.7
Precipitatic	3
Location	9525 Folsom Blvd, Sacramento, CA 95827, USA
County	Sacramento
City	Unincorporated
Air District	Sacramento Metropolitan AQMD
Air Basin	Sacramento Valley
TAZ	751
EDFZ	13
Electric Uti	Sacramento Municipal Utility District
Gas Utility	Pacific Gas & Electric
App Versio	2022.1.1.22

1.2. Land Use Types

Land Use S	Size	Unit	Lot Acreag	Building Ar	Landscape	Special Lan	Population	Description
Apartment	458	Dwelling U	11.4	439680	87936		1282	

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Energy	E-15	Require All-Electric Development
Area Sourc	AS-2	Use Low-VOC Paints

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Un/Mit.	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Unmit.	3.02	190	14	33.9	0.03	0.45	3.7	4.15	0.42	0.88	1.3		7557	7557	0.25	0.36	18.1	7689
Daily, Winter (Max)																		
Unmit.	4.01	3.38	31.7	31	0.06	1.37	7.84	9.21	1.26	3.98	5.24		7136	7136	0.27	0.36	0.47	7251
Average Daily (Max)																		
Unmit.	2.17	10.9	11.9	20.8	0.03	0.41	2.76	3.17	0.38	0.76	1.14		5078	5078	0.18	0.23	4.75	5154
Annual (Max)																		
Unmit.	0.4	2	2.18	3.79	< 0.005	0.08	0.5	0.58	0.07	0.14	0.21		841	841	0.03	0.04	0.79	853

2.2. Construction Emissions by Year, Unmitigated

Year	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily - Summer (Max)																		
2025	3.02	15.96639	14	33.9	0.03	0.45	3.7	4.15	0.42	0.88	1.3		7557	7557	0.25	0.36	18.1	7689
2026	2.88	15.96639	13.1	32.5	0.03	0.4	3.7	4.1	0.37	0.88	1.25		7455	7455	0.24	0.35	16.5	7583
Daily - Winter (Max)																		
2025	4.01	15.96639	31.7	31	0.06	1.37	7.84	9.21	1.26	3.98	5.24		7136	7136	0.27	0.36	0.47	7251
2026	2.66	15.96639	13.5	27.6	0.03	0.4	3.7	4.1	0.37	0.88	1.25		7044	7044	0.26	0.36	0.43	7158
Average Daily																		
2025	2.17	1.83	11.9	20.8	0.03	0.41	2.76	3.17	0.38	0.76	1.14		5078	5078	0.18	0.23	4.75	5154
2026	0.65	10.9	3.35	6.84	0.01	0.11	0.85	0.95	0.1	0.2	0.3		1684	1684	0.06	0.08	1.62	1711
Annual																		
2025	0.4	0.33	2.18	3.79	< 0.005	0.08	0.5	0.58	0.07	0.14	0.21		841	841	0.03	0.04	0.79	853
2026	0.12	2	0.61	1.25	< 0.005	0.02	0.15	0.17	0.02	0.04	0.05		279	279	0.01	0.01	0.27	283

2.3. Construction Emissions by Year, Mitigated

Year	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily - Summer (Max)																		
2025	3.02	15.96639	14	33.9	0.03	0.45	3.7	4.15	0.42	0.88	1.3		7557	7557	0.25	0.36	18.1	7689
2026	2.88	15.96639	13.1	32.5	0.03	0.4	3.7	4.1	0.37	0.88	1.25		7455	7455	0.24	0.35	16.5	7583
Daily - Winter (Max)																		
2025	4.01	15.96639	31.7	31	0.06	1.37	7.84	9.21	1.26	3.98	5.24		7136	7136	0.27	0.36	0.47	7251
2026	2.66	15.96639	13.5	27.6	0.03	0.4	3.7	4.1	0.37	0.88	1.25		7044	7044	0.26	0.36	0.43	7158
Average Daily																		
2025	2.17	1.83	11.9	20.8	0.03	0.41	2.76	3.17	0.38	0.76	1.14		5078	5078	0.18	0.23	4.75	5154
2026	0.65	10.9	3.35	6.84	0.01	0.11	0.85	0.95	0.1	0.2	0.3		1684	1684	0.06	0.08	1.62	1711
Annual																		
2025	0.4	0.33	2.18	3.79	< 0.005	0.08	0.5	0.58	0.07	0.14	0.21		841	841	0.03	0.04	0.79	853
2026	0.12	2	0.61	1.25	< 0.005	0.02	0.15	0.17	0.02	0.04	0.05		279	279	0.01	0.01	0.27	283

2.4. Operations Emissions Compared Against Thresholds

Un/Mit.	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Unmit.	14.7	23.9	12.4	136	0.26	0.31	21.6	21.9	0.3	5.48	5.78	217	29356	29573	19.6	1.09	84.3	30473
Mit.	14.5	23.5	10.9	135	0.25	0.19	21.6	21.8	0.18	5.48	5.65	217	27396	27613	19.4	1.09	84.3	28507
% Reduced	1.23	1.56	12.5	0.48	3.77	39.7		0.57	41.6		2.16		6.68	6.63	0.89	0.34		6.45
Daily, Winter (Max)																		
Unmit.	11.3	20.5	14	91.2	0.24	0.3	21.6	21.9	0.29	5.48	5.77	217	27064	27281	19.7	1.19	5.25	28133
Mit.	11.1	20.1	12.5	90.6	0.23	0.18	21.6	21.7	0.17	5.48	5.64	217	25104	25321	19.5	1.18	5.25	26167
% Reduced	1.6	1.82	11	0.72	4.13	41.3		0.57	42.9		2.17		7.24	7.19	0.88	0.31		6.99
Average Daily (Max)																		
Unmit.	12.4	21.6	12.8	104	0.23	0.3	20.5	20.8	0.29	5.2	5.49	217	26394	26611	19.6	1.09	36.5	27462
Mit.	12.2	21.2	11.3	104	0.22	0.18	20.5	20.6	0.16	5.2	5.36	217	24433	24650	19.4	1.08	36.5	25496
% Reduced	1.46	1.73	12.1	0.63	4.24	41.4		0.6	43.2		2.28		7.43	7.37	0.89	0.34		7.16
Annual (Max)																		
Unmit.	2.26	3.94	2.34	19	0.04	0.06	3.73	3.79	0.05	0.95	1	35.9	4370	4406	3.25	0.18	6.04	4547
Mit.	2.22	3.87	2.06	18.9	0.04	0.03	3.73	3.77	0.03	0.95	0.98	35.9	4045	4081	3.22	0.18	6.04	4221
% Reduced	1.46	1.73	12.1	0.63	4.24	41.4		0.6	43.2		2.28		7.43	7.37	0.89	0.34		7.16

2.5. Operations Emissions by Sector, Unmitigated

Sector	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Mobile	12.1	11	10.6	109	0.25	0.18	21.6	21.7	0.17	5.48	5.64		25633	25633	0.99	1	81.2	26036
Area	2.41	12.7	0.25	26	< 0.005	0.01		0.01	0.01		0.01	0	69.5	69.5	< 0.005	< 0.005		69.7
Energy	0.18	0.09	1.55	0.66	0.01	0.12		0.12	0.12		0.12		3621	3621	0.25	0.01		3631
Water												34.5	33.7	68.2	0.12	0.08		93.8
Waste												182	0	182	18.2	0		638
Refrig.																	3.15	3.15
Total	14.7	23.9	12.4	136	0.26	0.31	21.6	21.9	0.3	5.48	5.78	217	29356	29573	19.6	1.09	84.3	30473
Daily, Winter (Max)																		
Mobile	11.1	9.98	12.5	90.6	0.23	0.18	21.6	21.7	0.17	5.48	5.64		23410	23410	1.1	1.1	2.1	23766
Area	0	10.4	0	0	0	0		0	0		0	0	0	0	0	0		0

Construction Report Tables (unmitigated)

	Daily Max					Yearly	
Year	ROG	NOx	PM10	PM2.5	CO2	PM10	PM2.5
2025	16	32	9	5	853	0.58	0.21
2026	16	14	4	1	283	0.17	0.05

Construction Report Tables (mitigated)

	Daily Max					Yearly	
Year	ROG	NOx	PM10	PM2.5	CO2	PM10	PM2.5
2025	16	32	9	5	853	0.58	0.21
2026	16	14	4	1	283	0.17	0.05

Operational Report Tables

	Daily Max					Yearly	
Year	ROG	NOx	PM10	PM2.5	CO2	PM10	PM2.5
Unmit.	24	14	22	6	30473	3.79	1
Mit.	24	13	22	6	28507	3.77	0.98

Energy	0.18	0.09	1.55	0.66	0.01	0.12		0.12	0.12		0.12		3621	3621	0.25	0.01		3631
Water												34.5	33.7	68.2	0.12	0.08		93.8
Waste												182	0	182	18.2	0		638
Refrig.																	3.15	3.15
Total	11.3	20.5	14	91.2	0.24	0.3	21.6	21.9	0.29	5.48	5.77	217	27064	27281	19.7	1.19	5.25	28133
Average Daily																		
Mobile	10.5	9.5	11.1	85.7	0.22	0.17	20.5	20.6	0.16	5.2	5.36		22692	22692	0.99	1	33.3	23048
Area	1.65	12	0.17	17.8	< 0.005	0.01		0.01	0.01		0.01	0	47.6	47.6	< 0.005	< 0.005		47.8
Energy	0.18	0.09	1.55	0.66	0.01	0.12		0.12	0.12		0.12		3621	3621	0.25	0.01		3631
Water												34.5	33.7	68.2	0.12	0.08		93.8
Waste												182	0	182	18.2	0		638
Refrig.																	3.15	3.15
Total	12.4	21.6	12.8	104	0.23	0.3	20.5	20.8	0.29	5.2	5.49	217	26394	26611	19.6	1.09	36.5	27462
Annual																		
Mobile	1.92	1.73	2.03	15.6	0.04	0.03	3.73	3.77	0.03	0.95	0.98		3757	3757	0.16	0.17	5.52	3816
Area	0.3	2.19	0.03	3.25	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005	0	7.88	7.88	< 0.005	< 0.005		7.91
Energy	0.03	0.02	0.28	0.12	< 0.005	0.02		0.02	0.02		0.02		599	599	0.04	< 0.005		601
Water												5.71	5.58	11.3	0.02	0.01		15.5
Waste												30.2	0	30.2	3.02	0		106
Refrig.																	0.52	0.52
Total	2.26	3.94	2.34	19	0.04	0.06	3.73	3.79	0.05	0.95	1	35.9	4370	4406	3.25	0.18	6.04	4547

2.6. Operations Emissions by Sector, Mitigated

Sector	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Mobile	12.1	11	10.6	109	0.25	0.18	21.6	21.7	0.17	5.48	5.64		25633	25633	0.99	1	81.2	26036
Area	2.41	12.4	0.25	26	< 0.005	0.01		0.01	0.01		0.01	0	69.5	69.5	< 0.005	< 0.005		69.7
Energy	0	0	0	0	0	0		0	0		0		1660	1660	0.08	0.01		1665
Water												34.5	33.7	68.2	0.12	0.08		93.8
Waste												182	0	182	18.2	0		638
Refrig.																	3.15	3.15
Total	14.5	23.5	10.9	135	0.25	0.19	21.6	21.8	0.18	5.48	5.65	217	27396	27613	19.4	1.09	84.3	28507
Daily, Winter (Max)																		
Mobile	11.1	9.98	12.5	90.6	0.23	0.18	21.6	21.7	0.17	5.48	5.64		23410	23410	1.1	1.1	2.1	23766
Area	0	10.2	0	0	0	0		0	0		0	0	0	0	0	0		0
Energy	0	0	0	0	0	0		0	0		0		1660	1660	0.08	0.01		1665
Water												34.5	33.7	68.2	0.12	0.08		93.8
Waste												182	0	182	18.2	0		638
Refrig.																	3.15	3.15
Total	11.1	20.1	12.5	90.6	0.23	0.18	21.6	21.7	0.17	5.48	5.64	217	25104	25321	19.5	1.18	5.25	26167
Average Daily																		
Mobile	10.5	9.5	11.1	85.7	0.22	0.17	20.5	20.6	0.16	5.2	5.36		22692	22692	0.99	1	33.3	23048
Area	1.65	11.7	0.17	17.8	< 0.005	0.01		0.01	0.01		0.01	0	47.6	47.6	< 0.005	< 0.005		47.8
Energy	0	0	0	0	0	0		0	0		0		1660	1660	0.08	0.01		1665
Water												34.5	33.7	68.2	0.12	0.08		93.8
Waste												182	0	182	18.2	0		638
Refrig.																	3.15	3.15
Total	12.2	21.2	11.3	104	0.22	0.18	20.5	20.6	0.16	5.2	5.36	217	24433	24650	19.4	1.08	36.5	25496
Annual																		
Mobile	1.92	1.73	2.03	15.6	0.04	0.03	3.73	3.77	0.03	0.95	0.98		3757	3757	0.16	0.17	5.52	3816
Area	0.3	2.14	0.03	3.25	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005	0	7.88	7.88	< 0.005	< 0.005		7.91
Energy	0	0	0	0	0	0		0	0		0		275	275	0.01	< 0.005		276
Water												5.71	5.58	11.3	0.02	0.01		15.5
Waste												30.2	0	30.2	3.02	0		106
Refrig.																	0.52	0.52
Total	2.22	3.87	2.06	18.9	0.04	0.03	3.73	3.77	0.03	0.95	0.98	35.9	4045	4081	3.22	0.18	6.04	4221

3. Construction Emissions Details

3.1. Site Preparation (2025) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Off-Road E	3.94	3.31	31.6	30.2	0.05	1.37		1.37	1.26		1.26		5295	5295	0.21	0.04		5314
Dust From Material Movement							7.67	7.67		3.94	3.94							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Off-Road E	0.11	0.09	0.87	0.83	< 0.005	0.04		0.04	0.03		0.03		145	145	0.01	< 0.005		146
Dust From Material Movement							0.21	0.21		0.11	0.11							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Off-Road E	0.02	0.02	0.16	0.15	< 0.005	0.01		0.01	0.01		0.01		24	24	< 0.005	< 0.005		24.1
Dust From Material Movement							0.04	0.04		0.02	0.02							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Worker	0.07	0.07	0.06	0.78	0	0	0.18	0.18	0	0.04	0.04		176	176	< 0.005	0.01	0.02	179
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Worker	< 0.005	< 0.005	< 0.005	0.02	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005		4.96	4.96	< 0.005	< 0.005	0.01	5.03
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005		0.82	0.82	< 0.005	< 0.005	< 0.005	0.83
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0

3.2. Site Preparation (2025) - Mitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Off-Road E	3.94	3.31	31.6	30.2	0.05	1.37		1.37	1.26		1.26		5295	5295	0.21	0.04		5314
Dust From Material Movement							7.67	7.67		3.94	3.94							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Off-Road E	0.11	0.09	0.87	0.83	< 0.005	0.04		0.04	0.03		0.03		145	145	0.01	< 0.005		146
Dust From Material Movement							0.21	0.21		0.11	0.11							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Off-Road E	0.02	0.02	0.16	0.15	< 0.005	0.01		0.01	0.01		0.01		24	24	< 0.005	< 0.005		24.1
Dust From Material Movement							0.04	0.04		0.02	0.02							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0

Offsite																	
Daily, Summer (Max)																	
Daily, Winter (Max)																	
Worker	0.07	0.07	0.06	0.78	0	0	0.18	0.18	0	0.04	0.04	176	176	< 0.005	0.01	0.02	179
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Average Daily																	
Worker	< 0.005	< 0.005	< 0.005	0.02	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005	4.96	4.96	< 0.005	< 0.005	0.01	5.03
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual																	
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005	0.82	0.82	< 0.005	< 0.005	< 0.005	0.83
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

3.3. Grading (2025) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Off-Road E	3.8	3.2	29.7	28.3	0.06	1.23		1.23	1.14		1.14		6599	6599	0.27	0.05		6622
Dust From Material Movement							3.59	3.59		1.42	1.42							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Off-Road E	0.31	0.26	2.44	2.33	0.01	0.1		0.1	0.09		0.09		542	542	0.02	< 0.005		544
Dust From Material Movement							0.3	0.3		0.12	0.12							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Off-Road E	0.06	0.05	0.45	0.42	< 0.005	0.02		0.02	0.02		0.02		89.8	89.8	< 0.005	< 0.005		90.1
Dust From Material Movement							0.05	0.05		0.02	0.02							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Worker	0.08	0.08	0.07	0.89	0	0	0.2	0.2	0	0.05	0.05		202	202	< 0.005	0.01	0.02	204
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Worker	0.01	0.01	0.01	0.07	0	0	0.02	0.02	0	< 0.005	< 0.005		17	17	< 0.005	< 0.005	0.03	17.2
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Worker	< 0.005	< 0.005	< 0.005	0.01	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005		2.81	2.81	< 0.005	< 0.005	0.01	2.85
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0

3.4. Grading (2025) - Mitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Off-Road E	3.8	3.2	29.7	28.3	0.06	1.23		1.23	1.14		1.14		6599	6599	0.27	0.05		6622
Dust From Material Movement							3.59	3.59		1.42	1.42							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Off-Road E	0.31	0.26	2.44	2.33	0.01	0.1		0.1	0.09		0.09		542	542	0.02	< 0.005		544
Dust From Material Movement							0.3	0.3		0.12	0.12							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Off-Road E	0.06	0.05	0.45	0.42	< 0.005	0.02		0.02	0.02		0.02		89.8	89.8	< 0.005	< 0.005		90.1
Dust From Material Movement							0.05	0.05		0.02	0.02							
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Worker	0.08	0.08	0.07	0.89	0	0	0.2	0.2	0	0.05	0.05		202	202	< 0.005	0.01	0.02	204
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Worker	0.01	0.01	0.01	0.07	0	0	0.02	0.02	0	< 0.005	< 0.005		17	17	< 0.005	< 0.005	0.03	17.2
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Worker	< 0.005	< 0.005	< 0.005	0.01	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005		2.81	2.81	< 0.005	< 0.005	0.01	2.85
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0

3.5. Building Construction (2025) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Off-Road E	1.35	1.13	10.4	13	0.02	0.43		0.43	0.4		0.4		2398	2398	0.1	0.02		2406
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Daily, Winter (Max)																		
Off-Road E	1.35	1.13	10.4	13	0.02	0.43		0.43	0.4		0.4		2398	2398	0.1	0.02		2406
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Off-Road E	0.81	0.68	6.32	7.89	0.01	0.26		0.26	0.24		0.24		1450	1450	0.06	0.01		1455
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Off-Road E	0.15	0.12	1.15	1.44	< 0.005	0.05		0.05	0.04		0.04		240	240	0.01	< 0.005		241
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Worker	1.52	1.39	0.96	19.9	0	0	3.33	3.33	0	0.78	0.78		3743	3743	0.06	0.13	14.4	3799
Vendor	0.16	0.06	2.57	0.95	0.01	0.02	0.37	0.39	0.02	0.1	0.12		1416	1416	0.09	0.21	3.68	1484
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Daily, Winter (Max)																		
Worker	1.39	1.24	1.22	14.6	0	0	3.33	3.33	0	0.78	0.78		3323	3323	0.08	0.13	0.37	3365
Vendor	0.15	0.05	2.74	0.97	0.01	0.02	0.37	0.39	0.02	0.1	0.12		1415	1415	0.09	0.21	0.1	1480
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Worker	0.83	0.75	0.66	9.04	0	0	2.01	2.01	0	0.47	0.47		2062	2062	0.04	0.08	3.75	2091
Vendor	0.09	0.04	1.63	0.58	0.01	0.01	0.22	0.24	0.01	0.06	0.07		856	856	0.06	0.13	0.96	896
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0

Annual																	
Worker	0.15	0.14	0.12	1.65	0	0	0.37	0.37	0	0.09	0.09	341	341	0.01	0.01	0.62	346
Vendor	0.02	0.01	0.3	0.11	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	142	142	0.01	0.02	0.16	148
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

3.6. Building Construction (2025) - Mitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Off-Road E	1.35	1.13	10.4	13	0.02	0.43		0.43	0.4		0.4		2398	2398	0.1	0.02		2406
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Daily, Winter (Max)																		
Off-Road E	1.35	1.13	10.4	13	0.02	0.43		0.43	0.4		0.4		2398	2398	0.1	0.02		2406
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Off-Road E	0.81	0.68	6.32	7.89	0.01	0.26		0.26	0.24		0.24		1450	1450	0.06	0.01		1455
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Off-Road E	0.15	0.12	1.15	1.44	< 0.005	0.05		0.05	0.04		0.04		240	240	0.01	< 0.005		241
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Worker	1.52	1.39	0.96	19.9	0	0	3.33	3.33	0	0.78	0.78		3743	3743	0.06	0.13	14.4	3799
Vendor	0.16	0.06	2.57	0.95	0.01	0.02	0.37	0.39	0.02	0.1	0.12		1416	1416	0.09	0.21	3.68	1484
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Daily, Winter (Max)																		
Worker	1.39	1.24	1.22	14.6	0	0	3.33	3.33	0	0.78	0.78		3323	3323	0.08	0.13	0.37	3365
Vendor	0.15	0.05	2.74	0.97	0.01	0.02	0.37	0.39	0.02	0.1	0.12		1415	1415	0.09	0.21	0.1	1480
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Worker	0.83	0.75	0.66	9.04	0	0	2.01	2.01	0	0.47	0.47		2062	2062	0.04	0.08	3.75	2091
Vendor	0.09	0.04	1.63	0.58	0.01	0.01	0.22	0.24	0.01	0.06	0.07		856	856	0.06	0.13	0.96	896
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Worker	0.15	0.14	0.12	1.65	0	0	0.37	0.37	0	0.09	0.09		341	341	0.01	0.01	0.62	346
Vendor	0.02	0.01	0.3	0.11	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01		142	142	0.01	0.02	0.16	148
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0

3.7. Building Construction (2026) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Off-Road E	1.28	1.07	9.85	13	0.02	0.38		0.38	0.35		0.35		2397	2397	0.1	0.02		2405
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Daily, Winter (Max)																		
Off-Road E	1.28	1.07	9.85	13	0.02	0.38		0.38	0.35		0.35		2397	2397	0.1	0.02		2405
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Off-Road E	0.28	0.23	2.14	2.82	0.01	0.08		0.08	0.08		0.08		521	521	0.02	< 0.005		523
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Off-Road E	0.05	0.04	0.39	0.51	< 0.005	0.02		0.02	0.01		0.01		86.2	86.2	< 0.005	< 0.005		86.5
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Worker	1.45	1.32	0.85	18.6	0	0	3.33	3.33	0	0.78	0.78		3670	3670	0.05	0.13	13.1	3722
Vendor	0.14	0.05	2.4	0.91	0.01	0.02	0.37	0.39	0.02	0.1	0.12		1388	1388	0.09	0.21	3.34	1456
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Daily, Winter (Max)																		
Worker	1.23	1.2	1.1	13.7	0	0	3.33	3.33	0	0.78	0.78		3259	3259	0.07	0.13	0.34	3301
Vendor	0.14	0.05	2.57	0.93	0.01	0.02	0.37	0.39	0.02	0.1	0.12		1387	1387	0.09	0.21	0.09	1452
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Worker	0.26	0.26	0.21	3.03	0	0	0.72	0.72	0	0.17	0.17		727	727	0.01	0.03	1.23	737
Vendor	0.03	0.01	0.55	0.2	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.03		301	301	0.02	0.05	0.31	316
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Worker	0.05	0.05	0.04	0.55	0	0	0.13	0.13	0	0.03	0.03		120	120	< 0.005	< 0.005	0.2	122
Vendor	0.01	< 0.005	0.1	0.04	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	< 0.005		49.9	49.9	< 0.005	0.01	0.05	52.3
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0

3.8. Building Construction (2026) - Mitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Off-Road E	1.28	1.07	9.85	13	0.02	0.38		0.38	0.35		0.35		2397	2397	0.1	0.02		2405
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Daily, Winter (Max)																		
Off-Road E	1.28	1.07	9.85	13	0.02	0.38		0.38	0.35		0.35		2397	2397	0.1	0.02		2405
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Off-Road E	0.28	0.23	2.14	2.82	0.01	0.08		0.08	0.08		0.08		521	521	0.02	< 0.005		523
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Off-Road E	0.05	0.04	0.39	0.51	< 0.005	0.02		0.02	0.01		0.01		86.2	86.2	< 0.005	< 0.005		86.5
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Worker	1.45	1.32	0.85	18.6	0	0	3.33	3.33	0	0.78	0.78		3670	3670	0.05	0.13	13.1	3722
Vendor	0.14	0.05	2.4	0.91	0.01	0.02	0.37	0.39	0.02	0.1	0.12		1388	1388	0.09	0.21	3.34	1456
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Daily, Winter (Max)																		
Worker	1.23	1.2	1.1	13.7	0	0	3.33	3.33	0	0.78	0.78		3259	3259	0.07	0.13	0.34	3301
Vendor	0.14	0.05	2.57	0.93	0.01	0.02	0.37	0.39	0.02	0.1	0.12		1387	1387	0.09	0.21	0.09	1452
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Worker	0.26	0.26	0.21	3.03	0	0	0.72	0.72	0	0.17	0.17		727	727	0.01	0.03	1.23	737
Vendor	0.03	0.01	0.55	0.2	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.03		301	301	0.02	0.05	0.31	316
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Worker	0.05	0.05	0.04	0.55	0	0	0.13	0.13	0	0.03	0.03		120	120	< 0.005	< 0.005	0.2	122
Vendor	0.01	< 0.005	0.1	0.04	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	< 0.005		49.9	49.9	< 0.005	0.01	0.05	52.3
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0

3.9. Paving (2026) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Off-Road E	0.91	0.76	7.12	9.94	0.01	0.32		0.32	0.29		0.29		1511	1511	0.06	0.01		1516
Paving		0																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Daily, Winter (Max)																		
Average Daily																		
Off-Road E	0.05	0.04	0.39	0.54	< 0.005	0.02		0.02	0.02		0.02		82.8	82.8	< 0.005	< 0.005		83.1
Paving		0																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Off-Road E	0.01	0.01	0.07	0.1	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		13.7	13.7	< 0.005	< 0.005		13.8
Paving		0																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Worker	0.07	0.06	0.04	0.85	0	0	0.15	0.15	0	0.04	0.04		167	167	< 0.005	0.01	0.6	169
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Daily, Winter (Max)																		
Average Daily																		
Worker	< 0.005	< 0.005	< 0.005	0.03	0	0	0.01	0.01	0	< 0.005	< 0.005		8.34	8.34	< 0.005	< 0.005	0.01	8.45
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Worker	< 0.005	< 0.005	< 0.005	0.01	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005		1.38	1.38	< 0.005	< 0.005	< 0.005	1.4
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0

3.10. Paving (2026) - Mitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Off-Road E	0.91	0.76	7.12	9.94	0.01	0.32		0.32	0.29		0.29		1511	1511	0.06	0.01		1516
Paving		0																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Daily, Winter (Max)																		
Average Daily																		
Off-Road E	0.05	0.04	0.39	0.54	< 0.005	0.02		0.02	0.02		0.02		82.8	82.8	< 0.005	< 0.005		83.1
Paving		0																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Off-Road E	0.01	0.01	0.07	0.1	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		13.7	13.7	< 0.005	< 0.005		13.8
Paving		0																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Worker	0.07	0.06	0.04	0.85	0	0	0.15	0.15	0	0.04	0.04		167	167	< 0.005	0.01	0.6	169
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Daily, Winter (Max)																		
Average Daily																		
Worker	< 0.005	< 0.005	< 0.005	0.03	0	0	0.01	0.01	0	< 0.005	< 0.005		8.34	8.34	< 0.005	< 0.005	0.01	8.45
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Worker	< 0.005	< 0.005	< 0.005	0.01	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005		1.38	1.38	< 0.005	< 0.005	< 0.005	1.4
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0

3.11. Architectural Coating (2026) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Off-Road E	0.15	0.12	0.86	1.13	< 0.005	0.02		0.02	0.02		0.02		134	134	0.01	< 0.005		134
Architectural Coatings		189																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Daily, Winter (Max)																		
Average Daily																		
Off-Road E	0.01	0.01	0.05	0.06	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		7.32	7.32	< 0.005	< 0.005		7.34
Architectural Coatings		10.4																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Off-Road E	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		1.21	1.21	< 0.005	< 0.005		1.22
Architectural Coatings		1.89																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Worker	0.29	0.26	0.17	3.72	0	0	0.67	0.67	0	0.16	0.16		734	734	0.01	0.03	2.62	744
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Daily, Winter (Max)																		
Average Daily																		
Worker	0.01	0.01	0.01	0.15	0	0	0.04	0.04	0	0.01	0.01		36.7	36.7	< 0.005	< 0.005	0.06	37.2
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Worker	< 0.005	< 0.005	< 0.005	0.03	0	0	0.01	0.01	0	< 0.005	< 0.005		6.07	6.07	< 0.005	< 0.005	0.01	6.15
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0

3.12. Architectural Coating (2026) - Mitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Off-Road E	0.15	0.12	0.86	1.13	< 0.005	0.02		0.02	0.02		0.02		134	134	0.01	< 0.005		134
Architectural Coatings		189																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Daily, Winter (Max)																		
Average Daily																		
Off-Road E	0.01	0.01	0.05	0.06	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		7.32	7.32	< 0.005	< 0.005		7.34
Architectural Coatings		10.4																
Onsite truc	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		

Off-Road E	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	1.21	1.21	< 0.005	< 0.005		1.22
Architectural Coatings	1.89															
Onsite truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Offsite																
Daily, Summer (Max)																
Worker	0.29	0.26	0.17	3.72	0	0	0.67	0.67	0	0.16	0.16	734	734	0.01	0.03	2.62	744
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily, Winter (Max)																	
Average Daily																	
Worker	0.01	0.01	0.01	0.15	0	0	0.04	0.04	0	0.01	0.01	36.7	36.7	< 0.005	< 0.005	0.06	37.2
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual																	
Worker	< 0.005	< 0.005	< 0.005	0.03	0	0	0.01	0.01	0	< 0.005	< 0.005	6.07	6.07	< 0.005	< 0.005	0.01	6.15
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartment	12.1	11	10.6	109	0.25	0.18	21.6	21.7	0.17	5.48	5.64		25633	25633	0.99	1	81.2	26036
Total	12.1	11	10.6	109	0.25	0.18	21.6	21.7	0.17	5.48	5.64		25633	25633	0.99	1	81.2	26036
Daily, Winter (Max)																		
Apartment	11.1	9.98	12.5	90.6	0.23	0.18	21.6	21.7	0.17	5.48	5.64		23410	23410	1.1	1.1	2.1	23766
Total	11.1	9.98	12.5	90.6	0.23	0.18	21.6	21.7	0.17	5.48	5.64		23410	23410	1.1	1.1	2.1	23766
Annual																		
Apartment	1.92	1.73	2.03	15.6	0.04	0.03	3.73	3.77	0.03	0.95	0.98		3757	3757	0.16	0.17	5.52	3816
Total	1.92	1.73	2.03	15.6	0.04	0.03	3.73	3.77	0.03	0.95	0.98		3757	3757	0.16	0.17	5.52	3816

4.1.2. Mitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartment	12.1	11	10.6	109	0.25	0.18	21.6	21.7	0.17	5.48	5.64		25633	25633	0.99	1	81.2	26036
Total	12.1	11	10.6	109	0.25	0.18	21.6	21.7	0.17	5.48	5.64		25633	25633	0.99	1	81.2	26036
Daily, Winter (Max)																		
Apartment	11.1	9.98	12.5	90.6	0.23	0.18	21.6	21.7	0.17	5.48	5.64		23410	23410	1.1	1.1	2.1	23766
Total	11.1	9.98	12.5	90.6	0.23	0.18	21.6	21.7	0.17	5.48	5.64		23410	23410	1.1	1.1	2.1	23766
Annual																		
Apartment	1.92	1.73	2.03	15.6	0.04	0.03	3.73	3.77	0.03	0.95	0.98		3757	3757	0.16	0.17	5.52	3816
Total	1.92	1.73	2.03	15.6	0.04	0.03	3.73	3.77	0.03	0.95	0.98		3757	3757	0.16	0.17	5.52	3816

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartments Mid Rise													1659	1659	0.08	0.01		1664
Total													1659	1659	0.08	0.01		1664
Daily, Winter (Max)																		
Apartments Mid Rise													1659	1659	0.08	0.01		1664
Total													1659	1659	0.08	0.01		1664
Annual																		
Apartments Mid Rise													275	275	0.01	< 0.005		275
Total													275	275	0.01	< 0.005		275

4.2.2. Electricity Emissions By Land Use - Mitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartments Mid Rise													1660	1660	0.08	0.01		1665
Total													1660	1660	0.08	0.01		1665
Daily, Winter (Max)																		
Apartments Mid Rise													1660	1660	0.08	0.01		1665
Total													1660	1660	0.08	0.01		1665
Annual																		
Apartments Mid Rise													275	275	0.01	< 0.005		276
Total													275	275	0.01	< 0.005		276

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartment	0.18	0.09	1.55	0.66	0.01	0.12		0.12	0.12		0.12		1962	1962	0.17	< 0.005		1968
Total	0.18	0.09	1.55	0.66	0.01	0.12		0.12	0.12		0.12		1962	1962	0.17	< 0.005		1968
Daily, Winter (Max)																		
Apartment	0.18	0.09	1.55	0.66	0.01	0.12		0.12	0.12		0.12		1962	1962	0.17	< 0.005		1968
Total	0.18	0.09	1.55	0.66	0.01	0.12		0.12	0.12		0.12		1962	1962	0.17	< 0.005		1968
Annual																		
Apartment	0.03	0.02	0.28	0.12	< 0.005	0.02		0.02	0.02		0.02		325	325	0.03	< 0.005		326
Total	0.03	0.02	0.28	0.12	< 0.005	0.02		0.02	0.02		0.02		325	325	0.03	< 0.005		326

4.2.4. Natural Gas Emissions By Land Use - Mitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartment	0	0	0	0	0	0		0	0		0		0	0	0	0		0
Total	0	0	0	0	0	0		0	0		0		0	0	0	0		0
Daily, Winter (Max)																		
Apartment	0	0	0	0	0	0		0	0		0		0	0	0	0		0
Total	0	0	0	0	0	0		0	0		0		0	0	0	0		0
Annual																		
Apartment	0	0	0	0	0	0		0	0		0		0	0	0	0		0
Total	0	0	0	0	0	0		0	0		0		0	0	0	0		0

4.3. Area Emissions by Source

4.3.1. Unmitigated

Source	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Hearths	0	0	0	0	0	0		0	0		0	0	0	0	0	0		0
Consumer Products		9.41																
Architectural Coatings		1.04																
Landscape	2.41	2.28	0.25	26	< 0.005	0.01		0.01	0.01		0.01		69.5	69.5	< 0.005	< 0.005		69.7
Total	2.41	12.7	0.25	26	< 0.005	0.01		0.01	0.01		0.01	0	69.5	69.5	< 0.005	< 0.005		69.7
Daily, Winter (Max)																		
Hearths	0	0	0	0	0	0		0	0		0	0	0	0	0	0		0
Consumer Products		9.41																

Architectural Coatings		1.04															
Total	0	10.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual																	
Hearths	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Consumer Products		1.72															
Architectural Coatings		0.19															
Landscape	0.3	0.29	0.03	3.25	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0	7.88	7.88	< 0.005	< 0.005	7.91		
Total	0.3	2.19	0.03	3.25	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0	7.88	7.88	< 0.005	< 0.005	7.91		

4.3.2. Mitigated

Source	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Hearths	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Consumer Products		9.41																
Architectural Coatings		0.75																
Landscape	2.41	2.28	0.25	26	< 0.005	0.01		0.01	0.01		0.01		69.5	69.5	< 0.005	< 0.005		69.7
Total	2.41	12.4	0.25	26	< 0.005	0.01		0.01	0.01		0.01	0	69.5	69.5	< 0.005	< 0.005		69.7
Daily, Winter (Max)																		
Hearths	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Consumer Products		9.41																
Architectural Coatings		0.75																
Total	0	10.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual																		
Hearths	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Consumer Products		1.72																
Architectural Coatings		0.14																
Landscape	0.3	0.29	0.03	3.25	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0	7.88	7.88	< 0.005	< 0.005	7.91			
Total	0.3	2.14	0.03	3.25	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0	7.88	7.88	< 0.005	< 0.005	7.91			

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartments Mid Rise												34.5	33.7	68.2	0.12	0.08		93.8
Total												34.5	33.7	68.2	0.12	0.08		93.8
Daily, Winter (Max)																		
Apartments Mid Rise												34.5	33.7	68.2	0.12	0.08		93.8
Total												34.5	33.7	68.2	0.12	0.08		93.8
Annual																		
Apartments Mid Rise												5.71	5.58	11.3	0.02	0.01		15.5
Total												5.71	5.58	11.3	0.02	0.01		15.5

4.4.2. Mitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartments Mid Rise												34.5	33.7	68.2	0.12	0.08		93.8
Total												34.5	33.7	68.2	0.12	0.08		93.8
Daily, Winter (Max)																		
Apartments Mid Rise												34.5	33.7	68.2	0.12	0.08		93.8
Total												34.5	33.7	68.2	0.12	0.08		93.8
Annual																		
Apartments Mid Rise												5.71	5.58	11.3	0.02	0.01		15.5
Total												5.71	5.58	11.3	0.02	0.01		15.5

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartments Mid Rise												182	0	182	18.2	0		638
Total												182	0	182	18.2	0		638
Daily, Winter (Max)																		
Apartments Mid Rise												182	0	182	18.2	0		638
Total												182	0	182	18.2	0		638
Annual																		
Apartments Mid Rise												30.2	0	30.2	3.02	0		106
Total												30.2	0	30.2	3.02	0		106

4.5.2. Mitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartments Mid Rise												182	0	182	18.2	0		638
Total												182	0	182	18.2	0		638
Daily, Winter (Max)																		
Apartments Mid Rise												182	0	182	18.2	0		638
Total												182	0	182	18.2	0		638
Annual																		
Apartments Mid Rise												30.2	0	30.2	3.02	0		106
Total												30.2	0	30.2	3.02	0		106

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartments Mid Rise																	3.15	3.15
Total																	3.15	3.15
Daily, Winter (Max)																		
Apartments Mid Rise																	3.15	3.15
Total																	3.15	3.15
Annual																		
Apartments Mid Rise																	0.52	0.52
Total																	0.52	0.52

4.6.2. Mitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartments Mid Rise																	3.15	3.15
Total																	3.15	3.15
Daily, Winter (Max)																		
Apartments Mid Rise																	3.15	3.15
Total																	3.15	3.15
Annual																		
Apartments Mid Rise																	0.52	0.52
Total																	0.52	0.52

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Equipment	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.7.2. Mitigated

Equipment	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Equipment	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.8.2. Mitigated

Equipment	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Equipment	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.9.2. Mitigated

Equipment	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Vegetation	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Species	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		
Removed																		
Subtotal																		
Daily, Winter (Max)																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		
Removed																		
Subtotal																		
Annual																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		
Removed																		
Subtotal																		

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Vegetation	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		

Total
Daily, Winter (Max)
Total
Annual
Total

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Species	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		
Removed																		
Subtotal																		
Daily, Winter (Max)																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		
Removed																		
Subtotal																		
Annual																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		
Removed																		
Subtotal																		

5. Activity Data

5.1. Construction Schedule

Phase Nam	Phase Type	Start Date	End Date	Days Per W	Work Days	Phase Description
Site Prepar	Site Prepar	1/1/2025	########	5	10	
Grading	Grading	########	########	5	30	
Building Co	Building Co	########	########	5	300	
Paving	Paving	########	########	5	20	
Architectur	Architectur	########	########	5	20	

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Nam	Equipment	Fuel Type	Engine Tier	Number pe	Hours Per I	Horsepow	Load Factor
Site Prepar	Rubber Tire	Diesel	Average	3	8	367	0.4
Site Prepar	Tractors/Lo	Diesel	Average	4	8	84	0.37
Grading	Graders	Diesel	Average	1	8	148	0.41
Grading	Excavators	Diesel	Average	2	8	36	0.38
Grading	Tractors/Lo	Diesel	Average	2	8	84	0.37
Grading	Scrapers	Diesel	Average	2	8	423	0.48
Grading	Rubber Tire	Diesel	Average	1	8	367	0.4
Building Co	Forklifts	Diesel	Average	3	8	82	0.2
Building Co	Generator	Diesel	Average	1	8	14	0.74
Building Co	Cranes	Diesel	Average	1	7	367	0.29
Building Co	Welders	Diesel	Average	1	8	46	0.45
Building Co	Tractors/Lo	Diesel	Average	3	7	84	0.37
Paving	Pavers	Diesel	Average	2	8	81	0.42
Paving	Paving Equ	Diesel	Average	2	8	89	0.36
Paving	Rollers	Diesel	Average	2	8	36	0.38
Architectur	Air Compre	Diesel	Average	1	6	37	0.48

5.2.2. Mitigated

Phase Nam	Equipment	Fuel Type	Engine Tier	Number pe	Hours Per I	Horsepow	Load Factor
Site Prepar	Rubber Tire	Diesel	Average	3	8	367	0.4
Site Prepar	Tractors/Lo	Diesel	Average	4	8	84	0.37
Grading	Graders	Diesel	Average	1	8	148	0.41
Grading	Excavators	Diesel	Average	2	8	36	0.38
Grading	Tractors/Lo	Diesel	Average	2	8	84	0.37
Grading	Scrapers	Diesel	Average	2	8	423	0.48
Grading	Rubber Tire	Diesel	Average	1	8	367	0.4
Building Co	Forklifts	Diesel	Average	3	8	82	0.2
Building Co	Generator	Diesel	Average	1	8	14	0.74
Building Co	Cranes	Diesel	Average	1	7	367	0.29
Building Co	Welders	Diesel	Average	1	8	46	0.45
Building Co	Tractors/Lo	Diesel	Average	3	7	84	0.37
Paving	Pavers	Diesel	Average	2	8	81	0.42
Paving	Paving Equ	Diesel	Average	2	8	89	0.36
Paving	Rollers	Diesel	Average	2	8	36	0.38
Architectur	Air Compre	Diesel	Average	1	6	37	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Nam	Trip Type	One-Way T	Miles per T	Vehicle Mix
Site Preparation				
Site Prepar	Worker	17.5	14.3	LDA,LDT1,LDT2
Site Prepar	Vendor		8.8	HHDT,MHDT
Site Prepar	Hauling	0	20	HHDT
Site Prepar	Onsite truck			HHDT
Grading				
Grading	Worker	20	14.3	LDA,LDT1,LDT2
Grading	Vendor		8.8	HHDT,MHDT
Grading	Hauling	0	20	HHDT
Grading	Onsite truck			HHDT
Building Construction				
Building Co	Worker	330	14.3	LDA,LDT1,LDT2

Building Co	Vendor	49	8.8	HHDT,MHDT
Building Co	Hauling	0	20	HHDT
Building Co	Onsite truck			HHDT
Paving				
Paving	Worker	15	14.3	LDA,LDT1,LDT2
Paving	Vendor		8.8	HHDT,MHDT
Paving	Hauling	0	20	HHDT
Paving	Onsite truck			HHDT
Architectural Coating				
Architectur	Worker	66	14.3	LDA,LDT1,LDT2
Architectur	Vendor		8.8	HHDT,MHDT
Architectur	Hauling	0	20	HHDT
Architectur	Onsite truck			HHDT

5.3.2. Mitigated

Phase Nam	Trip Type	One-Way T	Miles per T	Vehicle Mix
Site Preparation				
Site Prepar	Worker	17.5	14.3	LDA,LDT1,LDT2
Site Prepar	Vendor		8.8	HHDT,MHDT
Site Prepar	Hauling	0	20	HHDT
Site Prepar	Onsite truck			HHDT
Grading				
Grading	Worker	20	14.3	LDA,LDT1,LDT2
Grading	Vendor		8.8	HHDT,MHDT
Grading	Hauling	0	20	HHDT
Grading	Onsite truck			HHDT
Building Construction				
Building Co	Worker	330	14.3	LDA,LDT1,LDT2
Building Co	Vendor	49	8.8	HHDT,MHDT
Building Co	Hauling	0	20	HHDT
Building Co	Onsite truck			HHDT
Paving				
Paving	Worker	15	14.3	LDA,LDT1,LDT2
Paving	Vendor		8.8	HHDT,MHDT
Paving	Hauling	0	20	HHDT
Paving	Onsite truck			HHDT
Architectural Coating				
Architectur	Worker	66	14.3	LDA,LDT1,LDT2
Architectur	Vendor		8.8	HHDT,MHDT
Architectur	Hauling	0	20	HHDT
Architectur	Onsite truck			HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Str	PM10 Redu	PM2.5 Reduction

5.5. Architectural Coatings

Phase Nam	Residential	Residential	Non-Residé	Non-Residé	Parking Area Coated (sq ft)
Architectur	890352	296784	0	0	

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Nam	Material Im	Material Ex	Acres Grad	Material Dı	Acres Paved (acres)
Site Preparation			15	0	
Grading			90	0	
Paving	0	0	0	0	

5.6.2. Construction Earthmoving Control Strategies

Control Str	Frequency	PM10 Redu	PM2.5 Reduction
Water Exp	2	61	61

5.7. Construction Paving

Land Use	Area Paved	% Asphalt
Apartments Mid Rise		0

5.8. Construction Electricity Consumption and Emissions Factors

Year	kWh per Yé	CO2	CH4	N2O
2025	0	295	0.01	< 0.005
2026	0	279	0.01	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use T	Trips/Weel	Trips/Satur	Trips/Sund	Trips/Year	VMT/Week	VMT/Satur	VMT/Sund	VMT/Year
Apartment	2492	2249	1873	864508	30404	27442	22859	10549670

5.9.2. Mitigated

Land Use T	Trips/Weel	Trips/Satur	Trips/Sund	Trips/Year	VMT/Week	VMT/Satur	VMT/Sund	VMT/Year
Apartment	2492	2249	1873	864508	30404	27442	22859	10549670

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Typ	Unmitigated (number)
Apartments Mid Rise	
Wood Fire	0
Gas Firepla	0
Propane Fi	0
Electric Fire	0
No Fireplac	458
Conventior	0
Catalytic W	0
Non-Cataly	0
Pellet Woo	0

5.10.1.2. Mitigated

Hearth Typ	Unmitigated (number)
Apartments Mid Rise	
Wood Fire	0
Gas Firepla	0
Propane Fi	0
Electric Fire	0
No Fireplac	458
Conventior	0
Catalytic W	0
Non-Cataly	0

Pellet Woo 0

5.10.2. Architectural Coatings

Residential	Residential	Non-Residé	Non-Residé	Parking Area Coated (sq ft)
890352	296784	0	0	

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0
Summer Dı	day/yr	250

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0
Summer Dı	day/yr	250

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Land Use	Electricity (	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Apartment	2267290	267	0.0129	0.0017	6122530

5.11.2. Mitigated

Land Use	Electricity (	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Apartment	2269291	267	0.0129	0.0017	0

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Wa	Outdoor Water (gal/year)
Apartment	16148622	1501065

5.12.2. Mitigated

Land Use	Indoor Wa	Outdoor Water (gal/year)
Apartment	16148622	1501065

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton	Cogeneration (kWh/year)
Apartment	339	

5.13.2. Mitigated

Land Use	Waste (ton	Cogeneration (kWh/year)
Apartment	339	

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use	T Equipment	Refrigerant	GWP	Quantity (k	Operations	Service Lea	Times Serviced
Apartment	Average ro	R-410A	2088	< 0.005	2.5	2.5	10
Apartment	Household	R-134a	1430	0.12	0.6	0	1

5.14.2. Mitigated

Land Use	T Equipment	Refrigerant	GWP	Quantity (k	Operations	Service Lea	Times Serviced
Apartment	Average ro	R-410A	2088	< 0.005	2.5	2.5	10
Apartment	Household	R-134a	1430	0.12	0.6	0	1

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Fuel Type	Engine Tier	Number pe	Hours Per I	Horsepow	Load Factor

5.15.2. Mitigated

Equipment Fuel Type	Engine Tier	Number pe	Hours Per I	Horsepow	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Fuel Type	Number pe	Hours per I	Hours per '	Horsepow	Load Factor

5.16.2. Process Boilers

Equipment Fuel Type	Number	Boiler Ratir	Daily Heat	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation	Vegetation	Initial Acre	Final Acres

5.18.1.2. Mitigated

Vegetation	Vegetation	Initial Acre	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cc	Initial Acre	Final Acres

5.18.1.2. Mitigated

Biomass Cc	Initial Acre	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity S	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity S	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Ha	Result for F	Unit
Temperatu	20.7	annual days of extreme heat
Extreme Pr	6	annual days with precipitation above 20 mm
Sea Level Rise		meters of inundation depth
Wildfire	0	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 m

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (Ca

6.2. Initial Climate Risk Scores

Climate Ha	Exposure S	Sensitivity	Adaptive C	Vulnerability Score
Temperatu	1	0	0	N/A
Extreme Pr	2	0	0	N/A
Sea Level R	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack	N/A	N/A	N/A	N/A
Air Quality	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Ha	Exposure S	Sensitivity	Adaptive C	Vulnerability Score
Temperatu	1	1	1	2
Extreme Pr	2	1	1	3
Sea Level R	N/A	N/A	N/A	
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack	N/A	N/A	N/A	
Air Quality	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	
AQ-Ozone	53.7
AQ-PM	37.6
AQ-DPM	57.1
Drinking W	55.8
Lead Risk H	32.5
Pesticides	0
Toxic Relea	24.2
Traffic	76.4
Effect Indicators	
CleanUp Si	58.2
Groundwat	35
Haz Waste	19.2
Impaired W	51.2
Solid Waste	0
Sensitive Population	
Asthma	71.2
Cardio-vas	80.6
Low Birth W	0.74
Socioeconomic Factor Indicators	
Education	16.2
Housing	21.1
Linguistic	17.3
Poverty	56.4
Unemployn	76.1

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	
Above Pov	54.45913
Employed	22.03259
Median HI	48.69755
Education	
Bachelor's	69.99872
High schoo	100
Preschool e	62.73579
Transportation	
Auto Acces	40.90851
Active com	78.46786
Social	
2-parent h	98.06236
Voting	75.22135
Neighborhood	
Alcohol avi	49.68562
Park acces	81.35506
Retail dens	38.85538
Supermark	9.86783
Tree canop	89.04145
Housing	
Homeowne	58.89901
Housing ha	72.46247
Low-inc ho	81.86834
Low-inc re	57.42333
Uncrowde	71.88503
Health Outcomes	
Insured ad	77.62094
Arthritis	0
Asthma ER	31
High Blood	0
Cancer (ex	0
Asthma	0
Coronary H	0
Chronic Ob	0
Diagnosed	0
Life Expect	14
Cognitively	91
Physically	72
Heart Atta	22
Mental He	0
Chronic Kic	0

Obesity	0
Pedestrian	92
Physical He	0
Stroke	0
Health Risk Behaviors	
Binge Drink	0
Current Sm	0
No Leisure	0
Climate Change Exposures	
Wildfire Ris	0
SLR Inunda	0
Children	11
Elderly	18
English Spe	71
Foreign-bo	25
Outdoor W	52
Climate Change Adaptive Capacity	
Impervious	62
Traffic Den	89
Traffic Acce	65
Other Indices	
Hardship	48
Other Decision Support	
2016 Votin	64

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroSc	42
Healthy Pla	63
Project Loc	No
Project Loc	No
Project Loc	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

Measure Ti	Co-Benefits Achieved

7.5. Evaluation Scorecard

Category	Number of	Total Point	Max Possib	Weighted Score

7.6. Health & Equity Custom Measures

Measure Ti	Sponsor

8. User Changes to Default Data

Screen	Justification
Land Use	units and acreage from excel sheet; 439680/5=87936
Constructio	no demo
Constructio	Sac metro rule 301: Flat coating limit = 50 g/L, nonflat coating = 100 g/L, roof coating = 50 g/L, driveway sealers = 50 g/L
Operations	Sac metro rule 301, VOC limits: flat coating = 50 g/L, nonflat coating = 100 g/L, driveway sealer = 100 g/L

ıeters
nESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Annual GHG Calculations

Annual Gasoline GHG Emissions (after rezone)

Year	Phase				Total
	Main	Fair Oaks	North Watt	Old Florin	CO2e/year
2025	813.77	13.27	265.16	0	1092
2026	798.51	0	644	0	1443
2027	783.98	0	24.86	440.01	1249
2028	763.98	0	0	512.25	1276
2029	753.76	0	0	0	754
Total	3914	13.27	934.02	952.26	5813.55

Annual Diesel GHG Emissions (after rezone)

Year	Phase				Total
	Main	Fair Oaks	North Watt	Old Florin	CO2e/year
2025	665.31	93.16	354.1	0	1113
2026	658.24	0	560	0	1218
2027	647.23	0	27.15	500.1	1174
2028	639.09	0	0	444.49	1084
2029	631.91	0	0	0	632
Total	3241.78	93.16	941.25	944.59	5221

Annual Gasoline GHG Emissions (before rezone)

Year	Phase				Total
	Main	Fair Oaks	North Watt	Old Florin	CO2e/year
2025	332.9	9.09	183.16	0	525
2026	326.76	0	442	0	769
2027	320.61	0	17.55	286.01	624
2028	314.15	0	0	332.85	647
2029	308.33	0	0	0	308
Total	1602.75	9.09	642.71	618.86	2873.41

Annual Diesel GHG Emissions (before rezone)

Year	Phase				Total
	Main	Fair Oaks	North Watt	Old Florin	CO2e/year
2025	451.48	91.4	318.9	0	862
2026	449.48	0	473	0	922
2027	445.48	0	25.3	434.1	905
2028	442.42	0	0	371.02	813
2029	438.38	0	0	0	438
Total	2227.24	91.4	817.2	805.12	3940.96

Annual Gasoline GHG Emissions (difference)

Year	Phase				Total
	Main	Fair Oaks	North Watt	Old Florin	CO2e/year
2025	480.87	4.18	82	0	567
2026	471.75	0	202	0	674
2027	463.37	0	7.31	154	625
2028	449.83	0	0	179.4	629
2029	445.43	0	0	0	445
Total	2311.25	4.18	291.31	333.4	2940.14

Annual Diesel GHG Emissions (difference)

Year	Phase				Total
	Main	Fair Oaks	North Watt	Old Florin	CO2e/year
2025	213.83	1.76	35.2	0	251
2026	208.76	0	87	0	296
2027	201.75	0	1.85	66	270
2028	196.67	0	0	73.47	270
2029	193.53	0	0	0	194
Total	1014.54	1.76	124.05	139.47	1279.82

Fuel Consumption in gallons (after)			
Year	Gasoline	Diesel	Total
2025	124396	108969	233365
2026	164295	119318	283613
2027	142238	115032	257270
2028	145356	106129	251486
2029	85850	61891	147741
Total	662,135.54	511,339.86	1,173,475.40

Fuel Consumption in gallons (before)			
Year	Gasoline	Diesel	Total
2025	59812	84405	144218
2026	87558	90351	177909
2027	71090	88627	159717
2028	73690	79671	153361
2029	35117	42936	78054
Total	327,267.65	385,990.21	713,257.86

Fuel Consumption in gallons (Difference)			
Year	Gasoline	Diesel	Total
2025	64,584	24,563	89,147
2026	76,737	28,968	105,705
2027	71,148	26,405	97,554
2028	71,666	26,458	98,125
2029	50,732	18,955	69,687
Total	334,868	125,350	460,218

Construction Energy Consumption (after rezone)

	Gasoline (workers)					
Year	**CO2 (MT)**	**CO2 (km)**	**fuel**	**BTU**		**million BTU**
2025	1092	1092200	**124,396**	14954219004		14954.219
2026	1443	1442510	**164,295**	19750604702		19750.6047
2027	1249	1248850	**142,238**	17099044500		17099.0445
2028	1276	1276230	**145,356**	17473926863		17473.92686
2029	754	753760	**85,850**	10320355353		10320.35535
	5,814	**5,813,550**	**662,136**	**79,598,150,423**		**79,598**

	Diesel (offroad eq, hauling, vendors)				
Year	**CO2 (MT)**	**CO2 (km)**	**fuel**	**BTU**	**million BTU**
2025	1,113	1112570	**108,969**	14970218040	14970.21804
2026	1,218	1218240	**119,318**	16392063803	16392.0638
2027	1,174	1174480	**115,032**	15803249848	15803.24985
2028	1,084	1083580	**106,129**	14580142251	14580.14225
2029	632	631910	**61,891**	8502683410	8502.68341
	5,221	**5,220,780**	**511,340**	**70,248,357,353**	**70,248**

	Total				
Year	**CO2 (MT)**	**CO2 (km)**	**fuel**	**BTU**	**million BTU**
2025	2,205	2,204,770	233,365	29,924,437,044	29,924
2026	2,661	2,660,750	283,613	36,142,668,505	36,143
2027	2,423	2,423,330	257,270	32,902,294,349	32,902
2028	2,360	2,359,810	251,486	32,054,069,114	32,054
2029	1,386	1,385,670	147,741	18,823,038,763	18,823
Total	**11,034**	**11,034,330**	**1,173,475**	**149,846,507,776**	**149,847**

MT to km	1000		
CO2 to Gal gasoline	8.78	Climate Registry 2022	
gasoline gal/btu	120,214	EIA 2023	
CO2 to gas diesel	10.21	Climate Registry 2022	
diesel gas/btu	137,381	EIA 2023	

	motor gas	distallate	
btu per barrel	5,049,000	5,770,000	EIA
gallons per barrel	42	42	EIA
btu per gallon	120,214	137,381	conversion

https://theclimateregistry.org/wp-content/uploads/2022/11/2022-Default-Emission-Factors-Final.pdf
EIA 2023. Table A3: Approximate Heat Content of Petroleum Consumption and Fuel Ethanol. Avaialble: https://www.eia.gov/totalenergy/data/monthly/pdf/sec12_4.pdf

Fuel Per Capita

Year	Gasoline per ca	Diesel Per capita	Total Per Capita
2025	6.0	5.2	11.2
2026	7.9	5.7	13.7
2027	6.8	5.5	12.4
2028	7.0	5.1	12.1
2029	4.1	3.0	7.1
Total	31.9	24.6	56.5
Average	10.6	4.9	11.3
Population:	20773		
Difference in tons from before rezone:	**-65.0**		
Difference in percent before rezone	**-85.19%**		

Construction Energy Consumption (before rezone)

	Gasoline (workers)					
Year	**CO2 (MT)**	**CO2 (km)**	**fuel**	**BTU**	**million BTU**	
2025	525	525150	**59,812**	7190265620	7190.26562	
2026	769	768760	**87,558**	10525732834	10525.73283	
2027	624	624170	**71,090**	8546030833	8546.030833	
2028	647	647000	**73,690**	8858615360	8858.61536	
2029	308	308330	**35,117**	4221602587	4221.602587	
	2,873	**2,873,410**	**327,268**	**39,342,247,234**	**39,342**	

	Total					
Year	**CO2 (MT)**	**CO2 (km)**	**fuel**	**BTU**	**million BTU**	
2025	1,387	1,386,930	144,218	18,785,971,510	18,786	
2026	1,691	1,691,240	177,909	22,938,189,343	22,938	
2027	1,529	1,529,050	159,717	20,721,670,029	20,722	
2028	1,460	1,460,440	153,361	19,803,880,972	19,804	
2029	747	746,710	78,054	10,120,237,445	10,120	
Total	**6,814**	**6,814,370**	**713,258**	**92,369,949,300**	**92,370**	

	Diesel (offroad eq, hauling, vendors)				
Year	**CO2 (MT)**	**CO2 (km)**	**fuel**	**BTU**	**million BTU**
2025	862	861780	**84,405**	11595705891	11595.70589
2026	922	922480	**90,351**	12412456509	12412.45651
2027	905	904880	**88,627**	12175639196	12175.6392
2028	813	813440	**79,671**	10945265613	10945.26561
2029	438	438380	**42,936**	5898634858	5898.634858
	3,941	**3,940,960**	**385,990**	**53,027,702,066**	**53,028**

MT to km	1000					
CO2 to Gal gasoline	8.78	Climate Registry 2022		motor gas	distallate	
gasoline gal/btu	120,214	EIA 2023	btu per barrel	5,049,000	5,770,000	EIA
CO2 to gas diesel	10.21	Climate Registry 2022	gallons per barrel	42	42	EIA
diesel gas/btu	137,381	EIA 2023	btu per gallon	120,214	137,381	conversion

https://theclimateregistry.org/wp-content/uploads/2022/11/2022-Default-Emission-Factors-Final.pdf
EIA 2023. Table A3: Approximate Heat Content of Petroleum Consumption and Fuel Ethanol. Avaialble: https://www.eia.gov/totalenergy/data/monthly/pdf/sec12_4.pdf

	Fuel Per Capita		
Year	Gasoline pe	Diesel Per capita	Total
2025	6.4	9.0	15.4
2026	9.4	9.7	19.0
2027	7.6	9.5	17.1
2028	7.9	8.5	16.4
2029	3.8	4.6	8.4
Total per capita	35.0	41.3	76.3
Population:	9347		

Fair Oaks Construction Energy Consumption (after rezone)

Gasoline (workers)

Year	CO2 (MT)	CO2 (km)	fuel	BTU	million BTU
2025	13	13270	**1,511**	181690611.8	181.6906118
	13	**13,270**	**1,511**	**181,690,612**	**182**

Diesel (offroad eq, hauling, vendors)

Year	CO2 (MT)	CO2 (km)	fuel	BTU	million BTU
2025	93	93160	**9,124**	1253517093	1253.517093
	93	**93,160**	**9,124**	**1,253,517,093**	**1,254**

Total

Year	CO2 (MT)	CO2 (km)	fuel	BTU	million BTU
2025	106	106,430	10,636	1,435,207,705	1,435
Total	**106**	**106,430**	**10,636**	**1,435,207,705**	**1,435**

MT to km	1000					
CO2 to Gal gasoline	8.78	Climate Registry 2022		motor gas	distallate	
gasoline gal/btu	120,214	EIA 2023	btu per barrel	5,049,000	5,770,000	EIA
CO2 to gas diesel	10.21	Climate Registry 2022	gallons per barrel	42	42	EIA
diesel gas/btu	137,381	EIA 2023	btu per gallon	120,214	137,381	conversion

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Fuel Per Capita

Year	Gasoline per ca	Diesel Per capita	Total Per Capita
2025	14.5	87.7	102.3
Average	14.5	87.7	102.3
Population:	104		

Fair Oaks Construction Energy Consumption (before rezone)

		Gasoline (workers)						Total					
Year		**CO2 (MT)**	**CO2 (km)**	**fuel**	**BTU**	**million BTU**	**Year**	**CO2 (MT)**	**CO2 (km)**	**fuel**	**BTU**	**million BTU**
	2025	9	9090	**1,035**	124458753.7	124.4587537	2025	100	100,490	9,987	1,354,294,116	1,354
		9	**9,090**	**1,035**	**124,458,754**	**124**	Total	**100**	**100,490**	**9,987**	**1,354,294,116**	**1,354**

		Diesel (offroad eq, hauling, vendors)				
Year		**CO2 (MT)**	**CO2 (km)**	**fuel**	**BTU**	**million BTU**
	2025	91	91400	**8,952**	1229835362	1229.835362
		91	**91,400**	**8,952**	**1,229,835,362**	**1,230**

MT to km	1000					
CO2 to Gal gasoline	8.78	Climate Registry 2022		motor gas	distallate	
gasoline gal/btu	120,214	EIA 2023	btu per barrel	5,049,000	5,770,000	EIA
CO2 to gas diesel	10.21	Climate Registry 2022	gallons per barrel	42	42	EIA
diesel gas/btu	137,381	EIA 2023	btu per gallon	120,214	137,381	conversion

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	Fuel Per Capita		
Year	Gasoline per ca	Diesel Per capita	Total Per Capita
2025	14.8	127.9	142.7
Average	14.8	127.9	142.7
Population:	70		

North Watt Construction Energy Consumption (after rezone)

Gasoline (workers)

Year	CO2 (MT)	CO2 (km)	fuel	BTU	million BTU
2025	265	265160	**30,200**	3630526196	3630.526196
2026	644	644000	**73,349**	8817539863	8817.539863
2027	25	24860	**2,831**	340378945.7	340.3789457
	934	**934,020**	**106,380**	**12,788,445,005**	**12,788**

Diesel (offroad eq, hauling, vendors)

Year	CO2 (MT)	CO2 (km)	fuel	BTU	million BTU
2025	354	354100	**34,682**	4764602864	4764.602864
2026	560	560000	**54,848**	7535096311	7535.096311
2027	27	27150	**2,659**	365317615.8	365.3176158
	941	**941,250**	**92,189**	**12,665,016,790**	**12,665**

Total

Year	CO2 (MT)	CO2 (km)	fuel	BTU	million BTU
2025	619	619,260	64,882	8,395,129,060	8,395
2026	1,204	1,204,000	128,197	16,352,636,174	16,353
2027	52	52,010	5,491	705,696,561	706
Total	**1,875**	**1,875,270**	**198,569**	**25,453,461,795**	**25,453**

MT to km	1000				
CO2 to Gal gasoline	8.78	Climate Registry 2022			
gasoline gal/btu	120,214	EIA 2023			
CO2 to gas diesel	10.21	Climate Registry 2022			
diesel gas/btu	137,381	EIA 2023			

	motor gas	distallate	
btu per barrel	5,049,000	5,770,000	EIA
gallons per barrel	42	42	EIA
btu per gallon	120,214	137,381	conversion

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EIA 2023. Table A3: Approximate Heat Content of Petroleum Consumption and Fuel Ethanol. Avaialble: https://www.eia.gov/totalenergy/data/monthly/pdf/sec12_4.pdf

Fuel Per Capita

Year	Gasoline per ca	Diesel Per capita	Total Per Capita
2025	14.7	16.9	31.5
2026	35.6	26.7	62.3
2027	1.4	1.3	2.7
Average	17.2	14.9	32.2
Population:	2058		

North Watt Construction Energy Consumption (before rezone)

	Gasoline (workers)					
Year	**CO2 (MT)**	**CO2 (km)**	**fuel**	**BTU**	**million BTU**	
2025	183	183160	**20,861**	2507795965	2507.795965	
2026	442	442000	**50,342**	6051789782	6051.789782	
2027	18	17550	**1,999**	240291653.1	240.2916531	
	643	**642,710**	**73,202**	**8,799,877,400**	**8,800**	

	Diesel (offroad eq, hauling, vendors)				
Year	**CO2 (MT)**	**CO2 (km)**	**fuel**	**BTU**	**million BTU**
2025	319	318900	**31,234**	4290968238	4290.968238
2026	473	473000	**46,327**	6364465277	6364.465277
2027	25	25300	**2,478**	340424886.9	340.4248869
	817	**817,200**	**80,039**	**10,995,858,402**	**10,996**

	Total				
Year	**CO2 (MT)**	**CO2 (km)**	**fuel**	**BTU**	**million BTU**
2025	502	502,060	52,095	6,798,764,203	6,799
2026	915	915,000	96,669	12,416,255,059	12,416
2027	43	42,850	4,477	580,716,540	581
Total	**1,460**	**1,459,910**	**153,241**	**19,795,735,802**	**19,796**

MT to km	1000				
CO2 to Gal gasoline	8.78	Climate Registry 2022			
gasoline gal/btu	120,214	EIA 2023			
CO2 to gas diesel	10.21	Climate Registry 2022			
diesel gas/btu	137,381	EIA 2023			

	motor gas	distallate	
btu per barrel	5,049,000	5,770,000	EIA
gallons per barrel	42	42	EIA
btu per gallon	120,214	137,381	conversion

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	Fuel Per Capita		
Year	Gasoline per ca	Diesel Per capita	Total Per Capita
2025	14.8	22.1	36.8
2026	35.6	32.8	68.4
2027	1.4	1.8	3.2
Average	17.3	18.9	36.1
Population:	1414		

Old Florin Construction Energy Consumption (after rezone)

Gasoline (workers)

Year	CO2 (MT)	CO2 (km)	fuel	BTU	million BTU
2027	440	440010	**50,115**	6024543036	6024.543036
2028	512	512250	**58,343**	7013640986	7013.640986
	952	**952,260**	**108,458**	**13,038,184,022**	**13,038**

Diesel (offroad eq, hauling, vendors)

Year	CO2 (MT)	CO2 (km)	fuel	BTU	million BTU
2027	500	500100	**48,981**	6729110116	6729.110116
2028	444	444490	**43,535**	5980848141	5980.848141
	945	**944,590**	**92,516**	**12,709,958,258**	**12,710**

Total

Year	CO2 (MT)	CO2 (km)	fuel	BTU	million BTU
2027	940	940,110	99,096	12,753,653,152	12,754
2028	957	956,740	101,878	12,994,489,127	12,994
Total	**1,897**	**1,896,850**	**200,974**	**25,748,142,280**	**25,748**

MT to km	1000					
CO2 to Gal gasoline	8.78	Climate Registry 2022		motor gas	distallate	
gasoline gal/btu	120,214	EIA 2023	btu per barrel	5,049,000	5,770,000	EIA
CO2 to gas diesel	10.21	Climate Registry 2022	gallons per barrel	42	42	EIA
diesel gas/btu	137,381	EIA 2023	btu per gallon	120,214	137,381	conversion

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Fuel Per Capita

Year	Gasoline per ca	Diesel Per capita	Total Per Capita
2027	23.0	22.5	45.5
2028	26.8	20.0	46.8
Average	24.9	21.3	46.2
Population:	2176		

Old Florin Construction Energy Consumption (before rezone)

	Gasoline (workers)					
Year	**CO2 (MT)**	**CO2 (km)**	**fuel**	**BTU**	**million BTU**	
2027	286	286010	**32,575**	3916000895	3916.000895	
2028	333	332850	**37,910**	4557326310	4557.32631	
	619	**618,860**	**70,485**	**8,473,327,205**	**8,473**	

	Total					
Year	**CO2 (MT)**	**CO2 (km)**	**fuel**	**BTU**	**million BTU**	
2027	720	720,110	75,092	9,757,046,089	9,757	
2028	704	703,870	74,249	9,549,596,726	9,550	
Total	**1,424**	**1,423,980**	**149,341**	**19,306,642,815**	**19,307**	

	Diesel (offroad eq, hauling, vendors)				
Year	**CO2 (MT)**	**CO2 (km)**	**fuel**	**BTU**	**million BTU**
2027	434	434100	**42,517**	5841045194	5841.045194
2028	371	371020	**36,339**	4992270416	4992.270416
	805	**805,120**	**78,856**	**10,833,315,610**	**10,833**

MT to km	1000					
CO2 to Gal gasoline	8.78	Climate Registry 2022		motor gas	distallate	
gasoline gal/btu	120,214	EIA 2023	btu per barrel	5,049,000	5,770,000	EIA
CO2 to gas diesel	10.21	Climate Registry 2022	gallons per barrel	42	42	EIA
diesel gas/btu	137,381	EIA 2023	btu per gallon	120,214	137,381	conversion

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	Fuel Per Capita		
Year	Gasoline per ca	Diesel Per capita	Total Per Capita
2027	23.1	30.2	53.3
2028	26.9	25.8	52.7
Average	25.0	28.0	53.0
Population:	1408		

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Nai	Sac Rezone Old Florin operations (before)
Operationa	2030
Lead Agency	
Land Use S	Project/site
Analysis Le	County
Windspeec	3
Precipitatic	37.8
Location	38.49656099729435, -121.39733654991514
County	Sacramento
City	Unincorporated
Air District	Sacramento Metropolitan AQMD
Air Basin	Sacramento Valley
TAZ	774
EDFZ	13
Electric Uti	Sacramento Municipal Utility District
Gas Utility	Pacific Gas & Electric
App Versio	2022.1.1.21

1.2. Land Use Types

Land Use S	Size	Unit	Lot Acreag	Building Ar	Landscape	Special Lan	Population	Description
Apartment	503	Dwelling U	25.2	533180	219717		1408	

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Energy	E-15	Require All-Electric Development

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Un/Mit.	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Unmit.	17.8	29.3	11.2	130	0.24	0.29	20.4	20.7	0.28	5.19	5.47	238	26729	26967	21.5	1.07	56.9	27881
Mit.	17.6	29.2	9.63	129	0.23	0.16	20.4	20.6	0.15	5.19	5.34	238	24677	24916	21.3	1.07	56.9	25824
% Reduced	1.06	0.32	14.4	0.53	4.35	45.3		0.63	47.3		2.39		7.68	7.61	0.85	0.36		7.38
Daily, Winter (Max)																		
Unmit.	13.8	25.4	12.6	89.2	0.22	0.28	20.4	20.7	0.27	5.19	5.46	238	24679	24917	21.6	1.17	5.2	25811
Mit.	13.6	25.3	11	88.6	0.21	0.15	20.4	20.6	0.14	5.19	5.33	238	22627	22865	21.4	1.16	5.2	23753
% Reduced	1.38	0.37	12.8	0.77	4.77	47.4		0.63	49		2.4		8.31	8.23	0.84	0.33		7.97
Average Daily (Max)																		
Unmit.	14.1	25.8	11	97.3	0.2	0.27	17.9	18.1	0.26	4.54	4.8	238	22891	23129	21.4	1.01	24.4	23991
Mit.	14	25.7	9.36	96.6	0.19	0.14	17.9	18	0.13	4.54	4.67	238	20839	21078	21.2	1.01	24.4	21934
% Reduced	1.34	0.37	14.7	0.71	5.18	48.5		0.72	50.5		2.73		8.96	8.87	0.85	0.38		8.58
Annual (Max)																		
Unmit.	2.58	4.71	2	17.8	0.04	0.05	3.26	3.31	0.05	0.83	0.88	39.5	3790	3829	3.55	0.17	4.03	3972
Mit.	2.55	4.7	1.71	17.6	0.03	0.03	3.26	3.28	0.02	0.83	0.85	39.5	3450	3490	3.52	0.17	4.03	3631
% Reduced	1.34	0.37	14.7	0.71	5.18	48.5		0.72	50.5		2.73		8.96	8.87	0.85	0.38		8.58

2.5. Operations Emissions by Sector, Unmitigated

Sector	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Mobile	15	14	9.36	100	0.23	0.14	20.4	20.6	0.14	5.19	5.33		23046	23046	1.03	0.98	53.1	23416
Area	2.61	15.3	0.27	28.6	< 0.005	0.01		0.01	0.01		0.01	0	76.3	76.3	< 0.005	< 0.005		76.6
Energy	0.19	0.09	1.62	0.69	0.01	0.13		0.13	0.13		0.13		3574	3574	0.27	0.02		3585
Water												37.9	33	70.9	0.13	0.08		98.9
Waste												200	0	200	20	0		701
Refrig.																	3.82	3.82
Total	17.8	29.3	11.2	130	0.24	0.29	20.4	20.7	0.28	5.19	5.47	238	26729	26967	21.5	1.07	56.9	27881
Daily, Winter (Max)																		
Mobile	13.6	12.5	11	88.6	0.21	0.15	20.4	20.6	0.14	5.19	5.33		21072	21072	1.19	1.07	1.38	21422
Area	0	12.8	0	0	0	0		0	0		0	0	0	0	0	0		0
Energy	0.19	0.09	1.62	0.69	0.01	0.13		0.13	0.13		0.13		3574	3574	0.27	0.02		3585
Water												37.9	33	70.9	0.13	0.08		98.9
Waste												200	0	200	20	0		701
Refrig.																	3.82	3.82
Total	13.8	25.4	12.6	89.2	0.22	0.28	20.4	20.7	0.27	5.19	5.46	238	24679	24917	21.6	1.17	5.2	25811
Average Daily																		
Mobile	12.2	11.3	9.17	77	0.19	0.13	17.9	18	0.12	4.54	4.66		19232	19232	0.99	0.91	20.5	19550
Area	1.79	14.5	0.18	19.6	< 0.005	0.01		0.01	0.01		0.01	0	52.3	52.3	< 0.005	< 0.005		52.4
Energy	0.19	0.09	1.62	0.69	0.01	0.13		0.13	0.13		0.13		3574	3574	0.27	0.02		3585
Water												37.9	33	70.9	0.13	0.08		98.9
Waste												200	0	200	20	0		701
Refrig.																	3.82	3.82
Total	14.1	25.8	11	97.3	0.2	0.27	17.9	18.1	0.26	4.54	4.8	238	22891	23129	21.4	1.01	24.4	23991
Annual																		
Mobile	2.22	2.05	1.67	14.1	0.03	0.02	3.26	3.28	0.02	0.83	0.85		3184	3184	0.16	0.15	3.4	3237
Area	0.33	2.64	0.03	3.58	< 0.005	< 0.005		0	< 0.005		0	0	8.65	8.65	< 0.005	< 0.005		8.68
Energy	0.03	0.02	0.3	0.13	< 0.005	0.02		0.02	0.02		0.02		592	592	0.04	< 0.005		594
Water												6.27	5.46	11.7	0.02	0.01		16.4
Waste												33.2	0	33.2	3.32	0		116
Refrig.																	0.63	0.63
Total	2.58	4.71	2	17.8	0.04	0.05	3.26	3.31	0.05	0.83	0.88	39.5	3790	3829	3.55	0.17	4.03	3972

2.6. Operations Emissions by Sector, Mitigated

Sector	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		

Mobile	15	14	9.36	100	0.23	0.14	20.4	20.6	0.14	5.19	5.33		23046	23046	1.03	0.98	53.1	23416
Area	2.61	15.3	0.27	28.6	< 0.005	0.01		0.01	0.01		0.01	0	76.3	76.3	< 0.005	< 0.005		76.6
Energy	0	0	0	0	0	0		0	0		0		1522	1522	0.09	0.01		1528
Water												37.9	33	70.9	0.13	0.08		98.9
Waste												200	0	200	20	0		701
Refrig.																	3.82	3.82
Total	17.6	29.2	9.63	129	0.23	0.16	20.4	20.6	0.15	5.19	5.34	238	24677	24916	21.3	1.07	56.9	25824
Daily, Winter (Max)																		
Mobile	13.6	12.5	11	88.6	0.21	0.15	20.4	20.6	0.14	5.19	5.33		21072	21072	1.19	1.07	1.38	21422
Area	0	12.8	0	0	0	0		0	0		0	0	0	0	0	0		0
Energy	0	0	0	0	0	0		0	0		0		1522	1522	0.09	0.01		1528
Water												37.9	33	70.9	0.13	0.08		98.9
Waste												200	0	200	20	0		701
Refrig.																	3.82	3.82
Total	13.6	25.3	11	88.6	0.21	0.15	20.4	20.6	0.14	5.19	5.33	238	22627	22865	21.4	1.16	5.2	23753
Average Daily																		
Mobile	12.2	11.3	9.17	77	0.19	0.13	17.9	18	0.12	4.54	4.66		19232	19232	0.99	0.91	20.5	19550
Area	1.79	14.5	0.18	19.6	< 0.005	0.01		0.01	0.01		0.01	0	52.3	52.3	< 0.005	< 0.005		52.4
Energy	0	0	0	0	0	0		0	0		0		1522	1522	0.09	0.01		1528
Water												37.9	33	70.9	0.13	0.08		98.9
Waste												200	0	200	20	0		701
Refrig.																	3.82	3.82
Total	14	25.7	9.36	96.6	0.19	0.14	17.9	18	0.13	4.54	4.67	238	20839	21078	21.2	1.01	24.4	21934
Annual																		
Mobile	2.22	2.05	1.67	14.1	0.03	0.02	3.26	3.28	0.02	0.83	0.85		3184	3184	0.16	0.15	3.4	3237
Area	0.33	2.64	0.03	3.58	< 0.005	< 0.005		0	< 0.005		0	0	8.65	8.65	< 0.005	< 0.005		8.68
Energy	0	0	0	0	0	0		0	0		0		252	252	0.01	< 0.005		253
Water												6.27	5.46	11.7	0.02	0.01		16.4
Waste												33.2	0	33.2	3.32	0		116
Refrig.																	0.63	0.63
Total	2.55	4.7	1.71	17.6	0.03	0.03	3.26	3.28	0.02	0.83	0.85	39.5	3450	3490	3.52	0.17	4.03	3631

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartment	15	14	9.36	100	0.23	0.14	20.4	20.6	0.14	5.19	5.33		23046	23046	1.03	0.98	53.1	23416
Total	15	14	9.36	100	0.23	0.14	20.4	20.6	0.14	5.19	5.33		23046	23046	1.03	0.98	53.1	23416
Daily, Winter (Max)																		
Apartment	13.6	12.5	11	88.6	0.21	0.15	20.4	20.6	0.14	5.19	5.33		21072	21072	1.19	1.07	1.38	21422
Total	13.6	12.5	11	88.6	0.21	0.15	20.4	20.6	0.14	5.19	5.33		21072	21072	1.19	1.07	1.38	21422
Annual																		
Apartment	2.22	2.05	1.67	14.1	0.03	0.02	3.26	3.28	0.02	0.83	0.85		3184	3184	0.16	0.15	3.4	3237
Total	2.22	2.05	1.67	14.1	0.03	0.02	3.26	3.28	0.02	0.83	0.85		3184	3184	0.16	0.15	3.4	3237

4.1.2. Mitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartment	15	14	9.36	100	0.23	0.14	20.4	20.6	0.14	5.19	5.33		23046	23046	1.03	0.98	53.1	23416
Total	15	14	9.36	100	0.23	0.14	20.4	20.6	0.14	5.19	5.33		23046	23046	1.03	0.98	53.1	23416
Daily, Winter (Max)																		
Apartment	13.6	12.5	11	88.6	0.21	0.15	20.4	20.6	0.14	5.19	5.33		21072	21072	1.19	1.07	1.38	21422
Total	13.6	12.5	11	88.6	0.21	0.15	20.4	20.6	0.14	5.19	5.33		21072	21072	1.19	1.07	1.38	21422
Annual																		
Apartment	2.22	2.05	1.67	14.1	0.03	0.02	3.26	3.28	0.02	0.83	0.85		3184	3184	0.16	0.15	3.4	3237
Total	2.22	2.05	1.67	14.1	0.03	0.02	3.26	3.28	0.02	0.83	0.85		3184	3184	0.16	0.15	3.4	3237

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartments Low Rise													1521	1521	0.09	0.01		1526
Total													1521	1521	0.09	0.01		1526
Daily, Winter (Max)																		
Apartments Low Rise													1521	1521	0.09	0.01		1526
Total													1521	1521	0.09	0.01		1526
Annual																		
Apartments Low Rise													252	252	0.01	< 0.005		253
Total													252	252	0.01	< 0.005		253

4.2.2. Electricity Emissions By Land Use - Mitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartments Low Rise													1522	1522	0.09	0.01		1528
Total													1522	1522	0.09	0.01		1528
Daily, Winter (Max)																		
Apartments Low Rise													1522	1522	0.09	0.01		1528
Total													1522	1522	0.09	0.01		1528
Annual																		
Apartments Low Rise													252	252	0.01	< 0.005		253
Total													252	252	0.01	< 0.005		253

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartment	0.19	0.09	1.62	0.69	0.01	0.13		0.13	0.13		0.13		2053	2053	0.18	< 0.005		2059

Total	0.19	0.09	1.62	0.69	0.01	0.13	0.13	0.13	0.13	2053	2053	0.18	< 0.005		2059
Daily, Winter (Max)															
Apartment	0.19	0.09	1.62	0.69	0.01	0.13	0.13	0.13	0.13	2053	2053	0.18	< 0.005		2059
Total	0.19	0.09	1.62	0.69	0.01	0.13	0.13	0.13	0.13	2053	2053	0.18	< 0.005		2059
Annual															
Apartment	0.03	0.02	0.3	0.13	< 0.005	0.02	0.02	0.02	0.02	340	340	0.03	< 0.005		341
Total	0.03	0.02	0.3	0.13	< 0.005	0.02	0.02	0.02	0.02	340	340	0.03	< 0.005		341

4.2.4. Natural Gas Emissions By Land Use - Mitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartment	0	0	0	0	0	0		0	0		0		0	0	0	0		0
Total	0	0	0	0	0	0		0	0		0		0	0	0	0		0
Daily, Winter (Max)																		
Apartment	0	0	0	0	0	0		0	0		0		0	0	0	0		0
Total	0	0	0	0	0	0		0	0		0		0	0	0	0		0
Annual																		
Apartment	0	0	0	0	0	0		0	0		0		0	0	0	0		0
Total	0	0	0	0	0	0		0	0		0		0	0	0	0		0

4.3. Area Emissions by Source

4.3.1. Unmitigated

Source	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Hearths	0	0	0	0	0	0		0	0		0	0	0	0	0	0		0
Consumer Products		11.4																
Architectural Coatings		1.37																
Landscape	2.61	2.47	0.27	28.6	< 0.005	0.01		0.01	0.01		0.01		76.3	76.3	< 0.005	< 0.005		76.6
Total	2.61	15.3	0.27	28.6	< 0.005	0.01		0.01	0.01		0.01	0	76.3	76.3	< 0.005	< 0.005		76.6
Daily, Winter (Max)																		
Hearths	0	0	0	0	0	0		0	0		0	0	0	0	0	0		0
Consumer Products		11.4																
Architectural Coatings		1.37																
Total	0	12.8	0	0	0	0		0	0		0	0	0	0	0	0		0
Annual																		
Hearths	0	0	0	0	0	0		0	0		0	0	0	0	0	0		0
Consumer Products		2.08																
Architectural Coatings		0.25																
Landscape	0.33	0.31	0.03	3.58	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		8.65	8.65	< 0.005	< 0.005		8.68
Total	0.33	2.64	0.03	3.58	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005	0	8.65	8.65	< 0.005	< 0.005		8.68

4.3.2. Mitigated

Source	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Hearths	0	0	0	0	0	0		0	0		0	0	0	0	0	0		0
Consumer Products		11.4																
Architectural Coatings		1.37																
Landscape	2.61	2.47	0.27	28.6	< 0.005	0.01		0.01	0.01		0.01		76.3	76.3	< 0.005	< 0.005		76.6
Total	2.61	15.3	0.27	28.6	< 0.005	0.01		0.01	0.01		0.01	0	76.3	76.3	< 0.005	< 0.005		76.6
Daily, Winter (Max)																		
Hearths	0	0	0	0	0	0		0	0		0	0	0	0	0	0		0
Consumer Products		11.4																
Architectural Coatings		1.37																
Total	0	12.8	0	0	0	0		0	0		0	0	0	0	0	0		0
Annual																		
Hearths	0	0	0	0	0	0		0	0		0	0	0	0	0	0		0
Consumer Products		2.08																
Architectural Coatings		0.25																
Landscape	0.33	0.31	0.03	3.58	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		8.65	8.65	< 0.005	< 0.005		8.68
Total	0.33	2.64	0.03	3.58	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005	0	8.65	8.65	< 0.005	< 0.005		8.68

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartments Low Rise												37.9	33	70.9	0.13	0.08		98.9
Total												37.9	33	70.9	0.13	0.08		98.9
Daily, Winter (Max)																		
Apartments Low Rise												37.9	33	70.9	0.13	0.08		98.9
Total												37.9	33	70.9	0.13	0.08		98.9
Annual																		
Apartments Low Rise												6.27	5.46	11.7	0.02	0.01		16.4
Total												6.27	5.46	11.7	0.02	0.01		16.4

4.4.2. Mitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartments Low Rise												37.9	33	70.9	0.13	0.08		98.9
Total												37.9	33	70.9	0.13	0.08		98.9
Daily, Winter (Max)																		
Apartments Low Rise												37.9	33	70.9	0.13	0.08		98.9
Total												37.9	33	70.9	0.13	0.08		98.9
Annual																		
Apartments Low Rise												6.27	5.46	11.7	0.02	0.01		16.4
Total												6.27	5.46	11.7	0.02	0.01		16.4

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartments Low Rise												200	0	200	20	0		701
Total												200	0	200	20	0		701
Daily, Winter (Max)																		
Apartments Low Rise												200	0	200	20	0		701
Total												200	0	200	20	0		701
Annual																		
Apartments Low Rise												33.2	0	33.2	3.32	0		116
Total												33.2	0	33.2	3.32	0		116

4.5.2. Mitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartments Low Rise												200	0	200	20	0		701
Total												200	0	200	20	0		701
Daily, Winter (Max)																		
Apartments Low Rise												200	0	200	20	0		701
Total												200	0	200	20	0		701
Annual																		
Apartments Low Rise												33.2	0	33.2	3.32	0		116
Total												33.2	0	33.2	3.32	0		116

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartments Low Rise																	3.82	3.82
Total																	3.82	3.82
Daily, Winter (Max)																		
Apartments Low Rise																	3.82	3.82
Total																	3.82	3.82
Annual																		
Apartments Low Rise																	0.63	0.63
Total																	0.63	0.63

4.6.2. Mitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartments Low Rise																	3.82	3.82
Total																	3.82	3.82
Daily, Winter (Max)																		
Apartments Low Rise																	3.82	3.82
Total																	3.82	3.82
Annual																		
Apartments Low Rise																	0.63	0.63
Total																	0.63	0.63

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Equipment	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.7.2. Mitigated

Equipment	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Equipment	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.8.2. Mitigated

Equipment	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Equipment	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.9.2. Mitigated

Equipment	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Vegetation	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Species	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		
Removed																		
Subtotal																		
Daily, Winter (Max)																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		
Removed																		
Subtotal																		
Annual																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		
Removed																		
Subtotal																		

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Vegetation	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Species	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Avoided																		

Subtotal
Sequestered
Subtotal
Removed
Subtotal

Daily, Winter (Max)
Avoided
Subtotal
Sequestered
Subtotal
Removed
Subtotal

Annual
Avoided
Subtotal
Sequestered
Subtotal
Removed
Subtotal

5. Activity Data
5.9. Operational Mobile Sources
5.9.1. Unmitigated

Land Use T	Trips/Weel	Trips/Satur	Trips/Sund	Trips/Year	VMT/Weel	VMT/Satur	VMT/Sund	VMT/Year
Apartment	3682	4094	3159	1338145	25930	28835	22246	9423871

5.9.2. Mitigated

Land Use T	Trips/Weel	Trips/Satur	Trips/Sund	Trips/Year	VMT/Weel	VMT/Satur	VMT/Sund	VMT/Year
Apartment	3682	4094	3159	1338145	25930	28835	22246	9423871

5.10. Operational Area Sources
5.10.1. Hearths
5.10.1.1. Unmitigated

Hearth Typ	Unmitigated (number)
Apartments Low Rise	
Wood Fire	0
Gas Firepla	0
Propane Fi	0
Electric Fire	0
No Fireplac	503
Conventior	0
Catalytic W	0
Non-Cataly	0
Pellet Woo	0

5.10.1.2. Mitigated

Hearth Typ	Unmitigated (number)
Apartments Low Rise	
Wood Fire	0
Gas Firepla	0
Propane Fi	0
Electric Fire	0
No Fireplac	503
Conventior	0
Catalytic W	0
Non-Cataly	0
Pellet Woo	0

5.10.2. Architectural Coatings

Residential	Residential	Non-Reside	Non-Reside	Parking Area Coated (sq ft)
1079690	359897	0	0	

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0
Summer D	day/yr	250

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0
Summer D	day/yr	250

5.11. Operational Energy Consumption
5.11.1. Unmitigated

Land Use	Electricity (	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Apartment	2489019	223	0.0129	0.0017	6406250

5.11.2. Mitigated

Land Use	Electricity (	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Apartment	2491142	223	0.0129	0.0017	0

5.12. Operational Water and Wastewater Consumption
5.12.1. Unmitigated

Land Use	Indoor Wa	Outdoor Water (gal/year)

Apartment	17735277	3750558

5.12.2. Mitigated

Land Use	Indoor Wat	Outdoor Water (gal/year)
Apartment	17735277	3750558

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton	Cogeneration (kWh/year)
Apartment	372	

5.13.2. Mitigated

Land Use	Waste (ton	Cogeneration (kWh/year)
Apartment	372	

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use	T Equipment	Refrigerant	GWP	Quantity (k	Operations	Service Lea	Times Serviced
Apartment	Average ro	R-410A	2088	< 0.005	2.5	2.5	10
Apartment	Household	R-134a	1430	0.12	0.6	0	1

5.14.2. Mitigated

Land Use	T Equipment	Refrigerant	GWP	Quantity (k	Operations	Service Lea	Times Serviced
Apartment	Average ro	R-410A	2088	< 0.005	2.5	2.5	10
Apartment	Household	R-134a	1430	0.12	0.6	0	1

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment	Fuel Type	Engine Tier	Number pe	Hours Per I	Horsepowe	Load Factor

5.15.2. Mitigated

Equipment	Fuel Type	Engine Tier	Number pe	Hours Per I	Horsepowe	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment	Fuel Type	Number pe	Hours per I	Hours per \	Horsepowe	Load Factor

5.16.2. Process Boilers

Equipment	Fuel Type	Number	Boiler Ratir	Daily Heat	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation	Vegetation	Initial Acre	Final Acres

5.18.1.2. Mitigated

Vegetation	Vegetation	Initial Acre	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cc	Initial Acre	Final Acres

5.18.1.2. Mitigated

Biomass Cc	Initial Acre	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity S	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity S	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Ha	Result for F	Unit
Temperatu	19.3	annual days of extreme heat
Extreme Pr	5.7	annual days with precipitation above 20 mm
Sea Level Rise		meters of inundation depth
Wildfire	0	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities

6.2. Initial Climate Risk Scores

Climate Ha	Exposure S	Sensitivity	Adaptive C	Vulnerability Score
Temperatu	1	0	0	N/A
Extreme Pr	2	0	0	N/A
Sea Level R	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack	N/A	N/A	N/A	N/A
Air Quality	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Ha	Exposure S	Sensitivity	Adaptive C	Vulnerability Score
Temperatu	1	1	1	2
Extreme Pr	2	1	1	3
Sea Level R	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack	N/A	N/A	N/A	N/A
Air Quality	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	
AQ-Ozone	48.6
AQ-PM	23.7
AQ-DPM	22.3
Drinking W	78.8
Lead Risk H	41.2
Pesticides	73.8
Toxic Relea	30.3
Traffic	28.5
Effect Indicators	
CleanUp Si	86.5
Groundwat	88.9
Haz Waste	99.8
Impaired W	51.2
Solid Waste	99.9
Sensitive Population	
Asthma	50.2
Cardio-vas	53.9
Low Birth W	36.4
Socioeconomic Factor Indicators	
Education	47.5
Housing	61.9
Linguistic	43.9
Poverty	58.5
Unemployr	62.4

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	
Above Pov	36.84075
Employed	20.45425
Median HI	23.26447
Education	
Bachelor's	39.343
High schoo	100
Preschool e	18.64494
Transportation	
Auto Acces	37.45669
Active com	70.7943
Social	
2-parent h	14.75683
Voting	58.51405
Neighborhood	
Alcohol ava	64.6221
Park access	12.70371
Retail dens	22.81535
Supermark	13.65328

Tree canop	2.065957
Housing	
Homeowne	60.60567
Housing ha	41.69126
Low-inc ho	38.58591
Low-inc rer	7.737713
Uncrowdec	46.38778
Health Outcomes	
Insured ad	43.96253
Arthritis	0
Asthma ER	50
High Blood	0
Cancer (ex	0
Asthma	0
Coronary H	0
Chronic Ob	0
Diagnosed	0
Life Expect	16
Cognitively	21
Physically	7.2
Heart Atta	54
Mental He	0
Chronic Kid	0
Obesity	0
Pedestrian	98
Physical He	0
Stroke	0
Health Risk Behaviors	
Binge Drink	0
Current Sm	0
No Leisure	0
Climate Change Exposures	
Wildfire Ris	0
SLR Inunda	0
Children	60
Elderly	21
English Spe	31
Foreign-bo	59
Outdoor W	29
Climate Change Adaptive Capacity	
Impervious	91
Traffic Den	38
Traffic Acce	23
Other Indices	
Hardship	62
Other Decision Support	
2016 Votin	64

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroSc	70
Healthy Pla	29
Project Loc	Yes
Project Loc	Yes
Project Loc	South Florin

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

Measure T	Co-Benefits Achieved

7.5. Evaluation Scorecard

Category	Number of Total Point	Max Possit	Weighted Score

7.6. Health & Equity Custom Measures

Measure T	Sponsor

8. User Changes to Default Data

Screen	Justification
Constructic	No demo
Land Use	landscape area = 20% of total lot acreage

Operational Summary Tables

After rezone, Unmitigated Results

Main Rezone after (unmitigated)

Source	ROG	NOx	PM10 (daily)	PM10 (yearly)	PM2.5 (daily)	PM2.5 (yearly)	CO2
Mobile	142	122	242	41.0	63	10.6	40143
Area	207	4	0	0.0	0	0.0	128
Energy	2	26	2	0.4	2	0.4	9259
Water	0	0	0	0.0	0	0.0	238
Waste	0	0	0	0.0	0	0.0	1713
Refrig.	0	0	0	0.0	0	0.0	8
Total	351	152	244	41.4	65	11.0	51489

Fair Oaks after (unmitigated)

Source	ROG	NOx	PM10 (daily)	PM10 (yearly)	PM2.5 (daily)	PM2.5 (yearly)	CO2
Mobile	1	1	2	0.3	0	0.1	296
Area	1	0	0	0.0	0	0.0	1
Energy	0	0	0	0.0	0	0.0	58
Water	0	0	0	0.0	0	0.0	1
Waste	0	0	0	0.0	0	0.0	9
Refrig.	0	0	0	0.0	0	0.0	0
Total	2	1	2	0.3	0	0.1	364

North Watt after (unmitigated)

Source	ROG	NOx	PM10 (daily)	PM10 (yearly)	PM2.5 (daily)	PM2.5 (yearly)	CO2
Mobile	15	15	31	5.2	8	1.4	5109
Area	21	0	0	0.0	0	0.0	13
Energy	0	2	0	0.0	0	0.0	892
Water	0	0	0	0.0	0	0.0	24
Waste	0	0	0	0.0	0	0.0	170
Refrig.	0	0	0	0.0	0	0.0	1
Total	36	18	31	5.3	8	1.4	6208

Old Florin after (unmitigated)

Source	ROG	NOx	PM10 (daily)	PM10 (yearly)	PM2.5 (daily)	PM2.5 (yearly)	CO2
Mobile	14	11	21	3.6	6	0.9	3548
Area	22	0	0	0.0	0	0.0	13
Energy	0	3	0	0.0	0	0.0	943
Water	0	0	0	0.0	0	0.0	25
Waste	0	0	0	0.0	0	0.0	179
Refrig.	0	0	0	0.0	0	0.0	1
Total	36	14	22	3.6	6	1.0	4709

After rezone, Mitigated Results

Main Rezone after (mitigated)

Source	ROG	NOx	PM10 (dail	PM10 (yea	PM2.5 (dai	PM2.5 (yea	CO2
Mobile	142	122	242	41.0	63	10.6	40143
Area	207	4	0	0.0	0	0.0	128
Energy	0	0	0	0.0	0	0.0	3834
Water	0	0	0	0.0	0	0.0	238
Waste	0	0	0	0.0	0	0.0	1713
Refrig.	0	0	0	0.0	0	0.0	8
Total	349	126	242	41.0	63	10.6	46064

Fair Oaks after (mitigated)

Source	ROG	NOx	PM10 (dail	PM10 (yea	PM2.5 (dai	PM2.5 (yea	CO2
Mobile	1	1	2	0.3	0	0.1	296
Area	1	0	0	0.0	0	0.0	1
Energy	0	0	0	0.0	0	0.0	32
Water	0	0	0	0.0	0	0.0	1
Waste	0	0	0	0.0	0	0.0	9
Refrig.	0	0	0	0.0	0	0.0	0
Total	2	1	2	0.3	0	0.1	338

North Watt after (mitigated)

Source	ROG	NOx	PM10 (dail	PM10 (yea	PM2.5 (dai	PM2.5 (yea	CO2
Mobile	15	15	31	5.2	8	1.4	5109
Area	21	0	0	0.0	0	0.0	13
Energy	0	0	0	0.0	0	0.0	370
Water	0	0	0	0.0	0	0.0	24
Waste	0	0	0	0.0	0	0.0	170
Refrig.	0	0	0	0.0	0	0.0	1
Total	35	15	31	5.2	8	1.4	5686

Old Florin after (mitigated)

Source	ROG	NOx	PM10 (dail	PM10 (yea	PM2.5 (dai	PM2.5 (yea	CO2
Mobile	14	11	21	3.6	6	0.9	3548
Area	22	0	0	0.0	0	0.0	13
Energy	0	0	0	0.0	0	0.0	391
Water	0	0	0	0.0	0	0.0	25
Waste	0	0	0	0.0	0	0.0	179
Refrig.	0	0	0	0.0	0	0.0	1
Total	36	12	21	3.6	6	0.9	4157

before rezone, Unmitigated Results

Main Rezone before (unmitigated)

Source	ROG	NOx	PM10 (dail	PM10 (yea	PM2.5 (dai	PM2.5 (yea	CO2
Mobile	96	82	163	26.0	42	6.7	25456
Area	67	2	0	0.0	0	0.0	58
Energy	2	26	2	0.4	2	0.4	9259
Water	0	0	0	0.0	0	0.0	111
Waste	0	0	0	0.0	0	0.0	771
Refrig.	0	0	0	0.0	0	0.0	3
Total	164	110	165	26.4	44	7.1	35657

Fair Oaks before (unmitigated)

Source	ROG	NOx	PM10 (dail	PM10 (yea	PM2.5 (dai	PM2.5 (yea	CO2
Mobile	1	1	2	0.3	0	0.1	282
Area	1	0	0	0.0	0	0.0	0
Energy	0	0	0	0.0	0	0.0	30
Water	0	0	0	0.0	0	0.0	1
Waste	0	0	0	0.0	0	0.0	6
Refrig.	0	0	0	0.0	0	0.0	0
Total	2	1	2	0.3	0	0.1	319

North Watt before (unmitigated)

Source	ROG	NOx	PM10 (dail	PM10 (yea	PM2.5 (dai	PM2.5 (yea	CO2
Mobile	15	15	32	5.1	8	1.3	4948
Area	15	0	0	0.0	0	0.0	9
Energy	0	2	0	0.0	0	0.0	596
Water	0	0	0	0.0	0	0.0	16
Waste	0	0	0	0.0	0	0.0	117
Refrig.	0	0	0	0.0	0	0.0	1
Total	31	17	32	5.1	8	1.3	5687

Old Florin before (unmitigated)

Source	ROG	NOx	PM10 (dail	PM10 (yea	PM2.5 (dai	PM2.5 (yea	CO2
Mobile	14	11	21	3.3	5	0.9	3237
Area	15	0	0	0.0	0	0.0	9
Energy	0	2	0	0.0	0	0.0	594
Water	0	0	0	0.0	0	0.0	16
Waste	0	0	0	0.0	0	0.0	116
Refrig.	0	0	0	0.0	0	0.0	1
Total	29	13	21	3.3	5	0.9	3973

before rezone, mitigated Results

Main Rezone before (mitigated)

Source	ROG	NOx	PM10 (dail	PM10 (yea	PM2.5 (dai	PM2.5 (yea	CO2
Mobile	96	82	163	26.0	42	6.7	25456
Area	67	2	0	0.0	0	0.0	58
Energy	0	0	0	0.0	0	0.0	3834
Water	0	0	0	0.0	0	0.0	111
Waste	0	0	0	0.0	0	0.0	771
Refrig.	0	0	0	0.0	0	0.0	3
Total	163	84	163	26.0	42	6.7	30232

Fair Oaks before (mitigated)

Source	ROG	NOx	PM10 (dail	PM10 (yea	PM2.5 (dai	PM2.5 (yea	CO2
Mobile	1	1	2	0.3	0	0.1	282
Area	1	0	0	0.0	0	0.0	0
Energy	0	0	0	0.0	0	0.0	13
Water	0	0	0	0.0	0	0.0	1
Waste	0	0	0	0.0	0	0.0	6
Refrig.	0	0	0	0.0	0	0.0	0
Total	2	1	2	0.3	0	0.1	302

North Watt before (mitigated)

Source	ROG	NOx	PM10 (dail	PM10 (yea	PM2.5 (dai	PM2.5 (yea	CO2
Mobile	15	15	32	5.1	8	1.3	4948
Area	15	0	0	0.0	0	0.0	9
Energy	0	0	0	0.0	0	0.0	254
Water	0	0	0	0.0	0	0.0	16
Waste	0	0	0	0.0	0	0.0	117
Refrig.	0	0	0	0.0	0	0.0	1
Total	31	15	32	5.1	8	1.3	5345

Old Florin before (unmitigated)

Source	ROG	NOx	PM10 (dail	PM10 (yea	PM2.5 (dai	PM2.5 (yea	CO2
Mobile	14	11	21	3.3	5	0.9	3237
Area	15	0	0	0.0	0	0.0	9
Energy	0	0	0	0.0	0	0.0	253
Water	0	0	0	0.0	0	0.0	16
Waste	0	0	0	0.0	0	0.0	116
Refrig.	0	0	0	0.0	0	0.0	1
Total	29	11	21	3.3	5	0.9	3632

Operational Energy Calcs (after rezone)

Unmitigated fuel consumption (total)

Sector	CO2 (MT/year)	CO2 (km)	fuel	BTU	million BTU
Mobile	40143	40143000	**4572095.67**	5.49631E+11	549631.2
Area	128	128000	**14578.5877**	1752554507	1752.6
Energy	9259	9259000	**1054555.81**	1.26773E+11	126772.7
Water	238	238000	**27107.0615**	3258656036	3258.7
Waste	1713	1713000	**195102.506**	23454108363	23454.1
Refrig.	8	8450	**962.414579**	115695981.1	115.7
Total	11346	11346450	1292306	155353688171	155354

Unmitigated fuel consumption (fair oaks)

Sector	CO2 (MT/year)	CO2 (km)	fuel	BTU	million BTU
Mobile	296	296000	**33712.984**	4052782297	4052.8
Area	1	640	**72.892938**	8762772.535	8.8
Energy	58	57500	**6548.9749**	787280344.9	787.3
Water	1	1450	**165.14806**	19853156.52	19.9
Waste	9	8570	**976.082**	117339001	117.3
Refrig.	0	40	**4.5558087**	547673.2834	0.5
Total	68	68200	7768	933782948	934

Unmitigated fuel consumption (north watt)

Sector	CO2 (MT/y	CO2 (km)	fuel	BTU	million BTU
Mobile	5109	5109000	**581890.7**	69951570127	69951.6
Area	13	12700	**1446.469**	173886267.5	173.9
Energy	892	892000	**101594.5**	12213114221	12213.1
Water	24	23600	**2687.927**	323127237.2	323.1
Waste	170	170000	**19362.19**	2327611455	2327.6
Refrig.	1	840	**95.67198**	11501138.95	11.5
Total	1099	1099140	125187	15049240319	15049

Unmitigated fuel consumption (odl florin)

Sector	CO2 (MT/y	CO2 (km)	fuel	BTU	million BTU
Mobile	3548	3548000	**404100.2**	48578620241	48578.6
Area	13	13400	**1526.196**	183470550	183.5
Energy	943	943000	**107403.2**	12911397657	12911.4
Water	25	25000	**2847.38**	3422958002.1	342.3
Waste	179	179000	**20387.24**	2450837943	2450.8
Refrig.	1	880	**100.2278**	12048812.24	12.0
Total	1161	1161280	132264	15900050765	15900

MT to km	1000					
CO2 to Gal gasoline	8.78	Climate Registry 2022		motor gas	distallate	
gasoline gal/btu	120,214	EIA 2023	btu per barrel	5,049,000	5,770,000	EIA
CO2 to gas diesel	10.21	Climate Registry 2022	gallons per barr	42	42	EIA
diesel gas/btu	137,381	EIA 2023	btu per gallon	120,214	137,381	conversion

Unmitigated	CO2e (MT/yr)
Mobile	40143.0
Area	128.0
Energy	9259.0
Water	238.0
Waste	1713.0
Refrig.	8.5
Total	11346.5

CA Energy Consumption

Sector	Trillion BTU	Percentage
Residential	1473.2	20.02%
Commercial	1396.7	18.98%
Industrial	1704.4	23.16%
Transporation	2785.1	37.84%
Total	7359.4	100.00%

Source: https://www.eia.gov/state/seds/sep_sum/html/pdf/sum_btu_1.pdf

Operational Energy Calcs (before rezone)

Unmitigated fuel consumption (total)

Sector	CO2 (MT/year)	CO2 (km)	fuel	BTU	million BTU
Mobile	40143	40143000	**4572095.67**	5.49631E+11	549631.2
Area	128	128000	**14578.5877**	1752554507	1752.6
Energy	9259	9259000	**1054555.81**	1.26773E+11	126772.7
Water	238	238000	**27107.0615**	3258656036	3258.7
Waste	1713	1713000	**195102.506**	23454108363	23454.1
Refrig.	8	8450	**962.414579**	115695981.1	115.7
Total	11346	11346450	1292306	155353688171	155354

Unmitigated fuel consumption (fair oaks)

Sector	CO2 (MT/year)	CO2 (km)	fuel	BTU	million BTU
Mobile	296	296000	**33712.984**	4052782297	4052.8
Area	1	640	**72.892938**	8762772.535	8.8
Energy	58	57500	**6548.9749**	787280344.9	787.3
Water	1	1450	**165.14806**	19853156.52	19.9
Waste	9	8570	**976.082**	117339001	117.3
Refrig.	0	40	**4.5558087**	547673.2834	0.5
Total	68	68200	7768	933782948	934

Unmitigated fuel consumption (north watt)

Sector	CO2 (MT/y	CO2 (km)	fuel	BTU	million BTU
Mobile	5109	5109000	**581890.7**	69951570127	69951.6
Area	13	12700	**1446.469**	173886267.5	173.9
Energy	892	892000	**101594.5**	12213114221	12213.1
Water	24	23600	**2687.927**	323127237.2	323.1
Waste	170	170000	**19362.19**	2327611455	2327.6
Refrig.	1	840	**95.67198**	11501138.95	11.5
Total	1099	1099140	125187	15049240319	15049

Unmitigated fuel consumption (odl florin)

Sector	CO2 (MT/y	CO2 (km)	fuel	BTU	million BTU
Mobile	3548	3548000	**404100.2**	48578620241	48578.6
Area	13	13400	**1526.196**	183470550	183.5
Energy	943	943000	**107403.2**	12911397657	12911.4
Water	25	25000	**2847.38**	3422958002.1	342.3
Waste	179	179000	**20387.24**	2450837943	2450.8
Refrig.	1	880	**100.2278**	12048812.24	12.0
Total	1161	1161280	132264	15900050765	15900

MT to km	1000						
CO2 to Gal gasoline	8.78	Climate Registry 2022			motor gas	distallate	
gasoline gal/btu	120,214	EIA 2023		btu per barrel	5,049,000	5,770,000	EIA
CO2 to gas diesel	10.21	Climate Registry 2022		gallons per barr	42	42	EIA
diesel gas/btu	137,381	EIA 2023		btu per gallon	120,214	137,381	conversion

Unmitigated	CO2e (MT/yr)
Mobile	40143.0
Area	128.0
Energy	9259.0
Water	238.0
Waste	1713.0
Refrig.	8.5
Total	11346.5

CA Energy Consumption

Sector	Trillion BTU	Percentage
Residential	1473.2	20.02%
Commercial	1396.7	18.98%
Industrial	1704.4	23.16%
Transporation	2785.1	37.84%
Total	7359.4	100.00%

Source: https://www.eia.gov/state/seds/sep_sum/html/pdf/sum_btu_1.pdf

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Nar	Sac Rezone Main Operations (after)
Operationa	2030
Lead Agency	
Land Use S	Project/site
Analysis Le	County
Windspeec	2.7
Precipitatic	37.8
Location	38.550592607076084, -121.39691856340349
County	Sacramento
City	Sacramento
Air District	Sacramento Metropolitan AQMD
Air Basin	Sacramento Valley
TAZ	765
EDFZ	13
Electric Uti	Sacramento Municipal Utility District
Gas Utility	Pacific Gas & Electric
App Versio	2022.1.1.21

1.2. Land Use Types

Land Use S	Size	Unit	Lot Acreag	Building Ar	Landscape	Special Lan	Population	Description
Apartment	7419	Dwelling U	236	7122240	2051870		20773	

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Energy	E-15	Require All-Electric Development

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Un/Mit.	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Unmit.	195	351	134	1574	2.82	3.95	240	244	3.79	61	64.8	3516	326844	330360	313	12.4	675	342564
Mit.	192	349	108	1563	2.66	1.86	240	242	1.71	61	62.7	3516	294165	297681	310	12.4	675	309795
% Reduced	1.55	0.43	19.2	0.7	5.83	52.7		0.85	54.9		3.21		10	9.89	0.92	0.49		9.57
Daily, Winter (Max)																		
Unmit.	143	300	148	993	2.57	3.76	240	244	3.65	61	64.7	3516	302484	306000	314	13.5	67.2	317942
Mit.	140	299	122	982	2.41	1.67	240	242	1.57	61	62.6	3516	269805	273321	312	13.4	67.2	285172
% Reduced	2.11	0.5	17.4	1.1	6.39	55.4		0.85	57		3.22		10.8	10.7	0.92	0.46		10.3
Average Daily (Max)																		
Unmit.	162	319	137	1216	2.51	3.8	223	227	3.67	56.6	60.3	3516	295662	299178	313	12.4	307	311001
Mit.	159	318	111	1205	2.35	1.72	223	225	1.59	56.6	58.2	3516	262983	266499	310	12.3	307	278232
% Reduced	1.86	0.47	18.8	0.9	6.54	54.7		0.92	56.7		3.45		11.1	10.9	0.92	0.5		10.5
Annual (Max)																		
Unmit.	29.6	58.3	25	222	0.46	0.69	40.7	41.4	0.67	10.3	11	582	48950	49532	51.8	2.05	50.9	51490
Mit.	29.1	58	20.3	220	0.43	0.31	40.7	41	0.29	10.3	10.6	582	43540	44122	51.4	2.04	50.9	46064
% Reduced	1.86	0.47	18.8	0.9	6.54	54.7		0.92	56.7		3.45		11.1	10.9	0.92	0.5		10.5

2.5. Operations Emissions by Sector, Unmitigated

Sector	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Mobile	154	142	104	1141	2.64	1.67	240	242	1.57	61	62.6		269501	269501	11.2	11	624	273673
Area	38.5	207	3.93	422	0.02	0.19		0.19	0.14		0.14	0	1125	1125	0.05	0.01		1129
Energy	3.01	1.51	25.7	11	0.16	2.08		2.08	2.08		2.08		55751	55751	4.23	0.24		55927
Water												559	467	1026	1.95	1.22		1439
Waste												2957	0	2957	296	0		10344
Refrig.																	51	51
Total	195	351	134	1574	2.82	3.95	240	244	3.79	61	64.8	3516	326844	330360	313	12.4	675	342564
Daily, Winter (Max)																		
Mobile	140	128	122	982	2.41	1.67	240	242	1.57	61	62.6		246267	246267	12.8	12	16.2	250180
Area	0	171	0	0	0	0		0	0		0	0	0	0	0	0		0
Energy	3.01	1.51	25.7	11	0.16	2.08		2.08	2.08		2.08		55751	55751	4.23	0.24		55927
Water												559	467	1026	1.95	1.22		1439
Waste												2957	0	2957	296	0		10344
Refrig.																	51	51
Total	143	300	148	993	2.57	3.76	240	244	3.65	61	64.7	3516	302484	306000	314	13.5	67.2	317942
Average Daily																		
Mobile	133	122	109	916	2.33	1.59	223	224	1.49	56.6	58.1		238674	238674	11.3	10.9	256	242466
Area	26.3	196	2.69	289	0.01	0.13		0.13	0.1		0.1	0	771	771	0.03	0.01		774
Energy	3.01	1.51	25.7	11	0.16	2.08		2.08	2.08		2.08		55751	55751	4.23	0.24		55927
Water												559	467	1026	1.95	1.22		1439
Waste												2957	0	2957	296	0		10344
Refrig.																	51	51
Total	162	319	137	1216	2.51	3.8	223	227	3.67	56.6	60.3	3516	295662	299178	313	12.4	307	311001
Annual																		
Mobile	24.2	22.3	19.8	167	0.43	0.29	40.7	41	0.27	10.3	10.6		39515	39515	1.88	1.81	42.4	40143
Area	4.81	35.7	0.49	52.8	< 0.005	0.02		0.02	0.02		0.02	0	128	128	0.01	< 0.005		128
Energy	0.55	0.27	4.7	2	0.03	0.38		0.38	0.38		0.38		9230	9230	0.7	0.04		9259
Water												92.5	77.3	170	0.32	0.2		238
Waste												490	0	490	48.9	0		1713
Refrig.																	8.45	8.45
Total	29.6	58.3	25	222	0.46	0.69	40.7	41.4	0.67	10.3	11	582	48950	49532	51.8	2.05	50.9	51490

2.6. Operations Emissions by Sector, Mitigated

Sector	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		

Mobile	154	142	104	1141	2.64	1.67	240	242	1.57	61	62.6		269501	269501	11.2	11	624	273673
Area	38.5	207	3.93	422	0.02	0.19		0.19	0.14		0.14	0	1125	1125	0.05	0.01		1129
Energy	0	0	0	0	0	0		0	0		0		23072	23072	1.33	0.18		23158
Water												559	467	1026	1.95	1.22		1439
Waste												2957	0	2957	296	0		10344
Refrig.																	51	51
Total	192	349	108	1563	2.66	1.86	240	242	1.71	61	62.7	3516	294165	297681	310	12.4	675	309795
Daily, Winter (Max)																		
Mobile	140	128	122	982	2.41	1.67	240	242	1.57	61	62.6		246267	246267	12.8	12	16.2	250180
Area	0	171	0	0	0	0		0	0		0	0	0	0	0	0		0
Energy	0	0	0	0	0	0		0	0		0		23072	23072	1.33	0.18		23158
Water												559	467	1026	1.95	1.22		1439
Waste												2957	0	2957	296	0		10344
Refrig.																	51	51
Total	140	299	122	982	2.41	1.67	240	242	1.57	61	62.6	3516	269805	273321	312	13.4	67.2	285172
Average Daily																		
Mobile	133	122	109	916	2.33	1.59	223	224	1.49	56.6	58.1		238674	238674	11.3	10.9	256	242466
Area	26.3	196	2.69	289	0.01	0.13		0.13	0.1		0.1	0	771	771	0.03	0.01		774
Energy	0	0	0	0	0	0		0	0		0		23072	23072	1.33	0.18		23158
Water												559	467	1026	1.95	1.22		1439
Waste												2957	0	2957	296	0		10344
Refrig.																	51	51
Total	159	318	111	1205	2.35	1.72	223	225	1.59	56.6	58.2	3516	262983	266499	310	12.3	307	278232
Annual																		
Mobile	24.2	22.3	19.8	167	0.43	0.29	40.7	41	0.27	10.3	10.6		39515	39515	1.88	1.81	42.4	40143
Area	4.81	35.7	0.49	52.8	< 0.005	0.02		0.02	0.02		0.02	0	128	128	0.01	< 0.005		128
Energy	0	0	0	0	0	0		0	0		0		3820	3820	0.22	0.03		3834
Water												92.5	77.3	170	0.32	0.2		238
Waste												490	0	490	48.9	0		1713
Refrig.																	8.45	8.45
Total	29.1	58	20.3	220	0.43	0.31	40.7	41	0.29	10.3	10.6	582	43540	44122	51.4	2.04	50.9	46064

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartment	154	142	104	1141	2.64	1.67	240	242	1.57	61	62.6		269501	269501	11.2	11	624	273673
Total	154	142	104	1141	2.64	1.67	240	242	1.57	61	62.6		269501	269501	11.2	11	624	273673
Daily, Winter (Max)																		
Apartment	140	128	122	982	2.41	1.67	240	242	1.57	61	62.6		246267	246267	12.8	12	16.2	250180
Total	140	128	122	982	2.41	1.67	240	242	1.57	61	62.6		246267	246267	12.8	12	16.2	250180
Annual																		
Apartment	24.2	22.3	19.8	167	0.43	0.29	40.7	41	0.27	10.3	10.6		39515	39515	1.88	1.81	42.4	40143
Total	24.2	22.3	19.8	167	0.43	0.29	40.7	41	0.27	10.3	10.6		39515	39515	1.88	1.81	42.4	40143

4.1.2. Mitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartment	154	142	104	1141	2.64	1.67	240	242	1.57	61	62.6		269501	269501	11.2	11	624	273673
Total	154	142	104	1141	2.64	1.67	240	242	1.57	61	62.6		269501	269501	11.2	11	624	273673
Daily, Winter (Max)																		
Apartment	140	128	122	982	2.41	1.67	240	242	1.57	61	62.6		246267	246267	12.8	12	16.2	250180
Total	140	128	122	982	2.41	1.67	240	242	1.57	61	62.6		246267	246267	12.8	12	16.2	250180
Annual																		
Apartment	24.2	22.3	19.8	167	0.43	0.29	40.7	41	0.27	10.3	10.6		39515	39515	1.88	1.81	42.4	40143
Total	24.2	22.3	19.8	167	0.43	0.29	40.7	41	0.27	10.3	10.6		39515	39515	1.88	1.81	42.4	40143

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartments Mid Rise													23071	23071	1.33	0.18		23157
Total													23071	23071	1.33	0.18		23157
Daily, Winter (Max)																		
Apartments Mid Rise													23071	23071	1.33	0.18		23157
Total													23071	23071	1.33	0.18		23157
Annual																		
Apartments Mid Rise													3820	3820	0.22	0.03		3834
Total													3820	3820	0.22	0.03		3834

4.2.2. Electricity Emissions By Land Use - Mitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartments Mid Rise													23072	23072	1.33	0.18		23158
Total													23072	23072	1.33	0.18		23158
Daily, Winter (Max)																		
Apartments Mid Rise													23072	23072	1.33	0.18		23158
Total													23072	23072	1.33	0.18		23158
Annual																		
Apartments Mid Rise													3820	3820	0.22	0.03		3834
Total													3820	3820	0.22	0.03		3834

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartment	3.01	1.51	25.7	11	0.16	2.08		2.08	2.08		2.08		32680	32680	2.89	0.06		32771

Total	3.01	1.51	25.7	11	0.16	2.08	2.08	2.08	2.08	32680	32680	2.89	0.06	32771
Daily, Winter (Max)														
Apartment	3.01	1.51	25.7	11	0.16	2.08	2.08	2.08	2.08	32680	32680	2.89	0.06	32771
Total	3.01	1.51	25.7	11	0.16	2.08	2.08	2.08	2.08	32680	32680	2.89	0.06	32771
Annual														
Apartment	0.55	0.27	4.7	2	0.03	0.38	0.38	0.38	0.38	5411	5411	0.48	0.01	5426
Total	0.55	0.27	4.7	2	0.03	0.38	0.38	0.38	0.38	5411	5411	0.48	0.01	5426

4.2.4. Natural Gas Emissions By Land Use - Mitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartment	0	0	0	0	0	0		0	0		0		0	0	0	0	0	0
Total	0	0	0	0	0	0		0	0		0		0	0	0	0	0	0
Daily, Winter (Max)																		
Apartment	0	0	0	0	0	0		0	0		0		0	0	0	0	0	0
Total	0	0	0	0	0	0		0	0		0		0	0	0	0	0	0
Annual																		
Apartment	0	0	0	0	0	0		0	0		0		0	0	0	0	0	0
Total	0	0	0	0	0	0		0	0		0		0	0	0	0	0	0

4.3. Area Emissions by Source

4.3.1. Unmitigated

Source	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Hearths	0	0	0	0	0	0		0	0		0	0	0	0	0	0	0	0
Consumer Products		152																
Architectural Coatings		18.3																
Landscape	38.5	36.4	3.93	422	0.02	0.19		0.19	0.14		0.14		1125	1125	0.05	0.01		1129
Total	38.5	207	3.93	422	0.02	0.19		0.19	0.14		0.14	0	1125	1125	0.05	0.01		1129
Daily, Winter (Max)																		
Hearths	0	0	0	0	0	0		0	0		0	0	0	0	0	0	0	0
Consumer Products		152																
Architectural Coatings		18.3																
Total	0	171	0	0	0	0		0	0		0	0	0	0	0	0	0	0
Annual																		
Hearths	0	0	0	0	0	0		0	0		0	0	0	0	0	0	0	0
Consumer Products		27.8																
Architectural Coatings		3.34																
Landscape	4.81	4.55	0.49	52.8	< 0.005	0.02		0.02	0.02		0.02		128	128	0.01	< 0.005		128
Total	4.81	35.7	0.49	52.8	< 0.005	0.02		0.02	0.02		0.02	0	128	128	0.01	< 0.005		128

4.3.2. Mitigated

Source	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Hearths	0	0	0	0	0	0		0	0		0	0	0	0	0	0	0	0
Consumer Products		152																
Architectural Coatings		18.3																
Landscape	38.5	36.4	3.93	422	0.02	0.19		0.19	0.14		0.14		1125	1125	0.05	0.01		1129
Total	38.5	207	3.93	422	0.02	0.19		0.19	0.14		0.14	0	1125	1125	0.05	0.01		1129
Daily, Winter (Max)																		
Hearths	0	0	0	0	0	0		0	0		0	0	0	0	0	0	0	0
Consumer Products		152																
Architectural Coatings		18.3																
Total	0	171	0	0	0	0		0	0		0	0	0	0	0	0	0	0
Annual																		
Hearths	0	0	0	0	0	0		0	0		0	0	0	0	0	0	0	0
Consumer Products		27.8																
Architectural Coatings		3.34																
Landscape	4.81	4.55	0.49	52.8	< 0.005	0.02		0.02	0.02		0.02		128	128	0.01	< 0.005		128
Total	4.81	35.7	0.49	52.8	< 0.005	0.02		0.02	0.02		0.02	0	128	128	0.01	< 0.005		128

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartments Mid Rise												559	467	1026	1.95	1.22		1439
Total												559	467	1026	1.95	1.22		1439
Daily, Winter (Max)																		
Apartments Mid Rise												559	467	1026	1.95	1.22		1439
Total												559	467	1026	1.95	1.22		1439
Annual																		
Apartments Mid Rise												92.5	77.3	170	0.32	0.2		238
Total												92.5	77.3	170	0.32	0.2		238

4.4.2. Mitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartments Mid Rise												559	467	1026	1.95	1.22		1439
Total												559	467	1026	1.95	1.22		1439
Daily, Winter (Max)																		
Apartments Mid Rise												559	467	1026	1.95	1.22		1439
Total												559	467	1026	1.95	1.22		1439
Annual																		
Apartments Mid Rise												92.5	77.3	170	0.32	0.2		238
Total												92.5	77.3	170	0.32	0.2		238

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartments Mid Rise												2957	0	2957	296	0		10344
Total												2957	0	2957	296	0		10344
Daily, Winter (Max)																		
Apartments Mid Rise												2957	0	2957	296	0		10344
Total												2957	0	2957	296	0		10344
Annual																		
Apartments Mid Rise												490	0	490	48.9	0		1713
Total												490	0	490	48.9	0		1713

4.5.2. Mitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartments Mid Rise												2957	0	2957	296	0		10344
Total												2957	0	2957	296	0		10344
Daily, Winter (Max)																		
Apartments Mid Rise												2957	0	2957	296	0		10344
Total												2957	0	2957	296	0		10344
Annual																		
Apartments Mid Rise												490	0	490	48.9	0		1713
Total												490	0	490	48.9	0		1713

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartments Mid Rise																	51	51
Total																	51	51
Daily, Winter (Max)																		
Apartments Mid Rise																	51	51
Total																	51	51
Annual																		
Apartments Mid Rise																	8.45	8.45
Total																	8.45	8.45

4.6.2. Mitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartments Mid Rise																	51	51
Total																	51	51
Daily, Winter (Max)																		
Apartments Mid Rise																	51	51
Total																	51	51
Annual																		
Apartments Mid Rise																	8.45	8.45
Total																	8.45	8.45

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Equipment	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.7.2. Mitigated

Equipment	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Equipment	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.8.2. Mitigated

Equipment	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Equipment	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.9.2. Mitigated

Equipment	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Vegetation	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Species	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		
Removed																		
Subtotal																		
Daily, Winter (Max)																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		
Removed																		
Subtotal																		
Annual																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		
Removed																		
Subtotal																		

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Vegetation	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Species	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Avoided																		

Subtotal
Sequestered
Subtotal
Removed
Subtotal

Daily, Winter (Max)
Avoided
Subtotal
Sequestered
Subtotal
Removed
Subtotal

Annual
Avoided
Subtotal
Sequestered
Subtotal
Removed
Subtotal

5. Activity Data
5.9. Operational Mobile Sources
5.9.1. Unmitigated

Land Use T	Trips/Weel	Trips/Satur	Trips/Sund	Trips/Year	VMT/Weel	VMT/Satur	VMT/Sund	VMT/Year
Apartment	40359	36427	30344	14003893	338859	305845	254767	1.18E+08

5.9.2. Mitigated

Land Use T	Trips/Weel	Trips/Satur	Trips/Sund	Trips/Year	VMT/Weel	VMT/Satur	VMT/Sund	VMT/Year
Apartment	40359	36427	30344	14003893	338859	305845	254767	1.18E+08

5.10. Operational Area Sources
5.10.1. Hearths
5.10.1.1. Unmitigated

Hearth Typ	Unmitigated (number)
Apartments Mid Rise	
Wood Fire	0
Gas Firepla	0
Propane Fi	0
Electric Fire	0
No Fireplac	7419
Conventior	0
Catalytic W	0
Non-Cataly	0
Pellet Woo	0

5.10.1.2. Mitigated

Hearth Typ	Unmitigated (number)
Apartments Mid Rise	
Wood Fire	0
Gas Firepla	0
Propane Fi	0
Electric Fire	0
No Fireplac	7419
Conventior	0
Catalytic W	0
Non-Cataly	0
Pellet Woo	0

5.10.2. Architectural Coatings

Residential	Residential	Non-Reside	Non-Reside	Parking Area Coated (sq ft)
14422536	4807512	0	0	

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0
Summer D	day/yr	250

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0
Summer D	day/yr	250

5.11. Operational Energy Consumption
5.11.1. Unmitigated

Land Use	Electricity (	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Apartment	37761761	223	0.0129	0.0017	1.02E+08

5.11.2. Mitigated

Land Use	Electricity (	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Apartment	37763762	223	0.0129	0.0017	0

5.12. Operational Water and Wastewater Consumption
5.12.1. Unmitigated

Land Use	Indoor Wa	Outdoor Water (gal/year)

Apartment 2.62E+08 35025380

5.12.2. Mitigated
Land Use Indoor Wa Outdoor Water (gal/year)
Apartment 2.62E+08 35025380

5.13. Operational Waste Generation
5.13.1. Unmitigated
Land Use Waste (ton Cogeneration (kWh/year)
Apartment 5486

5.13.2. Mitigated
Land Use Waste (ton Cogeneration (kWh/year)
Apartment 5486

5.14. Operational Refrigeration and Air Conditioning Equipment
5.14.1. Unmitigated
Land Use T Equipment Refrigeran GWP Quantity (k Operations Service Lea Times Serviced
Apartment Average ro R-410A 2088 < 0.005 2.5 2.5 10
Apartment Household R-134a 1430 0.12 0.6 0 1

5.14.2. Mitigated
Land Use T Equipment Refrigeran GWP Quantity (k Operations Service Lea Times Serviced
Apartment Average ro R-410A 2088 < 0.005 2.5 2.5 10
Apartment Household R-134a 1430 0.12 0.6 0 1

5.15. Operational Off-Road Equipment
5.15.1. Unmitigated
Equipment Fuel Type Engine Tier Number pe Hours Per I Horsepow Load Factor

5.15.2. Mitigated
Equipment Fuel Type Engine Tier Number pe Hours Per I Horsepow Load Factor

5.16. Stationary Sources
5.16.1. Emergency Generators and Fire Pumps
Equipment Fuel Type Number pe Hours per I Hours per Horsepow Load Factor

5.16.2. Process Boilers
Equipment Fuel Type Number Boiler Ratir Daily Heat Annual Heat Input (MMBtu/yr)

5.17. User Defined
Equipment Fuel Type

5.18. Vegetation
5.18.1. Land Use Change
5.18.1.1. Unmitigated
Vegetation Vegetation Initial Acre Final Acres

5.18.1.2. Mitigated
Vegetation Vegetation Initial Acre Final Acres

5.18.1. Biomass Cover Type
5.18.1.1. Unmitigated
Biomass Cc Initial Acre Final Acres

5.18.1.2. Mitigated
Biomass Cc Initial Acre Final Acres

5.18.2. Sequestration
5.18.2.1. Unmitigated
Tree Type Number Electricity S Natural Gas Saved (btu/year)

5.18.2.2. Mitigated
Tree Type Number Electricity S Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report
6.1. Climate Risk Summary
Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.
Climate Ha Result for F Unit
Temperatu 18.8 annual days of extreme heat
Extreme Pr 6.2 annual days with precipitation above 20 mm
Sea Level Rise meters of inundation depth
Wildfire 0 annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Ha	Exposure S	Sensitivity	Adaptive C	Vulnerability Score
Temperatu	1	0	0	N/A
Extreme Pr	2	0	0	N/A
Sea Level R	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack	N/A	N/A	N/A	N/A
Air Quality	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure. The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Ha	Exposure S	Sensitivity	Adaptive C	Vulnerability Score
Temperatu	1	1	1	2
Extreme Pr	2	1	1	3
Sea Level R	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack	N/A	N/A	N/A	N/A
Air Quality	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure. The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	
AQ-Ozone	48.5
AQ-PM	37.5
AQ-DPM	65.4
Drinking W	56.6
Lead Risk H	38.1
Pesticides	29.5
Toxic Relea	41.1
Traffic	78.6
Effect Indicators	
CleanUp Si	0
Groundwat	28.3
Haz Waste	40.9
Impaired W	51.2
Solid Waste	73
Sensitive Population	
Asthma	87.9
Cardio-vas	72
Low Birth W	9.08
Socioeconomic Factor Indicators	
Education	20.9
Housing	22.7
Linguistic	21.4
Poverty	43.5
Unemployr	40.6

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	
Above Pov	65.76415
Employed	89.43924
Median HI	66.04645
Education	
Bachelor's	71.14077
High schoo	100
Preschool e	54.90825
Transportation	
Auto Acces	28.53843
Active com	72.93725
Social	
2-parent h	56.35827
Voting	87.62992
Neighborhood	
Alcohol ava	60.41319
Park access	81.35506

Retail dens	56.7304
Supermark	55.3702
Tree canop	89.60606
Housing	
Homeowne	69.85756
Housing ha	79.08379
Low-inc ho	69.62659
Low-inc rer	61.37559
Uncrowdec	59.34813
Health Outcomes	
Insured ad	68.56153
Arthritis	8.6
Asthma ER	26
High Blood	9.1
Cancer (ex	7.2
Asthma	46
Coronary H	12
Chronic Ob	31
Diagnosed	50
Life Expect	28
Cognitively	73
Physically	62
Heart Atta	24
Mental He	70
Chronic Kid	27
Obesity	53
Pedestrian	75
Physical He	59
Stroke	26
Health Risk Behaviors	
Binge Drink	54
Current Sm	64
No Leisure	74
Climate Change Exposures	
Wildfire Ris	0
SLR Inunda	0
Children	42
Elderly	9
English Spe	62
Foreign-bo	13
Outdoor W	28
Climate Change Adaptive Capacity	
Impervious	55
Traffic Den	84
Traffic Acce	61
Other Indices	
Hardship	33
Other Decision Support	
2016 Votin	77

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroSc	49
Healthy Pla	77
Project Loc	No
Project Loc	No
Project Loc	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

Measure T	Co-Benefits Achieved

7.5. Evaluation Scorecard

Category	Number of Total Point	Max Possit	Weighted Score

7.6. Health & Equity Custom Measures

Measure T	Sponsor

8. User Changes to Default Data

Screen	Justification
Operations	...
Land Use	236 acres with 7419 units

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Nai	Sac Rezone Fair Oaks Operations (rezoned)
Operationa	2030
Lead Agency	
Land Use S	Project/site
Analysis Le	County
Windspeec	3.5
Precipitatic	39.2
Location	38.637469230516956, -121.32836613666706
County	Sacramento
City	Unincorporated
Air District	Sacramento Metropolitan AQMD
Air Basin	Sacramento Valley
TAZ	619
EDFZ	13
Electric Uti	Sacramento Municipal Utility District
Gas Utility	Pacific Gas & Electric
App Versio	2022.1.1.21

1.2. Land Use Types

Land Use S	Size	Unit	Lot Acreag	Building Ar	Landscape	Special Lan	Population	Description
Apartment	37	Dwelling U	1.25	35520	10890		104	

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Energy	E-15	Require All-Electric Development

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Un/Mit.	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Unmit.	1.06	1.82	0.85	10.2	0.02	0.02	1.79	1.81	0.02	0.45	0.48	17.6	2347	2364	1.58	0.08	4.9	2433
Mit.	1.05	1.81	0.72	10.1	0.02	0.01	1.79	1.8	0.01	0.45	0.47	17.6	2190	2208	1.57	0.08	4.9	2276
% Reduced	1.38	0.4	14.7	0.52		43.6		0.56	45.6		2.12		6.67	6.62	0.88			6.45
Daily, Winter (Max)																		
Unmit.	0.8	1.56	0.95	6.62	0.02	0.02	1.79	1.81	0.02	0.45	0.48	17.6	2167	2185	1.59	0.09	0.37	2252
Mit.	0.79	1.56	0.83	6.57	0.02	0.01	1.79	1.8	0.01	0.45	0.47	17.6	2011	2029	1.58	0.09	0.37	2095
% Reduced	1.83	0.47	13.1	0.8		45.5		0.56	47.1		2.12		7.22	7.16	0.88			6.97
Average Daily (Max)																		
Unmit.	0.89	1.66	0.87	7.74	0.02	0.02	1.66	1.68	0.02	0.42	0.44	17.6	2116	2133	1.58	0.08	2.16	2200
Mit.	0.88	1.65	0.75	7.69	0.02	0.01	1.66	1.67	0.01	0.42	0.43	17.6	1959	1977	1.57	0.08	2.16	2043
% Reduced	1.64	0.44	14.3	0.69		45.4		0.6	47.2		2.28		7.39	7.33	0.88			7.13
Annual (Max)																		
Unmit.	0.16	0.3	0.16	1.41	< 0.005	< 0.005	0.3	0.31	< 0.005	0.08	0.08	2.91	350	353	0.26	0.01	0.36	364
Mit.	0.16	0.3	0.14	1.4	< 0.005	< 0.005	0.3	0.3	< 0.005	0.08	0.08	2.91	324	327	0.26	0.01	0.36	338
% Reduced	1.64	0.44	14.3	0.69	4.41	45.4		0.6	47.2		2.28		7.39	7.33	0.88	0.35		7.13

2.5. Operations Emissions by Sector, Unmitigated

Sector	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Mobile	0.86	0.78	0.7	7.99	0.02	0.01	1.79	1.8	0.01	0.45	0.47		1990	1990	0.07	0.08	4.65	2019
Area	0.19	1.03	0.02	2.11	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005	0	5.61	5.61	< 0.005	< 0.005		5.63
Energy	0.01	0.01	0.12	0.05	< 0.005	0.01		0.01	0.01		0.01		347	347	0.02	< 0.005		347
Water												2.79	3.93	6.72	0.01	0.01		8.78
Waste												14.8	0	14.8	1.48	0		51.8
Refrig.																	0.25	0.25
Total	1.06	1.82	0.85	10.2	0.02	0.02	1.79	1.81	0.02	0.45	0.48	17.6	2347	2364	1.58	0.08	4.9	2433
Daily, Winter (Max)																		
Mobile	0.79	0.71	0.83	6.57	0.02	0.01	1.79	1.8	0.01	0.45	0.47		1817	1817	0.08	0.08	0.12	1844
Area	0	0.85	0	0	0	0		0	0		0	0	0	0	0	0		0
Energy	0.01	0.01	0.12	0.05	< 0.005	0.01		0.01	0.01		0.01		347	347	0.02	< 0.005		347
Water												2.79	3.93	6.72	0.01	0.01		8.78
Waste												14.8	0	14.8	1.48	0		51.8
Refrig.																	0.25	0.25
Total	0.8	1.56	0.95	6.62	0.02	0.02	1.79	1.81	0.02	0.45	0.48	17.6	2167	2185	1.59	0.09	0.37	2252
Average Daily																		
Mobile	0.75	0.67	0.74	6.25	0.02	0.01	1.66	1.67	0.01	0.42	0.43		1761	1761	0.07	0.07	1.91	1788
Area	0.13	0.98	0.01	1.44	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005	0	3.84	3.84	< 0.005	< 0.005		3.86
Energy	0.01	0.01	0.12	0.05	< 0.005	0.01		0.01	0.01		0.01		347	347	0.02	< 0.005		347
Water												2.79	3.93	6.72	0.01	0.01		8.78
Waste												14.8	0	14.8	1.48	0		51.8
Refrig.																	0.25	0.25
Total	0.89	1.66	0.87	7.74	0.02	0.02	1.66	1.68	0.02	0.42	0.44	17.6	2116	2133	1.58	0.08	2.16	2200
Annual																		
Mobile	0.14	0.12	0.13	1.14	< 0.005	< 0.005	0.3	0.3	< 0.005	0.08	0.08		292	292	0.01	0.01	0.32	296
Area	0.02	0.18	< 0.005	0.26	< 0.005	< 0.005		0	< 0.005		0	0	0.64	0.64	< 0.005	< 0.005		0.64
Energy	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005		0	< 0.005		0		57.4	57.4	< 0.005	< 0.005		57.5
Water												0.46	0.65	1.11	< 0.005	< 0.005		1.45
Waste												2.45	0	2.45	0.24	0		8.57
Refrig.																	0.04	0.04
Total	0.16	0.3	0.16	1.41	< 0.005	< 0.005	0.3	0.31	< 0.005	0.08	0.08	2.91	350	353	0.26	0.01	0.36	364

2.6. Operations Emissions by Sector, Mitigated

Sector	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		

Mobile	0.86	0.78	0.7	7.99	0.02	0.01	1.79	1.8	0.01	0.45	0.47		1990	1990	0.07	0.08	4.65	2019
Area	0.19	1.03	0.02	2.11	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005	0	5.61	5.61	< 0.005	< 0.005		5.63
Energy	0	0	0	0	0	0		0	0		0		190	190	0.01	< 0.005		191
Water												2.79	3.93	6.72	0.01	0.01		8.78
Waste												14.8	0	14.8	1.48	0		51.8
Refrig.																	0.25	0.25
Total	1.05	1.81	0.72	10.1	0.02	0.01	1.79	1.8	0.01	0.45	0.47	17.6	2190	2208	1.57	0.08	4.9	2276
Daily, Winter (Max)																		
Mobile	0.79	0.71	0.83	6.57	0.02	0.01	1.79	1.8	0.01	0.45	0.47		1817	1817	0.08	0.08	0.12	1844
Area	0	0.85	0	0	0	0		0	0		0	0	0	0	0	0		0
Energy	0	0	0	0	0	0		0	0		0		190	190	0.01	< 0.005		191
Water												2.79	3.93	6.72	0.01	0.01		8.78
Waste												14.8	0	14.8	1.48	0		51.8
Refrig.																	0.25	0.25
Total	0.79	1.56	0.83	6.57	0.02	0.01	1.79	1.8	0.01	0.45	0.47	17.6	2011	2029	1.58	0.09	0.37	2095
Average Daily																		
Mobile	0.75	0.67	0.74	6.25	0.02	0.01	1.66	1.67	0.01	0.42	0.43		1761	1761	0.07	0.07	1.91	1788
Area	0.13	0.98	0.01	1.44	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005	0	3.84	3.84	< 0.005	< 0.005		3.86
Energy	0	0	0	0	0	0		0	0		0		190	190	0.01	< 0.005		191
Water												2.79	3.93	6.72	0.01	0.01		8.78
Waste												14.8	0	14.8	1.48	0		51.8
Refrig.																	0.25	0.25
Total	0.88	1.65	0.75	7.69	0.02	0.01	1.66	1.67	0.01	0.42	0.43	17.6	1959	1977	1.57	0.08	2.16	2043
Annual																		
Mobile	0.14	0.12	0.13	1.14	< 0.005	< 0.005	0.3	0.3	< 0.005	0.08	0.08		292	292	0.01	0.01	0.32	296
Area	0.02	0.18	< 0.005	0.26	< 0.005	< 0.005		0	< 0.005		0	0	0.64	0.64	< 0.005	< 0.005		0.64
Energy	0	0	0	0	0	0		0	0		0		31.5	31.5	< 0.005	< 0.005		31.6
Water												0.46	0.65	1.11	< 0.005	< 0.005		1.45
Waste												2.45	0	2.45	0.24	0		8.57
Refrig.																	0.04	0.04
Total	0.16	0.3	0.14	1.4	< 0.005	< 0.005	0.3	0.3	< 0.005	0.08	0.08	2.91	324	327	0.26	0.01	0.36	338

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartment	0.86	0.78	0.7	7.99	0.02	0.01	1.79	1.8	0.01	0.45	0.47		1990	1990	0.07	0.08	4.65	2019
Total	0.86	0.78	0.7	7.99	0.02	0.01	1.79	1.8	0.01	0.45	0.47		1990	1990	0.07	0.08	4.65	2019
Daily, Winter (Max)																		
Apartment	0.79	0.71	0.83	6.57	0.02	0.01	1.79	1.8	0.01	0.45	0.47		1817	1817	0.08	0.08	0.12	1844
Total	0.79	0.71	0.83	6.57	0.02	0.01	1.79	1.8	0.01	0.45	0.47		1817	1817	0.08	0.08	0.12	1844
Annual																		
Apartment	0.14	0.12	0.13	1.14	< 0.005	< 0.005	0.3	0.3	< 0.005	0.08	0.08		292	292	0.01	0.01	0.32	296
Total	0.14	0.12	0.13	1.14	< 0.005	< 0.005	0.3	0.3	< 0.005	0.08	0.08		292	292	0.01	0.01	0.32	296

4.1.2. Mitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartment	0.86	0.78	0.7	7.99	0.02	0.01	1.79	1.8	0.01	0.45	0.47		1990	1990	0.07	0.08	4.65	2019
Total	0.86	0.78	0.7	7.99	0.02	0.01	1.79	1.8	0.01	0.45	0.47		1990	1990	0.07	0.08	4.65	2019
Daily, Winter (Max)																		
Apartment	0.79	0.71	0.83	6.57	0.02	0.01	1.79	1.8	0.01	0.45	0.47		1817	1817	0.08	0.08	0.12	1844
Total	0.79	0.71	0.83	6.57	0.02	0.01	1.79	1.8	0.01	0.45	0.47		1817	1817	0.08	0.08	0.12	1844
Annual																		
Apartment	0.14	0.12	0.13	1.14	< 0.005	< 0.005	0.3	0.3	< 0.005	0.08	0.08		292	292	0.01	0.01	0.32	296
Total	0.14	0.12	0.13	1.14	< 0.005	< 0.005	0.3	0.3	< 0.005	0.08	0.08		292	292	0.01	0.01	0.32	296

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartments Mid Rise													188	188	0.01	< 0.005		189
Total													188	188	0.01	< 0.005		189
Daily, Winter (Max)																		
Apartments Mid Rise													188	188	0.01	< 0.005		189
Total													188	188	0.01	< 0.005		189
Annual																		
Apartments Mid Rise													31.1	31.1	< 0.005	< 0.005		31.2
Total													31.1	31.1	< 0.005	< 0.005		31.2

4.2.2. Electricity Emissions By Land Use - Mitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartments Mid Rise													190	190	0.01	< 0.005		191
Total													190	190	0.01	< 0.005		191
Daily, Winter (Max)																		
Apartments Mid Rise													190	190	0.01	< 0.005		191
Total													190	190	0.01	< 0.005		191
Annual																		
Apartments Mid Rise													31.5	31.5	< 0.005	< 0.005		31.6
Total													31.5	31.5	< 0.005	< 0.005		31.6

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartment	0.01	0.01	0.12	0.05	< 0.005	0.01		0.01	0.01		0.01		159	159	0.01	< 0.005		159

Total	0.01	0.01	0.12	0.05	< 0.005	0.01	0.01	0.01	0.01	159	159	0.01	< 0.005	159			
Daily, Winter (Max)																	
Apartment	0.01	0.01	0.12	0.05	< 0.005	0.01	0.01	0.01	0.01	159	159	0.01	< 0.005	159			
Total	0.01	0.01	0.12	0.05	< 0.005	0.01	0.01	0.01	0.01	159	159	0.01	< 0.005	159			
Annual																	
Apartment	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	26.2	26.2	< 0.005	< 0.005	26.3			
Total	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	26.2	26.2	< 0.005	< 0.005	26.3			

4.2.4. Natural Gas Emissions By Land Use - Mitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily, Winter (Max)																		
Apartment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual																		
Apartment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

4.3. Area Emissions by Source

4.3.1. Unmitigated

Source	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Hearths	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Consumer Products		0.76																
Architectural Coatings		0.09																
Landscape	0.19	0.18	0.02	2.11	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		5.61	5.61	< 0.005	< 0.005		5.63
Total	0.19	1.03	0.02	2.11	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005	0	5.61	5.61	< 0.005	< 0.005		5.63
Daily, Winter (Max)																		
Hearths	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Consumer Products		0.76																
Architectural Coatings		0.09																
Total	0	0.85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual																		
Hearths	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Consumer Products		0.14																
Architectural Coatings		0.02																
Landscape	0.02	0.02	< 0.005	0.26	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		0.64	0.64	< 0.005	< 0.005		0.64
Total	0.02	0.18	< 0.005	0.26	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005	0	0.64	0.64	< 0.005	< 0.005		0.64

4.3.2. Mitigated

Source	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Hearths	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Consumer Products		0.76																
Architectural Coatings		0.09																
Landscape	0.19	0.18	0.02	2.11	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		5.61	5.61	< 0.005	< 0.005		5.63
Total	0.19	1.03	0.02	2.11	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005	0	5.61	5.61	< 0.005	< 0.005		5.63
Daily, Winter (Max)																		
Hearths	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Consumer Products		0.76																
Architectural Coatings		0.09																
Total	0	0.85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual																		
Hearths	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Consumer Products		0.14																
Architectural Coatings		0.02																
Landscape	0.02	0.02	< 0.005	0.26	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		0.64	0.64	< 0.005	< 0.005		0.64
Total	0.02	0.18	< 0.005	0.26	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005	0	0.64	0.64	< 0.005	< 0.005		0.64

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartments Mid Rise												2.79	3.93	6.72	0.01	0.01		8.78
Total												2.79	3.93	6.72	0.01	0.01		8.78
Daily, Winter (Max)																		
Apartments Mid Rise												2.79	3.93	6.72	0.01	0.01		8.78
Total												2.79	3.93	6.72	0.01	0.01		8.78
Annual																		
Apartments Mid Rise												0.46	0.65	1.11	< 0.005	< 0.005		1.45
Total												0.46	0.65	1.11	< 0.005	< 0.005		1.45

4.4.2. Mitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartments Mid Rise												2.79	3.93	6.72	0.01	0.01		8.78
Total												2.79	3.93	6.72	0.01	0.01		8.78
Daily, Winter (Max)																		
Apartments Mid Rise												2.79	3.93	6.72	0.01	0.01		8.78
Total												2.79	3.93	6.72	0.01	0.01		8.78
Annual																		
Apartments Mid Rise												0.46	0.65	1.11	< 0.005	< 0.005		1.45
Total												0.46	0.65	1.11	< 0.005	< 0.005		1.45

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartments Mid Rise												14.8	0	14.8	1.48	0		51.8
Total												14.8	0	14.8	1.48	0		51.8
Daily, Winter (Max)																		
Apartments Mid Rise												14.8	0	14.8	1.48	0		51.8
Total												14.8	0	14.8	1.48	0		51.8
Annual																		
Apartments Mid Rise												2.45	0	2.45	0.24	0		8.57
Total												2.45	0	2.45	0.24	0		8.57

4.5.2. Mitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartments Mid Rise												14.8	0	14.8	1.48	0		51.8
Total												14.8	0	14.8	1.48	0		51.8
Daily, Winter (Max)																		
Apartments Mid Rise												14.8	0	14.8	1.48	0		51.8
Total												14.8	0	14.8	1.48	0		51.8
Annual																		
Apartments Mid Rise												2.45	0	2.45	0.24	0		8.57
Total												2.45	0	2.45	0.24	0		8.57

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartments Mid Rise																	0.25	0.25
Total																	0.25	0.25
Daily, Winter (Max)																		
Apartments Mid Rise																	0.25	0.25
Total																	0.25	0.25
Annual																		
Apartments Mid Rise																	0.04	0.04
Total																	0.04	0.04

4.6.2. Mitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartments Mid Rise																	0.25	0.25
Total																	0.25	0.25
Daily, Winter (Max)																		
Apartments Mid Rise																	0.25	0.25
Total																	0.25	0.25
Annual																		
Apartments Mid Rise																	0.04	0.04
Total																	0.04	0.04

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Equipment	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.7.2. Mitigated

Equipment	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Equipment	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.8.2. Mitigated

Equipment	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Equipment	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.9.2. Mitigated

Equipment	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Vegetation	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Species	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		
Removed																		
Subtotal																		
Daily, Winter (Max)																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		
Removed																		
Subtotal																		
Annual																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		
Removed																		
Subtotal																		

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Vegetation	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Species	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Avoided																		

Subtotal
Sequestered
Subtotal
Removed
Subtotal

Daily, Winter (Max)
Avoided
Subtotal
Sequestered
Subtotal
Removed
Subtotal

Annual
Avoided
Subtotal
Sequestered
Subtotal
Removed
Subtotal

5. Activity Data
5.9. Operational Mobile Sources
5.9.1. Unmitigated

Land Use T	Trips/Weel	Trips/Satur	Trips/Sund	Trips/Year	VMT/Weel	VMT/Satur	VMT/Sund	VMT/Year
Apartment	201	182	151	69840	2524	2278	1898	875808

5.9.2. Mitigated

Land Use T	Trips/Weel	Trips/Satur	Trips/Sund	Trips/Year	VMT/Weel	VMT/Satur	VMT/Sund	VMT/Year
Apartment	201	182	151	69840	2524	2278	1898	875808

5.10. Operational Area Sources
5.10.1. Hearths
5.10.1.1. Unmitigated

Hearth Typ	Unmitigated (number)
Apartments Mid Rise	
Wood Fire	0
Gas Firepla	0
Propane Fi	0
Electric Fire	0
No Fireplac	37
Conventior	0
Catalytic W	0
Non-Cataly	0
Pellet Woo	0

5.10.1.2. Mitigated

Hearth Typ	Unmitigated (number)
Apartments Mid Rise	
Wood Fire	0
Gas Firepla	0
Propane Fi	0
Electric Fire	0
No Fireplac	37
Conventior	0
Catalytic W	0
Non-Cataly	0
Pellet Woo	0

5.10.2. Architectural Coatings

Residential	Residential	Non-Reside	Non-Reside	Parking Area Coated (sq ft)
71928	23976	0	0	

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0
Summer D	day/yr	250

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0
Summer D	day/yr	250

5.11. Operational Energy Consumption
5.11.1. Unmitigated

Land Use	Electricity (	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Apartment	183165	375	0.0129	0.0017	494615

5.11.2. Mitigated

Land Use	Electricity (	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Apartment	185167	375	0.0129	0.0017	0

5.12. Operational Water and Wastewater Consumption
5.12.1. Unmitigated

Land Use	Indoor Wa	Outdoor Water (gal/year)

Apartment 1304583 185892

5.12.2. Mitigated
Land Use Indoor Wa Outdoor Water (gal/year)
Apartment 1304583 185892

5.13. Operational Waste Generation
5.13.1. Unmitigated
Land Use Waste (ton Cogeneration (kWh/year)
Apartment 27.5

5.13.2. Mitigated
Land Use Waste (ton Cogeneration (kWh/year)
Apartment 27.5

5.14. Operational Refrigeration and Air Conditioning Equipment
5.14.1. Unmitigated
Land Use T Equipment Refrigerant GWP Quantity (k Operations Service Lea Times Serviced
Apartment Average ro R-410A 2088 < 0.005 2.5 2.5 10
Apartment Household R-134a 1430 0.12 0.6 0 1

5.14.2. Mitigated
Land Use T Equipment Refrigerant GWP Quantity (k Operations Service Lea Times Serviced
Apartment Average ro R-410A 2088 < 0.005 2.5 2.5 10
Apartment Household R-134a 1430 0.12 0.6 0 1

5.15. Operational Off-Road Equipment
5.15.1. Unmitigated
Equipment Fuel Type Engine Tier Number pe Hours Per I Horsepow Load Factor

5.15.2. Mitigated
Equipment Fuel Type Engine Tier Number pe Hours Per I Horsepow Load Factor

5.16. Stationary Sources
5.16.1. Emergency Generators and Fire Pumps
Equipment Fuel Type Number pe Hours per I Hours per Horsepow Load Factor

5.16.2. Process Boilers
Equipment Fuel Type Number Boiler Ratir Daily Heat Annual Heat Input (MMBtu/yr)

5.17. User Defined
Equipment Fuel Type

5.18. Vegetation
5.18.1. Land Use Change
5.18.1.1. Unmitigated
Vegetation Vegetation Initial Acre Final Acres

5.18.1.2. Mitigated
Vegetation Vegetation Initial Acre Final Acres

5.18.1. Biomass Cover Type
5.18.1.1. Unmitigated
Biomass Cc Initial Acre Final Acres

5.18.1.2. Mitigated
Biomass Cc Initial Acre Final Acres

5.18.2. Sequestration
5.18.2.1. Unmitigated
Tree Type Number Electricity S Natural Gas Saved (btu/year)

5.18.2.2. Mitigated
Tree Type Number Electricity S Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report
6.1. Climate Risk Summary
Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Ha	Result for F	Unit
Temperatu	24.1	annual days of extreme heat
Extreme Pr	6.45	annual days with precipitation above 20 mm
Sea Level Rise		meters of inundation depth
Wildfire	0.69	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Ha	Exposure S	Sensitivity	Adaptive C	Vulnerability Score
Temperatu	2	0	0	N/A
Extreme Pr	2	0	0	N/A
Sea Level R	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack	N/A	N/A	N/A	N/A
Air Quality	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Ha	Exposure S	Sensitivity	Adaptive C	Vulnerability Score
Temperatu	2	1	1	3
Extreme Pr	2	1	1	3
Sea Level R	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack	N/A	N/A	N/A	N/A
Air Quality	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	
AQ-Ozone	59.7
AQ-PM	39.5
AQ-DPM	50.3
Drinking W	47.8
Lead Risk H	54.5
Pesticides	0
Toxic Relea	20.9
Traffic	21.4
Effect Indicators	
CleanUp Si	18.7
Groundwat	78.3
Haz Waste	59.8
Impaired W	77.3
Solid Waste	0
Sensitive Population	
Asthma	88.7
Cardio-vas	62.6
Low Birth W	7.38
Socioeconomic Factor Indicators	
Education	25.1
Housing	70.2
Linguistic	37
Poverty	67.4
Unemployr	14.4

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	
Above Pov	37.16156
Employed	15.56525
Median HI	23.82908
Education	
Bachelor's	54.33081
High schoo	26.62646
Preschool e	15.20595
Transportation	
Auto Acces	28.94906
Active com	46.06698
Social	
2-parent h	11.18953
Voting	74.93905
Neighborhood	
Alcohol ava	37.77749
Park access	30.25792
Retail dens	94.59772

Supermark	42.71782
Tree canop	91.62069
Housing	
Homeowne	51.98255
Housing ha	41.55011
Low-inc ho	37.45669
Low-inc rer	6.736815
Uncrowdec	66.91903
Health Outcomes	
Insured ad	47.9148
Arthritis	0
Asthma ER	6
High Blood	0
Cancer (ex	0
Asthma	0
Coronary H	0
Chronic Ob	0
Diagnosed	0
Life Expect	11
Cognitively	14
Physically	27
Heart Atta	49
Mental He	0
Chronic Kic	0
Obesity	0
Pedestrian	53
Physical He	0
Stroke	0
Health Risk Behaviors	
Binge Drink	0
Current Sm	0
No Leisure	0
Climate Change Exposures	
Wildfire Ris	0
SLR Inunda	0
Children	67
Elderly	28
English Spe	75
Foreign-bo	11
Outdoor W	47
Climate Change Adaptive Capacity	
Impervious	61
Traffic Den	60
Traffic Acc	23
Other Indices	
Hardship	64
Other Decision Support	
2016 Votin	65

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroS	47
Healthy Pla	30
Project Loc	No
Project Loc	Yes
Project Loc	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

Measure T	Co-Benefits Achieved

7.5. Evaluation Scorecard

Category	Number of	Total Point	Max Possit	Weighted Score

7.6. Health & Equity Custom Measures

Measure T	Sponsor

8. User Changes to Default Data

Screen	Justification
Constructio	no demo
Land Use	PD

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Nai	Sac Rezone North Watt Operations (rezoned)
Operationa	2030
Lead Agency	
Land Use S	Project/site
Analysis Le	County
Windspeec	3.5
Precipitatic	39.2
Location	38.66735756395545, -121.38321539651498
County	Sacramento
City	Unincorporated
Air District	Sacramento Metropolitan AQMD
Air Basin	Sacramento Valley
TAZ	657
EDFZ	13
Electric Uti	Sacramento Municipal Utility District
Gas Utility	Pacific Gas & Electric
App Versio	2022.1.1.21

1.2. Land Use Types

Land Use S	Size	Unit	Lot Acreag	Building Ar	Landscape	Special Lan	Population	Description
Apartment	735	Dwelling U	21.3	705600	185653		2058	

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Energy	E-15	Require All-Electric Development

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Un/Mit.	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Unmit.	20.4	35.6	15.4	183	0.35	0.43	30.8	31.2	0.41	7.82	8.23	348	39874	40223	31.2	1.47	85.1	41527
Mit.	20.1	35.4	12.9	182	0.34	0.23	30.8	31	0.21	7.82	8.03	348	36727	37075	30.9	1.47	85.1	38370
% Reduced	1.43	0.41	16.2	0.58	4.48	46.7		0.64	48.7		2.44		7.89	7.83	0.89	0.4		7.6
Daily, Winter (Max)																		
Unmit.	15.2	30.5	17.2	118	0.32	0.41	30.8	31.2	0.4	7.82	8.22	348	36779	37127	31.3	1.6	7.13	38394
Mit.	14.9	30.4	14.7	117	0.31	0.21	30.8	31	0.2	7.82	8.02	348	33631	33980	31	1.59	7.13	35237
% Reduced	1.91	0.48	14.5	0.89	4.91	48.8		0.64	50.4		2.44		8.56	8.48	0.89	0.37		8.22
Average Daily (Max)																		
Unmit.	17.1	32.4	15.8	140	0.31	0.41	28.5	28.9	0.4	7.25	7.65	348	35895	36244	31.2	1.47	37.9	37499
Mit.	16.8	32.2	13.3	139	0.3	0.21	28.5	28.7	0.2	7.25	7.45	348	32748	33096	30.9	1.46	37.9	34342
% Reduced	1.7	0.45	15.7	0.75	5.04	48.5		0.69	50.4		2.62		8.77	8.68	0.89	0.4		8.42
Annual (Max)																		
Unmit.	3.11	5.91	2.88	25.6	0.06	0.08	5.21	5.28	0.07	1.32	1.4	57.7	5943	6001	5.16	0.24	6.27	6208
Mit.	3.06	5.88	2.43	25.4	0.05	0.04	5.21	5.25	0.04	1.32	1.36	57.7	5422	5479	5.12	0.24	6.27	5686
% Reduced	1.7	0.45	15.7	0.75	5.04	48.5		0.69	50.4		2.62		8.77	8.68	0.89	0.4		8.42

2.5. Operations Emissions by Sector, Unmitigated

Sector	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Mobile	16.3	14.9	12.5	140	0.34	0.21	30.8	31	0.2	7.82	8.02		34345	34345	1.31	1.33	80	34854
Area	3.81	20.5	0.39	41.8	< 0.005	0.02		0.02	0.01		0.01	0	111	111	< 0.005	< 0.005		112
Energy	0.29	0.15	2.48	1.06	0.02	0.2		0.2	0.2		0.2		5372	5372	0.41	0.02		5389
Water												55.4	45.9	101	0.19	0.12		142
Waste												293	0	293	29.3	0		1025
Refrig.																	5.05	5.05
Total	20.4	35.6	15.4	183	0.35	0.43	30.8	31.2	0.41	7.82	8.23	348	39874	40223	31.2	1.47	85.1	41527
Daily, Winter (Max)																		
Mobile	14.9	13.5	14.7	117	0.31	0.21	30.8	31	0.2	7.82	8.02		31361	31361	1.45	1.45	2.07	31833
Area	0	16.9	0	0	0	0		0	0		0	0	0	0	0	0		0
Energy	0.29	0.15	2.48	1.06	0.02	0.2		0.2	0.2		0.2		5372	5372	0.41	0.02		5389
Water												55.4	45.9	101	0.19	0.12		142
Waste												293	0	293	29.3	0		1025
Refrig.																	5.05	5.05
Total	15.2	30.5	17.2	118	0.32	0.41	30.8	31.2	0.4	7.82	8.22	348	36779	37127	31.3	1.6	7.13	38394
Average Daily																		
Mobile	14.2	12.8	13.1	111	0.3	0.2	28.5	28.7	0.19	7.25	7.44		30401	30401	1.3	1.32	32.8	30861
Area	2.61	19.4	0.27	28.7	< 0.005	0.01		0.01	0.01		0.01	0	76.4	76.4	< 0.005	< 0.005		76.6
Energy	0.29	0.15	2.48	1.06	0.02	0.2		0.2	0.2		0.2		5372	5372	0.41	0.02		5389
Water												55.4	45.9	101	0.19	0.12		142
Waste												293	0	293	29.3	0		1025
Refrig.																	5.05	5.05
Total	17.1	32.4	15.8	140	0.31	0.41	28.5	28.9	0.4	7.25	7.65	348	35895	36244	31.2	1.47	37.9	37499
Annual																		
Mobile	2.58	2.34	2.38	20.2	0.05	0.04	5.21	5.24	0.03	1.32	1.36		5033	5033	0.22	0.22	5.44	5109
Area	0.48	3.54	0.05	5.23	< 0.005	< 0.005		0	< 0.005		0	0	12.6	12.6	< 0.005	< 0.005		12.7
Energy	0.05	0.03	0.45	0.19	< 0.005	0.04		0.04	0.04		0.04		889	889	0.07	< 0.005		892
Water												9.17	7.61	16.8	0.03	0.02		23.6
Waste												48.5	0	48.5	4.85	0		170
Refrig.																	0.84	0.84
Total	3.11	5.91	2.88	25.6	0.06	0.08	5.21	5.28	0.07	1.32	1.4	57.7	5943	6001	5.16	0.24	6.27	6208

2.6. Operations Emissions by Sector, Mitigated

Sector	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		

Mobile	16.3	14.9	12.5	140	0.34	0.21	30.8	31	0.2	7.82	8.02		34345	34345	1.31	1.33	80	34854
Area	3.81	20.5	0.39	41.8	< 0.005	0.02		0.02	0.01		0.01	0	111	111	< 0.005	< 0.005		112
Energy	0	0	0	0	0	0		0	0		0		2224	2224	0.13	0.02		2232
Water												55.4	45.9	101	0.19	0.12		142
Waste												293	0	293	29.3	0		1025
Refrig.																	5.05	5.05
Total	20.1	35.4	12.9	182	0.34	0.23	30.8	31	0.21	7.82	8.03	348	36727	37075	30.9	1.47	85.1	38370
Daily, Winter (Max)																		
Mobile	14.9	13.5	14.7	117	0.31	0.21	30.8	31	0.2	7.82	8.02		31361	31361	1.45	1.45	2.07	31833
Area	0	16.9	0	0	0	0		0	0		0	0	0	0	0	0		0
Energy	0	0	0	0	0	0		0	0		0		2224	2224	0.13	0.02		2232
Water												55.4	45.9	101	0.19	0.12		142
Waste												293	0	293	29.3	0		1025
Refrig.																	5.05	5.05
Total	14.9	30.4	14.7	117	0.31	0.21	30.8	31	0.2	7.82	8.02	348	33631	33980	31	1.59	7.13	35237
Average Daily																		
Mobile	14.2	12.8	13.1	111	0.3	0.2	28.5	28.7	0.19	7.25	7.44		30401	30401	1.3	1.32	32.8	30861
Area	2.61	19.4	0.27	28.7	< 0.005	0.01		0.01	0.01		0.01	0	76.4	76.4	< 0.005	< 0.005		76.6
Energy	0	0	0	0	0	0		0	0		0		2224	2224	0.13	0.02		2232
Water												55.4	45.9	101	0.19	0.12		142
Waste												293	0	293	29.3	0		1025
Refrig.																	5.05	5.05
Total	16.8	32.2	13.3	139	0.3	0.21	28.5	28.7	0.2	7.25	7.45	348	32748	33096	30.9	1.46	37.9	34342
Annual																		
Mobile	2.58	2.34	2.38	20.2	0.05	0.04	5.21	5.24	0.03	1.32	1.36		5033	5033	0.22	0.22	5.44	5109
Area	0.48	3.54	0.05	5.23	< 0.005	< 0.005		0	< 0.005		0	0	12.6	12.6	< 0.005	< 0.005		12.7
Energy	0	0	0	0	0	0		0	0		0		368	368	0.02	< 0.005		370
Water												9.17	7.61	16.8	0.03	0.02		23.6
Waste												48.5	0	48.5	4.85	0		170
Refrig.																	0.84	0.84
Total	3.06	5.88	2.43	25.4	0.05	0.04	5.21	5.25	0.04	1.32	1.36	57.7	5422	5479	5.12	0.24	6.27	5686

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartment	16.3	14.9	12.5	140	0.34	0.21	30.8	31	0.2	7.82	8.02		34345	34345	1.31	1.33	80	34854
Total	16.3	14.9	12.5	140	0.34	0.21	30.8	31	0.2	7.82	8.02		34345	34345	1.31	1.33	80	34854
Daily, Winter (Max)																		
Apartment	14.9	13.5	14.7	117	0.31	0.21	30.8	31	0.2	7.82	8.02		31361	31361	1.45	1.45	2.07	31833
Total	14.9	13.5	14.7	117	0.31	0.21	30.8	31	0.2	7.82	8.02		31361	31361	1.45	1.45	2.07	31833
Annual																		
Apartment	2.58	2.34	2.38	20.2	0.05	0.04	5.21	5.24	0.03	1.32	1.36		5033	5033	0.22	0.22	5.44	5109
Total	2.58	2.34	2.38	20.2	0.05	0.04	5.21	5.24	0.03	1.32	1.36		5033	5033	0.22	0.22	5.44	5109

4.1.2. Mitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartment	16.3	14.9	12.5	140	0.34	0.21	30.8	31	0.2	7.82	8.02		34345	34345	1.31	1.33	80	34854
Total	16.3	14.9	12.5	140	0.34	0.21	30.8	31	0.2	7.82	8.02		34345	34345	1.31	1.33	80	34854
Daily, Winter (Max)																		
Apartment	14.9	13.5	14.7	117	0.31	0.21	30.8	31	0.2	7.82	8.02		31361	31361	1.45	1.45	2.07	31833
Total	14.9	13.5	14.7	117	0.31	0.21	30.8	31	0.2	7.82	8.02		31361	31361	1.45	1.45	2.07	31833
Annual																		
Apartment	2.58	2.34	2.38	20.2	0.05	0.04	5.21	5.24	0.03	1.32	1.36		5033	5033	0.22	0.22	5.44	5109
Total	2.58	2.34	2.38	20.2	0.05	0.04	5.21	5.24	0.03	1.32	1.36		5033	5033	0.22	0.22	5.44	5109

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartments Mid Rise													2223	2223	0.13	0.02		2231
Total													2223	2223	0.13	0.02		2231
Daily, Winter (Max)																		
Apartments Mid Rise													2223	2223	0.13	0.02		2231
Total													2223	2223	0.13	0.02		2231
Annual																		
Apartments Mid Rise													368	368	0.02	< 0.005		369
Total													368	368	0.02	< 0.005		369

4.2.2. Electricity Emissions By Land Use - Mitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartments Mid Rise													2224	2224	0.13	0.02		2232
Total													2224	2224	0.13	0.02		2232
Daily, Winter (Max)																		
Apartments Mid Rise													2224	2224	0.13	0.02		2232
Total													2224	2224	0.13	0.02		2232
Annual																		
Apartments Mid Rise													368	368	0.02	< 0.005		370
Total													368	368	0.02	< 0.005		370

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartment	0.29	0.15	2.48	1.06	0.02	0.2		0.2	0.2		0.2		3149	3149	0.28	0.01		3158

Total	0.29	0.15	2.48	1.06	0.02	0.2	0.2	0.2	0.2	3149	3149	0.28	0.01	3158
Daily, Winter (Max)														
Apartment	0.29	0.15	2.48	1.06	0.02	0.2	0.2	0.2	0.2	3149	3149	0.28	0.01	3158
Total	0.29	0.15	2.48	1.06	0.02	0.2	0.2	0.2	0.2	3149	3149	0.28	0.01	3158
Annual														
Apartment	0.05	0.03	0.45	0.19	< 0.005	0.04	0.04	0.04	0.04	521	521	0.05	< 0.005	523
Total	0.05	0.03	0.45	0.19	< 0.005	0.04	0.04	0.04	0.04	521	521	0.05	< 0.005	523

4.2.4. Natural Gas Emissions By Land Use - Mitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily, Winter (Max)																		
Apartment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual																		
Apartment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

4.3. Area Emissions by Source

4.3.1. Unmitigated

Source	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Hearths	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Consumer Products		15.1																
Architectural Coatings		1.81																
Landscape	3.81	3.61	0.39	41.8	< 0.005	0.02		0.02	0.01		0.01		111	111	< 0.005	< 0.005		112
Total	3.81	20.5	0.39	41.8	< 0.005	0.02		0.02	0.01		0.01	0	111	111	< 0.005	< 0.005		112
Daily, Winter (Max)																		
Hearths	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Consumer Products		15.1																
Architectural Coatings		1.81																
Total	0	16.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual																		
Hearths	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Consumer Products		2.76																
Architectural Coatings		0.33																
Landscape	0.48	0.45	0.05	5.23	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		12.6	12.6	< 0.005	< 0.005		12.7
Total	0.48	3.54	0.05	5.23	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005	0	12.6	12.6	< 0.005	< 0.005		12.7

4.3.2. Mitigated

Source	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Hearths	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Consumer Products		15.1																
Architectural Coatings		1.81																
Landscape	3.81	3.61	0.39	41.8	< 0.005	0.02		0.02	0.01		0.01		111	111	< 0.005	< 0.005		112
Total	3.81	20.5	0.39	41.8	< 0.005	0.02		0.02	0.01		0.01	0	111	111	< 0.005	< 0.005		112
Daily, Winter (Max)																		
Hearths	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Consumer Products		15.1																
Architectural Coatings		1.81																
Total	0	16.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual																		
Hearths	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Consumer Products		2.76																
Architectural Coatings		0.33																
Landscape	0.48	0.45	0.05	5.23	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		12.6	12.6	< 0.005	< 0.005		12.7
Total	0.48	3.54	0.05	5.23	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005	0	12.6	12.6	< 0.005	< 0.005		12.7

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartments Mid Rise												55.4	45.9	101	0.19	0.12		142
Total												55.4	45.9	101	0.19	0.12		142
Daily, Winter (Max)																		
Apartments Mid Rise												55.4	45.9	101	0.19	0.12		142
Total												55.4	45.9	101	0.19	0.12		142
Annual																		
Apartments Mid Rise												9.17	7.61	16.8	0.03	0.02		23.6
Total												9.17	7.61	16.8	0.03	0.02		23.6

4.4.2. Mitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartments Mid Rise												55.4	45.9	101	0.19	0.12		142
Total												55.4	45.9	101	0.19	0.12		142
Daily, Winter (Max)																		
Apartments Mid Rise												55.4	45.9	101	0.19	0.12		142
Total												55.4	45.9	101	0.19	0.12		142
Annual																		
Apartments Mid Rise												9.17	7.61	16.8	0.03	0.02		23.6
Total												9.17	7.61	16.8	0.03	0.02		23.6

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartments Mid Rise												293	0	293	29.3	0		1025
Total												293	0	293	29.3	0		1025
Daily, Winter (Max)																		
Apartments Mid Rise												293	0	293	29.3	0		1025
Total												293	0	293	29.3	0		1025
Annual																		
Apartments Mid Rise												48.5	0	48.5	4.85	0		170
Total												48.5	0	48.5	4.85	0		170

4.5.2. Mitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartments Mid Rise												293	0	293	29.3	0		1025
Total												293	0	293	29.3	0		1025
Daily, Winter (Max)																		
Apartments Mid Rise												293	0	293	29.3	0		1025
Total												293	0	293	29.3	0		1025
Annual																		
Apartments Mid Rise												48.5	0	48.5	4.85	0		170
Total												48.5	0	48.5	4.85	0		170

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartments Mid Rise																	5.05	5.05
Total																	5.05	5.05
Daily, Winter (Max)																		
Apartments Mid Rise																	5.05	5.05
Total																	5.05	5.05
Annual																		
Apartments Mid Rise																	0.84	0.84
Total																	0.84	0.84

4.6.2. Mitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartments Mid Rise																	5.05	5.05
Total																	5.05	5.05
Daily, Winter (Max)																		
Apartments Mid Rise																	5.05	5.05
Total																	5.05	5.05
Annual																		
Apartments Mid Rise																	0.84	0.84
Total																	0.84	0.84

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Equipment	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.7.2. Mitigated

Equipment	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Equipment	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.8.2. Mitigated

Equipment	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Equipment	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.9.2. Mitigated

Equipment	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Vegetation	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Species	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		
Removed																		
Subtotal																		
Daily, Winter (Max)																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		
Removed																		
Subtotal																		
Annual																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		
Removed																		
Subtotal																		

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Vegetation	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Species	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Avoided																		

Subtotal
Sequestered
Subtotal
Removed
Subtotal

Daily, Winter (Max)
Avoided
Subtotal
Sequestered
Subtotal
Removed
Subtotal

Annual
Avoided
Subtotal
Sequestered
Subtotal
Removed
Subtotal

5. Activity Data
5.9. Operational Mobile Sources
5.9.1. Unmitigated

Land Use T	Trips/Weel	Trips/Satur	Trips/Sund	Trips/Year	VMT/Weel	VMT/Satur	VMT/Sund	VMT/Year
Apartment	3998	3609	3006	1387365	43437	39205	32657	15071676

5.9.2. Mitigated

Land Use T	Trips/Weel	Trips/Satur	Trips/Sund	Trips/Year	VMT/Weel	VMT/Satur	VMT/Sund	VMT/Year
Apartment	3998	3609	3006	1387365	43437	39205	32657	15071676

5.10. Operational Area Sources
5.10.1. Hearths
5.10.1.1. Unmitigated

Hearth Typ	Unmitigated (number)
Apartments Mid Rise	
Wood Fire	0
Gas Firepla	0
Propane Fi	0
Electric Fire	0
No Fireplac	735
Conventior	0
Catalytic W	0
Non-Cataly	0
Pellet Woo	0

5.10.1.2. Mitigated

Hearth Typ	Unmitigated (number)
Apartments Mid Rise	
Wood Fire	0
Gas Firepla	0
Propane Fi	0
Electric Fire	0
No Fireplac	735
Conventior	0
Catalytic W	0
Non-Cataly	0
Pellet Woo	0

5.10.2. Architectural Coatings

Residential	Residential	Non-Reside	Non-Reside	Parking Area Coated (sq ft)
1428840	476280	0	0	

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0
Summer D	day/yr	250

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0
Summer D	day/yr	250

5.11. Operational Energy Consumption
5.11.1. Unmitigated

Land Use	Electricity (	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Apartment	3638555	223	0.0129	0.0017	9825458

5.11.2. Mitigated

Land Use	Electricity (	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Apartment	3640556	223	0.0129	0.0017	0

5.12. Operational Water and Wastewater Consumption
5.12.1. Unmitigated

Land Use	Indoor Wa	Outdoor Water (gal/year)

Apartment	25915365	3169087

5.12.2. Mitigated

Land Use	Indoor Wa	Outdoor Water (gal/year)
Apartment	25915365	3169087

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton	Cogeneration (kWh/year)
Apartment	544	

5.13.2. Mitigated

Land Use	Waste (ton	Cogeneration (kWh/year)
Apartment	544	

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use	T	Equipment	Refrigerant	GWP	Quantity (k	Operations	Service Lea	Times Serviced
Apartment		Average ro	R-410A	2088	< 0.005	2.5	2.5	10
Apartment		Household	R-134a	1430	0.12	0.6	0	1

5.14.2. Mitigated

Land Use	T	Equipment	Refrigerant	GWP	Quantity (k	Operations	Service Lea	Times Serviced
Apartment		Average ro	R-410A	2088	< 0.005	2.5	2.5	10
Apartment		Household	R-134a	1430	0.12	0.6	0	1

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment	Fuel Type	Engine Tier	Number pe	Hours Per I	Horsepowe	Load Factor

5.15.2. Mitigated

Equipment	Fuel Type	Engine Tier	Number pe	Hours Per I	Horsepowe	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment	Fuel Type	Number pe	Hours per I	Hours per \	Horsepowe	Load Factor

5.16.2. Process Boilers

Equipment	Fuel Type	Number	Boiler Ratir	Daily Heat	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation	Vegetation	Initial Acre	Final Acres

5.18.1.2. Mitigated

Vegetation	Vegetation	Initial Acre	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cc	Initial Acre	Final Acres

5.18.1.2. Mitigated

Biomass Cc	Initial Acre	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity S	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity S	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Ha	Result for F	Unit
Temperatu	21.8	annual days of extreme heat
Extreme Pr	6.35	annual days with precipitation above 20 mm
Sea Level Rise		meters of inundation depth
Wildfire	0	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities

6.2. Initial Climate Risk Scores

Climate Ha	Exposure S	Sensitivity	Adaptive C	Vulnerability Score

Temperatu	1	0	0	N/A
Extreme Pr	2	0	0	N/A
Sea Level R	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack	N/A	N/A	N/A	N/A
Air Quality	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Ha	Exposure S	Sensitivity	Adaptive C	Vulnerability Score
Temperatu	1	1	1	2
Extreme Pr	2	1	1	3
Sea Level R	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack	N/A	N/A	N/A	N/A
Air Quality	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	
AQ-Ozone	58.2
AQ-PM	37.4
AQ-DPM	27.5
Drinking W	61.1
Lead Risk H	92.2
Pesticides	7.24
Toxic Relea	21.8
Traffic	47
Effect Indicators	
CleanUp Si	80.9
Groundwat	99.2
Haz Waste	61.6
Impaired W	0
Solid Waste	52.9
Sensitive Population	
Asthma	93.4
Cardio-vas	69.2
Low Birth W	79.4
Socioeconomic Factor Indicators	
Education	62.9
Housing	73.4
Linguistic	39.2
Poverty	91.6
Unemployr	65.6

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	
Above Pov	10.16297
Employed	6.274862
Median HI	6.672655
Education	
Bachelor's	19.73566
High schoo	12.79353
Preschool e	42.65366
Transportation	
Auto Acces	24.89414
Active com	74.06647
Social	
2-parent h	39.00937
Voting	13.02451
Neighborhood	
Alcohol ava	41.65277
Park access	47.42718
Retail dens	38.27794
Supermark	72.19299
Tree canop	82.34313
Housing	

Homeowne	23.13615
Housing ha	24.9198
Low-inc ho	13.20416
Low-inc rer	43.79571
Uncrowdec	25.44591
Health Outcomes	
Insured adı	37.80316
Arthritis	0
Asthma ER	5.9
High Blood	0
Cancer (ex	0
Asthma	0
Coronary H	0
Chronic Ob	0
Diagnosed	0
Life Expect	5.5
Cognitively	4
Physically	5.6
Heart Atta	17
Mental He	0
Chronic Kic	0
Obesity	0
Pedestrian	97
Physical He	0
Stroke	0
Health Risk Behaviors	
Binge Drink	0
Current Sm	0
No Leisure	0
Climate Change Exposures	
Wildfire Ris	0
SLR Inunda	0
Children	16
Elderly	68
English Spe	43
Foreign-bo	30
Outdoor W	49
Climate Change Adaptive Capacity	
Impervious	51
Traffic Den	47
Traffic Acc	66
Other Indices	
Hardship	81
Other Decision Support	
2016 Votin	6.4

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroS	83
Healthy Pla	13
Project Loc	Yes
Project Loc	Yes
Project Loc	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

Measure T	Co-Benefits Achieved

7.5. Evaluation Scorecard

Category	Number of Total Point	Max Possit	Weighted Score

7.6. Health & Equity Custom Measures

Measure T	Sponsor

8. User Changes to Default Data

Screen	Justification
Land Use	20% of total lot acreage is landscaped as in GP
Constructio	no demo

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Nar	Sac Rezone Old Florin operations (rezoned)
Operationa	2030
Lead Agency	
Land Use Si	Project/site
Analysis Le	County
Windspeed	3
Precipitatic	37.8
Location	38.49656099729435, -121.39733654991514
County	Sacramento
City	Unincorporated
Air District	Sacramento Metropolitan AQMD
Air Basin	Sacramento Valley
TAZ	774
EDFZ	13
Electric Uti	Sacramento Municipal Utility District
Gas Utility	Pacific Gas & Electric
App Versio	2022.1.1.21

1.2. Land Use Types

Land Use Si	Size	Unit	Lot Acreag	Building Ar	Landscape	Special Lan	Population	Description
Apartment	777	Dwelling U	25.2	745920	219717		2176	

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Energy	E-15	Require All-Electric Development

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Un/Mit.	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Unmit.	19.8	36.3	12.7	149	0.25	0.38	21.1	21.5	0.37	5.36	5.73	368	29637	30005	32.7	1.16	60.2	31228
Mit.	19.5	36.1	10.1	148	0.23	0.17	21.1	21.3	0.16	5.36	5.51	368	26310	26678	32.4	1.15	60.2	27891
% Reduced	1.55	0.42	20.6	0.75	6.66	55.6		0.99	57.7		3.7		11.2	11.1	0.9	0.54		10.7
Daily, Winter (Max)																		
Unmit.	14.3	31	13.9	92.5	0.23	0.36	21.1	21.5	0.35	5.36	5.71	368	27481	27850	32.8	1.26	6.76	29051
Mit.	14	30.8	11.3	91.4	0.21	0.15	21.1	21.3	0.14	5.36	5.5	368	24154	24522	32.5	1.25	6.76	25714
% Reduced	2.14	0.5	18.8	1.21	7.3	58.6		0.99	60.2		3.71		12.1	11.9	0.9	0.5		11.5
Average Daily (Max)																		
Unmit.	16.4	33	13	116	0.22	0.37	19.6	19.9	0.36	4.97	5.33	368	26888	27256	32.7	1.16	27.8	28445
Mit.	16.1	32.8	10.3	115	0.21	0.16	19.6	19.7	0.14	4.97	5.12	368	23560	23928	32.4	1.15	27.8	25108
% Reduced	1.87	0.47	20.2	0.96	7.47	57.6		1.06	59.6		3.98		12.4	12.2	0.9	0.54		11.7
Annual (Max)																		
Unmit.	2.99	6.02	2.37	21.1	0.04	0.07	3.57	3.64	0.06	0.91	0.97	61	4452	4513	5.41	0.19	4.61	4709
Mit.	2.94	5.99	1.89	20.9	0.04	0.03	3.57	3.6	0.03	0.91	0.93	61	3901	3962	5.36	0.19	4.61	4157
% Reduced	1.87	0.47	20.2	0.96	7.47	57.6		1.06	59.6		3.98		12.4	12.2	0.9	0.54		11.7

2.5. Operations Emissions by Sector, Unmitigated

Sector	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Mobile	15.5	14.4	9.67	104	0.23	0.15	21.1	21.3	0.14	5.36	5.5		23792	23792	1.07	1.01	54.8	24173
Area	4.03	21.7	0.41	44.2	< 0.005	0.02		0.02	0.02		0.02	0	118	118	< 0.005	< 0.005		118
Energy	0.31	0.15	2.62	1.12	0.02	0.21		0.21	0.21		0.21		5679	5679	0.43	0.02		5697
Water												58.5	49	108	0.2	0.13		151
Waste												310	0	310	31	0		1084
Refrig.																	5.34	5.34
Total	19.8	36.3	12.7	149	0.25	0.38	21.1	21.5	0.37	5.36	5.73	368	29637	30005	32.7	1.16	60.2	31228
Daily, Winter (Max)																		
Mobile	14	12.9	11.3	91.4	0.21	0.15	21.1	21.3	0.14	5.36	5.5		21754	21754	1.23	1.1	1.42	22115
Area	0	17.9	0	0	0	0		0	0		0	0	0	0	0	0		0
Energy	0.31	0.15	2.62	1.12	0.02	0.21		0.21	0.21		0.21		5679	5679	0.43	0.02		5697
Water												58.5	49	108	0.2	0.13		151
Waste												310	0	310	31	0		1084
Refrig.																	5.34	5.34
Total	14.3	31	13.9	92.5	0.23	0.36	21.1	21.5	0.35	5.36	5.71	368	27481	27850	32.8	1.26	6.76	29051
Average Daily																		
Mobile	13.3	12.3	10.1	84.4	0.21	0.14	19.6	19.7	0.13	4.97	5.11		21079	21079	1.08	1	22.5	21427
Area	2.76	20.5	0.28	30.3	< 0.005	0.01		0.01	0.01		0.01	0	80.7	80.7	< 0.005	< 0.005		81
Energy	0.31	0.15	2.62	1.12	0.02	0.21		0.21	0.21		0.21		5679	5679	0.43	0.02		5697
Water												58.5	49	108	0.2	0.13		151
Waste												310	0	310	31	0		1084
Refrig.																	5.34	5.34
Total	16.4	33	13	116	0.22	0.37	19.6	19.9	0.36	4.97	5.33	368	26888	27256	32.7	1.16	27.8	28445
Annual																		
Mobile	2.43	2.25	1.84	15.4	0.04	0.03	3.57	3.6	0.02	0.91	0.93		3490	3490	0.18	0.17	3.73	3548
Area	0.5	3.74	0.05	5.53	< 0.005	< 0.005		0	< 0.005		0	0	13.4	13.4	< 0.005	< 0.005		13.4
Energy	0.06	0.03	0.48	0.2	< 0.005	0.04		0.04	0.04		0.04		940	940	0.07	< 0.005		943
Water												9.69	8.11	17.8	0.03	0.02		25
Waste												51.3	0	51.3	5.12	0		179
Refrig.																	0.88	0.88
Total	2.99	6.02	2.37	21.1	0.04	0.07	3.57	3.64	0.06	0.91	0.97	61	4452	4513	5.41	0.19	4.61	4709

2.6. Operations Emissions by Sector, Mitigated

Sector	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Mobile	15.5	14.4	9.67	104	0.23	0.15	21.1	21.3	0.14	5.36	5.5		23792	23792	1.07	1.01	54.8	24173
Area	4.03	21.7	0.41	44.2	< 0.005	0.02		0.02	0.02		0.02	0	118	118	< 0.005	< 0.005		118
Energy	0	0	0	0	0	0		0	0		0		2351	2351	0.14	0.02		2360
Water												58.5	49	108	0.2	0.13		151
Waste												310	0	310	31	0		1084
Refrig.																	5.34	5.34
Total	19.5	36.1	10.1	148	0.23	0.17	21.1	21.3	0.16	5.36	5.51	368	26310	26678	32.4	1.15	60.2	27891
Daily, Winter (Max)																		
Mobile	14	12.9	11.3	91.4	0.21	0.15	21.1	21.3	0.14	5.36	5.5		21754	21754	1.23	1.1	1.42	22115
Area	0	17.9	0	0	0	0		0	0		0	0	0	0	0	0		0
Energy	0	0	0	0	0	0		0	0		0		2351	2351	0.14	0.02		2360
Water												58.5	49	108	0.2	0.13		151
Waste												310	0	310	31	0		1084
Refrig.																	5.34	5.34
Total	14	30.8	11.3	91.4	0.21	0.15	21.1	21.3	0.14	5.36	5.5	368	24154	24522	32.5	1.25	6.76	25714
Average Daily																		
Mobile	13.3	12.3	10.1	84.4	0.21	0.14	19.6	19.7	0.13	4.97	5.11		21079	21079	1.08	1	22.5	21427
Area	2.76	20.5	0.28	30.3	< 0.005	0.01		0.01	0.01		0.01	0	80.7	80.7	< 0.005	< 0.005		81
Energy	0	0	0	0	0	0		0	0		0		2351	2351	0.14	0.02		2360
Water												58.5	49	108	0.2	0.13		151
Waste												310	0	310	31	0		1084
Refrig.																	5.34	5.34
Total	16.1	32.8	10.3	115	0.21	0.16	19.6	19.7	0.14	4.97	5.12	368	23560	23928	32.4	1.15	27.8	25108
Annual																		
Mobile	2.43	2.25	1.84	15.4	0.04	0.03	3.57	3.6	0.02	0.91	0.93		3490	3490	0.18	0.17	3.73	3548
Area	0.5	3.74	0.05	5.53	< 0.005	< 0.005		0	< 0.005		0	0	13.4	13.4	< 0.005	< 0.005		13.4

Energy	0	0	0	0	0	0	0	0	0	0	389	389	0.02	< 0.005			391
Water										9.69	8.11	17.8	0.03	0.02			25
Waste										51.3	0	51.3	5.12	0			179
Refrig.																0.88	0.88
Total	2.94	5.99	1.89	20.9	0.04	0.03	3.57	3.6	0.03	0.91	0.93	61	3901	3962	5.36	0.19	4.61	4157

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartment:	15.5	14.4	9.67	104	0.23	0.15	21.1	21.3	0.14	5.36	5.5		23792	23792	1.07	1.01	54.8	24173
Total	15.5	14.4	9.67	104	0.23	0.15	21.1	21.3	0.14	5.36	5.5		23792	23792	1.07	1.01	54.8	24173
Daily, Winter (Max)																		
Apartment:	14	12.9	11.3	91.4	0.21	0.15	21.1	21.3	0.14	5.36	5.5		21754	21754	1.23	1.1	1.42	22115
Total	14	12.9	11.3	91.4	0.21	0.15	21.1	21.3	0.14	5.36	5.5		21754	21754	1.23	1.1	1.42	22115
Annual																		
Apartment:	2.43	2.25	1.84	15.4	0.04	0.03	3.57	3.6	0.02	0.91	0.93		3490	3490	0.18	0.17	3.73	3548
Total	2.43	2.25	1.84	15.4	0.04	0.03	3.57	3.6	0.02	0.91	0.93		3490	3490	0.18	0.17	3.73	3548

4.1.2. Mitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartment:	15.5	14.4	9.67	104	0.23	0.15	21.1	21.3	0.14	5.36	5.5		23792	23792	1.07	1.01	54.8	24173
Total	15.5	14.4	9.67	104	0.23	0.15	21.1	21.3	0.14	5.36	5.5		23792	23792	1.07	1.01	54.8	24173
Daily, Winter (Max)																		
Apartment:	14	12.9	11.3	91.4	0.21	0.15	21.1	21.3	0.14	5.36	5.5		21754	21754	1.23	1.1	1.42	22115
Total	14	12.9	11.3	91.4	0.21	0.15	21.1	21.3	0.14	5.36	5.5		21754	21754	1.23	1.1	1.42	22115
Annual																		
Apartment:	2.43	2.25	1.84	15.4	0.04	0.03	3.57	3.6	0.02	0.91	0.93		3490	3490	0.18	0.17	3.73	3548
Total	2.43	2.25	1.84	15.4	0.04	0.03	3.57	3.6	0.02	0.91	0.93		3490	3490	0.18	0.17	3.73	3548

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartments Mid Rise													2350	2350	0.14	0.02		2359
Total													2350	2350	0.14	0.02		2359
Daily, Winter (Max)																		
Apartments Mid Rise													2350	2350	0.14	0.02		2359
Total													2350	2350	0.14	0.02		2359
Annual																		
Apartments Mid Rise													389	389	0.02	< 0.005		391
Total													389	389	0.02	< 0.005		391

4.2.2. Electricity Emissions By Land Use - Mitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartments Mid Rise													2351	2351	0.14	0.02		2360
Total													2351	2351	0.14	0.02		2360
Daily, Winter (Max)																		
Apartments Mid Rise													2351	2351	0.14	0.02		2360
Total													2351	2351	0.14	0.02		2360
Annual																		
Apartments Mid Rise													389	389	0.02	< 0.005		391
Total													389	389	0.02	< 0.005		391

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartment:	0.31	0.15	2.62	1.12	0.02	0.21		0.21	0.21		0.21		3329	3329	0.29	0.01		3338
Total	0.31	0.15	2.62	1.12	0.02	0.21		0.21	0.21		0.21		3329	3329	0.29	0.01		3338
Daily, Winter (Max)																		
Apartment:	0.31	0.15	2.62	1.12	0.02	0.21		0.21	0.21		0.21		3329	3329	0.29	0.01		3338
Total	0.31	0.15	2.62	1.12	0.02	0.21		0.21	0.21		0.21		3329	3329	0.29	0.01		3338
Annual																		
Apartment:	0.06	0.03	0.48	0.2	< 0.005	0.04		0.04	0.04		0.04		551	551	0.05	< 0.005		553
Total	0.06	0.03	0.48	0.2	< 0.005	0.04		0.04	0.04		0.04		551	551	0.05	< 0.005		553

4.2.4. Natural Gas Emissions By Land Use - Mitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartment:	0	0	0	0	0	0		0	0		0		0	0	0	0		0
Total	0	0	0	0	0	0		0	0		0		0	0	0	0		0
Daily, Winter (Max)																		
Apartment:	0	0	0	0	0	0		0	0		0		0	0	0	0		0
Total	0	0	0	0	0	0		0	0		0		0	0	0	0		0
Annual																		
Apartment:	0	0	0	0	0	0		0	0		0		0	0	0	0		0
Total	0	0	0	0	0	0		0	0		0		0	0	0	0		0

4.3. Area Emissions by Source

4.3.1. Unmitigated

Source	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Hearths	0	0	0	0	0	0		0	0		0	0	0	0	0	0		0
Consumer Products		16																
Architectural Coatings		1.92																
Landscape	4.03	3.81	0.41	44.2	< 0.005	0.02		0.02	0.02		0.02		118	118	< 0.005	< 0.005		118
Total	4.03	21.7	0.41	44.2	< 0.005	0.02		0.02	0.02		0.02	0	118	118	< 0.005	< 0.005		118
Daily, Winter (Max)																		
Hearths	0	0	0	0	0	0		0	0		0	0	0	0	0	0		0
Consumer Products		16																
Architectural Coatings		1.92																
Total	0	17.9	0	0	0	0		0	0		0	0	0	0	0	0		0
Annual																		
Hearths	0	0	0	0	0	0		0	0		0	0	0	0	0	0		0
Consumer Products		2.91																
Architectural Coatings		0.35																
Landscape	0.5	0.48	0.05	5.53	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		13.4	13.4	< 0.005	< 0.005		13.4
Total	0.5	3.74	0.05	5.53	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005	0	13.4	13.4	< 0.005	< 0.005		13.4

4.3.2. Mitigated

Source	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Hearths	0	0	0	0	0	0		0	0		0	0	0	0	0	0		0
Consumer Products		16																
Architectural Coatings		1.92																
Landscape	4.03	3.81	0.41	44.2	< 0.005	0.02		0.02	0.02		0.02		118	118	< 0.005	< 0.005		118
Total	4.03	21.7	0.41	44.2	< 0.005	0.02		0.02	0.02		0.02	0	118	118	< 0.005	< 0.005		118
Daily, Winter (Max)																		
Hearths	0	0	0	0	0	0		0	0		0	0	0	0	0	0		0
Consumer Products		16																

Architectural Coatings		1.92																
Total	0	17.9	0	0	0	0		0	0		0	0	0	0	0	0		0
Annual																		
Hearths	0	0	0	0	0	0		0	0		0	0	0	0	0	0		0
Consumer Products		2.91																
Architectural Coatings		0.35																
Landscape	0.5	0.48	0.05	5.53	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		13.4	13.4	< 0.005	< 0.005		13.4
Total	0.5	3.74	0.05	5.53	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005	0	13.4	13.4	< 0.005	< 0.005		13.4

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartments Mid Rise												58.5	49	108	0.2	0.13		151
Total												58.5	49	108	0.2	0.13		151
Daily, Winter (Max)																		
Apartments Mid Rise												58.5	49	108	0.2	0.13		151
Total												58.5	49	108	0.2	0.13		151
Annual																		
Apartments Mid Rise												9.69	8.11	17.8	0.03	0.02		25
Total												9.69	8.11	17.8	0.03	0.02		25

4.4.2. Mitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartments Mid Rise												58.5	49	108	0.2	0.13		151
Total												58.5	49	108	0.2	0.13		151
Daily, Winter (Max)																		
Apartments Mid Rise												58.5	49	108	0.2	0.13		151
Total												58.5	49	108	0.2	0.13		151
Annual																		
Apartments Mid Rise												9.69	8.11	17.8	0.03	0.02		25
Total												9.69	8.11	17.8	0.03	0.02		25

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartments Mid Rise												310	0	310	31	0		1084
Total												310	0	310	31	0		1084
Daily, Winter (Max)																		
Apartments Mid Rise												310	0	310	31	0		1084
Total												310	0	310	31	0		1084
Annual																		
Apartments Mid Rise												51.3	0	51.3	5.12	0		179
Total												51.3	0	51.3	5.12	0		179

4.5.2. Mitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartments Mid Rise												310	0	310	31	0		1084
Total												310	0	310	31	0		1084
Daily, Winter (Max)																		
Apartments Mid Rise												310	0	310	31	0		1084
Total												310	0	310	31	0		1084
Annual																		
Apartments Mid Rise												51.3	0	51.3	5.12	0		179
Total												51.3	0	51.3	5.12	0		179

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartments Mid Rise																	5.34	5.34
Total																	5.34	5.34
Daily, Winter (Max)																		
Apartments Mid Rise																	5.34	5.34
Total																	5.34	5.34
Annual																		
Apartments Mid Rise																	0.88	0.88
Total																	0.88	0.88

4.6.2. Mitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartments Mid Rise																	5.34	5.34
Total																	5.34	5.34
Daily, Winter (Max)																		
Apartments Mid Rise																	5.34	5.34
Total																	5.34	5.34
Annual																		
Apartments Mid Rise																	0.88	0.88
Total																	0.88	0.88

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Equipment	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.7.2. Mitigated

Equipment	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Equipment	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.8.2. Mitigated

Equipment	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Equipment	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.9.2. Mitigated

Equipment	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Vegetation	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Species	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		
Removed																		
Subtotal																		
Daily, Winter (Max)																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		
Removed																		
Subtotal																		
Annual																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		
Removed																		
Subtotal																		

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Vegetation	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Species	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		
Removed																		
Subtotal																		
Daily, Winter (Max)																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		
Removed																		
Subtotal																		
Annual																		
Avoided																		
Subtotal																		

Sequestered
Subtotal
Removed
Subtotal

5. Activity Data
5.9. Operational Mobile Sources
5.9.1. Unmitigated

Land Use T	Trips/Week	Trips/Satur	Trips/Sund	Trips/Year	VMT/Week	VMT/Satur	VMT/Sund	VMT/Year
Apartment	4227	3815	3178	1466643	29768	26868	22381	10328814

5.9.2. Mitigated

Land Use T	Trips/Week	Trips/Satur	Trips/Sund	Trips/Year	VMT/Week	VMT/Satur	VMT/Sund	VMT/Year
Apartment	4227	3815	3178	1466643	29768	26868	22381	10328814

5.10. Operational Area Sources
5.10.1. Hearths
5.10.1.1. Unmitigated

Hearth Typ	Unmitigated (number)
Apartments Mid Rise	
Wood Fire	0
Gas Firepla	0
Propane Fi	0
Electric Fire	0
No Fireplac	777
Conventior	0
Catalytic W	0
Non-Cataly	0
Pellet Woo	0

5.10.1.2. Mitigated

Hearth Typ	Unmitigated (number)
Apartments Mid Rise	
Wood Fire	0
Gas Firepla	0
Propane Fi	0
Electric Fire	0
No Fireplac	777
Conventior	0
Catalytic W	0
Non-Cataly	0
Pellet Woo	0

5.10.2. Architectural Coatings

Residential	Residential	Non-Reside	Non-Reside	Parking Area Coated (sq ft)
1510488	503496	0	0	

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0
Summer Da	day/yr	250

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0
Summer Da	day/yr	250

5.11. Operational Energy Consumption
5.11.1. Unmitigated

Land Use	Electricity (	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Apartment	3846472	223	0.0129	0.0017	10386912

5.11.2. Mitigated

Land Use	Electricity (	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Apartment	3848473	223	0.0129	0.0017	0

5.12. Operational Water and Wastewater Consumption
5.12.1. Unmitigated

Land Use	Indoor Wat	Outdoor Water (gal/year)
Apartment	27396243	3750558

5.12.2. Mitigated

Land Use	Indoor Wat	Outdoor Water (gal/year)
Apartment	27396243	3750558

5.13. Operational Waste Generation
5.13.1. Unmitigated

Land Use	Waste (ton	Cogeneration (kWh/year)
Apartment	575	

5.13.2. Mitigated

Land Use	Waste (ton	Cogeneration (kWh/year)
Apartment	575	

5.14. Operational Refrigeration and Air Conditioning Equipment
5.14.1. Unmitigated

Land Use T	Equipment	Refrigerant	GWP	Quantity (k	Operations	Service Lea	Times Serviced
Apartment	Average ro	R-410A	2088	< 0.005	2.5	2.5	10
Apartment	Household	R-134a	1430	0.12	0.6	0	1

5.14.2. Mitigated

Land Use T	Equipment	Refrigerant	GWP	Quantity (k	Operations	Service Lea	Times Serviced
Apartment	Average ro	R-410A	2088	< 0.005	2.5	2.5	10
Apartment	Household	R-134a	1430	0.12	0.6	0	1

5.15. Operational Off-Road Equipment
5.15.1. Unmitigated

Equipment	Fuel Type	Engine Tier	Number pe	Hours Per D	Horsepowe	Load Factor

5.15.2. Mitigated

Equipment	Fuel Type	Engine Tier	Number pe	Hours Per D	Horsepowe	Load Factor

5.16. Stationary Sources
5.16.1. Emergency Generators and Fire Pumps

Equipment	Fuel Type	Number pe	Hours per D	Hours per Y	Horsepowe	Load Factor

5.16.2. Process Boilers

Equipment	Fuel Type	Number	Boiler Ratir	Daily Heat	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment	Fuel Type

5.18. Vegetation
5.18.1. Land Use Change
5.18.1.1. Unmitigated
Vegetation Vegetation Initial Acres Final Acres

5.18.1.2. Mitigated
Vegetation Vegetation Initial Acres Final Acres

5.18.1. Biomass Cover Type
5.18.1.1. Unmitigated
Biomass Cc Initial Acres Final Acres

5.18.1.2. Mitigated
Biomass Cc Initial Acres Final Acres

5.18.2. Sequestration
5.18.2.1. Unmitigated
Tree Type Number Electricity S Natural Gas Saved (btu/year)

5.18.2.2. Mitigated
Tree Type Number Electricity S Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report
6.1. Climate Risk Summary
Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Ha	Result for F	Unit
Temperatu	19.3	annual days of extreme heat
Extreme Pr	5.7	annual days with precipitation above 20 mm
Sea Level Rise		meters of inundation depth
Wildfire	0	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Ha	Exposure Sc	Sensitivity S	Adaptive Ca	Vulnerability Score
Temperatu	1	0	0	N/A
Extreme Pr	2	0	0	N/A
Sea Level R	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack I	N/A	N/A	N/A	N/A
Air Quality	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Ha	Exposure Sc	Sensitivity S	Adaptive Ca	Vulnerability Score
Temperatu	1	1	1	2
Extreme Pr	2	1	1	3
Sea Level R	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack I	N/A	N/A	N/A	N/A
Air Quality	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures
7. Health and Equity Details
7.1. CalEnviroScreen 4.0 Scores
The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	
AQ-Ozone	48.6
AQ-PM	23.7
AQ-DPM	22.3
Drinking W	78.8
Lead Risk H	41.2
Pesticides	73.8
Toxic Relea	30.3
Traffic	28.5
Effect Indicators	
CleanUp Sit	86.5
Groundwat	88.9
Haz Waste	99.8
Impaired W	51.2
Solid Waste	99.9
Sensitive Population	
Asthma	50.2
Cardio-vas	53.9
Low Birth W	36.4
Socioeconomic Factor Indicators	
Education	47.5
Housing	61.9
Linguistic	43.9
Poverty	58.5
Unemployr	62.4

7.2. Healthy Places Index Scores
The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	
Above Pov	36.84075
Employed	20.45425
Median HI	23.26447

Education	
Bachelor's	39.343
High schoo	100
Preschool e	18.64494
Transportation	
Auto Acces	37.45669
Active com	70.7943
Social	
2-parent ho	14.75683
Voting	58.51405
Neighborhood	
Alcohol ava	64.6221
Park access	12.70371
Retail dens	22.81535
Supermark	13.65328
Tree canop	2.065957
Housing	
Homeowne	60.60567
Housing ha	41.69126
Low-inc ho	38.58591
Low-inc ren	7.737713
Uncrowdec	46.38778
Health Outcomes	
Insured adu	43.96253
Arthritis	0
Asthma ER	50
High Blood	0
Cancer (exc	0
Asthma	0
Coronary H	0
Chronic Ob	0
Diagnosed	0
Life Expecta	16
Cognitively	21
Physically	7.2
Heart Attac	54
Mental Hea	0
Chronic Kid	0
Obesity	0
Pedestrian	98
Physical He	0
Stroke	0
Health Risk Behaviors	
Binge Drink	0
Current Sm	0
No Leisure	0
Climate Change Exposures	
Wildfire Ris	0
SLR Inundat	0
Children	60
Elderly	21
English Spe	31
Foreign-bo	59
Outdoor W	29
Climate Change Adaptive Capacity	
Impervious	91
Traffic Den	38
Traffic Acce	23
Other Indices	
Hardship	62
Other Decision Support	
2016 Votin	64

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroSc	70
Healthy Pla	29
Project Loc	Yes
Project Loc	Yes
Project Loc	South Florin

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

Measure Ti	Co-Benefits Achieved

7.5. Evaluation Scorecard

Category	Number of	Total Point:	Max Possib	Weighted Score

7.6. Health & Equity Custom Measures

Measure Ti	Sponsor

8. User Changes to Default Data

Screen	Justification
Constructic	No demo
Land Use	landscape area = 20% of total lot acreage

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Nar	Sac Rezone Main Operations (before)
Operationa	2030
Lead Agency	
Land Use S	Project/site
Analysis Le	County
Windspeed	2.7
Precipitatic	37.8
Location	38.550592607076084, -121.39691856340349
County	Sacramento
City	Sacramento
Air District	Sacramento Metropolitan AQMD
Air Basin	Sacramento Valley
TAZ	765
EDFZ	13
Electric Uti	Sacramento Municipal Utility District
Gas Utility	Pacific Gas & Electric
App Versio	2022.1.1.21

1.2. Land Use Types

Land Use S	Size	Unit	Lot Acreag	Building Ar	Landscape	Special Lan	Population	Description
Apartment	3338	Dwelling U	236	2112942	2112942		9346	

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Energy	E-15	Require All-Electric Development

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Un/Mit.	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Unmit.	124	164	97.7	969	1.95	3.29	162	165	3.2	41.1	44.3	1582	237925	239507	146	8.17	435	246018
Mit.	121	163	72	958	1.78	1.21	162	163	1.12	41.1	42.2	1582	205246	206828	143	8.11	435	213249
% Reduced	2.44	0.92	26.3	1.13	8.43	63.2		1.26	65		4.7		13.7	13.6	1.99	0.75		13.3
Daily, Winter (Max)																		
Unmit.	97	138	108	672	1.79	3.21	162	165	3.14	41.1	44.2	1582	221776	223358	147	8.87	26	229694
Mit.	94	137	82.4	661	1.62	1.13	162	163	1.06	41.1	42.1	1582	189097	190679	144	8.81	26	196924
% Reduced	3.11	1.09	23.8	1.63	9.2	64.9		1.26	66.3		4.71		14.7	14.6	1.97	0.69		14.3
Average Daily (Max)																		
Unmit.	99.1	141	95.9	722	1.65	3.15	141	144	3.07	35.9	39	1582	207676	209258	145	7.71	178	215365
Mit.	96.1	139	70.1	711	1.49	1.07	141	142	0.99	35.9	36.9	1582	174997	176579	142	7.65	178	182596
% Reduced	3.04	1.07	26.9	1.52	9.96	66.1		1.44	67.8		5.34		15.7	15.6	1.99	0.8		15.2
Annual (Max)																		
Unmit.	18.1	25.7	17.5	132	0.3	0.57	25.8	26.4	0.56	6.55	7.11	262	34383	34645	24.1	1.28	29.4	35656
Mit.	17.5	25.4	12.8	130	0.27	0.19	25.8	26	0.18	6.55	6.73	262	28973	29235	23.6	1.27	29.4	30231
% Reduced	3.04	1.07	26.9	1.52	9.96	66.1		1.44	67.8		5.34		15.7	15.6	1.99	0.8		15.2

2.5. Operations Emissions by Sector, Unmitigated

Sector	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Mobile	103	95.8	70.2	768	1.78	1.13	162	163	1.06	41.1	42.1		181438	181438	7.57	7.38	420	184246
Area	17.3	67	1.77	190	0.01	0.09		0.09	0.07		0.07	0	506	506	0.02	< 0.005		508
Energy	3.01	1.51	25.7	11	0.16	2.08		2.08	2.08		2.08		55751	55751	4.23	0.24		55927
Water												252	230	481	0.88	0.55		668
Waste												1330	0	1330	133	0		4654
Refrig.																	15.1	15.1
Total	124	164	97.7	969	1.95	3.29	162	165	3.2	41.1	44.3	1582	237925	239507	146	8.17	435	246018
Daily, Winter (Max)																		
Mobile	94	86.1	82.4	661	1.62	1.13	162	163	1.06	41.1	42.1		165795	165795	8.61	8.08	10.9	168430
Area	0	50.7	0	0	0	0		0	0		0	0	0	0	0	0		0
Energy	3.01	1.51	25.7	11	0.16	2.08		2.08	2.08		2.08		55751	55751	4.23	0.24		55927
Water												252	230	481	0.88	0.55		668
Waste												1330	0	1330	133	0		4654
Refrig.																	15.1	15.1
Total	97	138	108	672	1.79	3.21	162	165	3.14	41.1	44.2	1582	221776	223358	147	8.87	26	229694
Average Daily																		
Mobile	84.2	77.4	68.9	581	1.48	1.01	141	142	0.95	35.9	36.8		151348	151348	7.19	6.92	162	153753
Area	11.9	61.9	1.21	130	0.01	0.06		0.06	0.04		0.04	0	347	347	0.01	< 0.005		348
Energy	3.01	1.51	25.7	11	0.16	2.08		2.08	2.08		2.08		55751	55751	4.23	0.24		55927
Water												252	230	481	0.88	0.55		668
Waste												1330	0	1330	133	0		4654
Refrig.																	15.1	15.1
Total	99.1	141	95.9	722	1.65	3.15	141	144	3.07	35.9	39	1582	207676	209258	145	7.71	178	215365
Annual																		
Mobile	15.4	14.1	12.6	106	0.27	0.18	25.8	26	0.17	6.55	6.72		25057	25057	1.19	1.15	26.9	25456
Area	2.16	11.3	0.22	23.8	< 0.005	0.01		0.01	0.01		0.01	0	57.4	57.4	< 0.005	< 0.005		57.6
Energy	0.55	0.27	4.7	2	0.03	0.38		0.38	0.38		0.38		9230	9230	0.7	0.04		9259
Water												41.6	38.1	79.7	0.15	0.09		111
Waste												220	0	220	22	0		771
Refrig.																	2.51	2.51
Total	18.1	25.7	17.5	132	0.3	0.57	25.8	26.4	0.56	6.55	7.11	262	34383	34645	24.1	1.28	29.4	35656

2.6. Operations Emissions by Sector, Mitigated

Sector	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Mobile	103	95.8	70.2	768	1.78	1.13	162	163	1.06	41.1	42.1		181438	181438	7.57	7.38	420	184246
Area	17.3	67	1.77	190	0.01	0.09		0.09	0.07		0.07	0	506	506	0.02	< 0.005		508
Energy	0	0	0	0	0	0		0	0		0		23072	23072	1.33	0.18		23158
Water												252	230	481	0.88	0.55		668
Waste												1330	0	1330	133	0		4654
Refrig.																	15.1	15.1
Total	121	163	72	958	1.78	1.21	162	163	1.12	41.1	42.2	1582	205246	206828	143	8.11	435	213249
Daily, Winter (Max)																		
Mobile	94	86.1	82.4	661	1.62	1.13	162	163	1.06	41.1	42.1		165795	165795	8.61	8.08	10.9	168430

Area	0	50.7	0	0	0	0		0	0		0	0	0	0	0	0		0
Energy	0	0	0	0	0	0		0	0		0		23072	23072	1.33	0.18		23158
Water												252	230	481	0.88	0.55		668
Waste												1330	0	1330	133	0		4654
Refrig.																	15.1	15.1
Total	94	137	82.4	661	1.62	1.13	162	163	1.06	41.1	42.1	1582	189097	190679	144	8.81	26	196924
Average Daily																		
Mobile	84.2	77.4	68.9	581	1.48	1.01	141	142	0.95	35.9	36.8		151348	151348	7.19	6.92	162	153753
Area	11.9	61.9	1.21	130	0.01	0.06		0.06	0.04		0.04	0	347	347	0.01	< 0.005		348
Energy	0	0	0	0	0	0		0	0		0		23072	23072	1.33	0.18		23158
Water												252	230	481	0.88	0.55		668
Waste												1330	0	1330	133	0		4654
Refrig.																	15.1	15.1
Total	96.1	139	70.1	711	1.49	1.07	141	142	0.99	35.9	36.9	1582	174997	176579	142	7.65	178	182596
Annual																		
Mobile	15.4	14.1	12.6	106	0.27	0.18	25.8	26	0.17	6.55	6.72		25057	25057	1.19	1.15	26.9	25456
Area	2.16	11.3	0.22	23.8	< 0.005	0.01		0.01	0.01		0.01	0	57.4	57.4	< 0.005	< 0.005		57.6
Energy	0	0	0	0	0	0		0	0		0		3820	3820	0.22	0.03		3834
Water												41.6	38.1	79.7	0.15	0.09		111
Waste												220	0	220	22	0		771
Refrig.																	2.51	2.51
Total	17.5	25.4	12.8	130	0.27	0.19	25.8	26	0.18	6.55	6.73	262	28973	29235	23.6	1.27	29.4	30231

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartment	103	95.8	70.2	768	1.78	1.13	162	163	1.06	41.1	42.1		181438	181438	7.57	7.38	420	184246
Total	103	95.8	70.2	768	1.78	1.13	162	163	1.06	41.1	42.1		181438	181438	7.57	7.38	420	184246
Daily, Winter (Max)																		
Apartment	94	86.1	82.4	661	1.62	1.13	162	163	1.06	41.1	42.1		165795	165795	8.61	8.08	10.9	168430
Total	94	86.1	82.4	661	1.62	1.13	162	163	1.06	41.1	42.1		165795	165795	8.61	8.08	10.9	168430
Annual																		
Apartment	15.4	14.1	12.6	106	0.27	0.18	25.8	26	0.17	6.55	6.72		25057	25057	1.19	1.15	26.9	25456
Total	15.4	14.1	12.6	106	0.27	0.18	25.8	26	0.17	6.55	6.72		25057	25057	1.19	1.15	26.9	25456

4.1.2. Mitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartment	103	95.8	70.2	768	1.78	1.13	162	163	1.06	41.1	42.1		181438	181438	7.57	7.38	420	184246
Total	103	95.8	70.2	768	1.78	1.13	162	163	1.06	41.1	42.1		181438	181438	7.57	7.38	420	184246
Daily, Winter (Max)																		
Apartment	94	86.1	82.4	661	1.62	1.13	162	163	1.06	41.1	42.1		165795	165795	8.61	8.08	10.9	168430
Total	94	86.1	82.4	661	1.62	1.13	162	163	1.06	41.1	42.1		165795	165795	8.61	8.08	10.9	168430
Annual																		
Apartment	15.4	14.1	12.6	106	0.27	0.18	25.8	26	0.17	6.55	6.72		25057	25057	1.19	1.15	26.9	25456
Total	15.4	14.1	12.6	106	0.27	0.18	25.8	26	0.17	6.55	6.72		25057	25057	1.19	1.15	26.9	25456

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartments Low Rise													23071	23071	1.33	0.18		23157
Total													23071	23071	1.33	0.18		23157
Daily, Winter (Max)																		
Apartments Low Rise													23071	23071	1.33	0.18		23157
Total													23071	23071	1.33	0.18		23157
Annual																		
Apartments Low Rise													3820	3820	0.22	0.03		3834
Total													3820	3820	0.22	0.03		3834

4.2.2. Electricity Emissions By Land Use - Mitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartments Low Rise													23072	23072	1.33	0.18		23158
Total													23072	23072	1.33	0.18		23158
Daily, Winter (Max)																		
Apartments Low Rise													23072	23072	1.33	0.18		23158
Total													23072	23072	1.33	0.18		23158
Annual																		
Apartments Low Rise													3820	3820	0.22	0.03		3834
Total													3820	3820	0.22	0.03		3834

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartment	3.01	1.51	25.7	11	0.16	2.08		2.08	2.08		2.08		32680	32680	2.89	0.06		32771
Total	3.01	1.51	25.7	11	0.16	2.08		2.08	2.08		2.08		32680	32680	2.89	0.06		32771
Daily, Winter (Max)																		
Apartment	3.01	1.51	25.7	11	0.16	2.08		2.08	2.08		2.08		32680	32680	2.89	0.06		32771
Total	3.01	1.51	25.7	11	0.16	2.08		2.08	2.08		2.08		32680	32680	2.89	0.06		32771
Annual																		
Apartment	0.55	0.27	4.7	2	0.03	0.38		0.38	0.38		0.38		5411	5411	0.48	0.01		5426
Total	0.55	0.27	4.7	2	0.03	0.38		0.38	0.38		0.38		5411	5411	0.48	0.01		5426

4.2.4. Natural Gas Emissions By Land Use - Mitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartment	0	0	0	0	0	0		0	0		0		0	0	0	0		0
Total	0	0	0	0	0	0		0	0		0		0	0	0	0		0
Daily, Winter (Max)																		
Apartment	0	0	0	0	0	0		0	0		0		0	0	0	0		0
Total	0	0	0	0	0	0		0	0		0		0	0	0	0		0
Annual																		
Apartment	0	0	0	0	0	0		0	0		0		0	0	0	0		0

Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

4.3. Area Emissions by Source

4.3.1. Unmitigated

Source	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Hearths	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Consumer Products		45.2																
Architectural Coatings		5.43																
Landscape	17.3	16.4	1.77	190	0.01	0.09		0.09	0.07		0.07		506	506	0.02	< 0.005		508
Total	17.3	67	1.77	190	0.01	0.09		0.09	0.07		0.07	0	506	506	0.02	< 0.005		508
Daily, Winter (Max)																		
Hearths	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Consumer Products		45.2																
Architectural Coatings		5.43																
Total	0	50.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual																		
Hearths	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Consumer Products		8.25																
Architectural Coatings		0.99																
Landscape	2.16	2.05	0.22	23.8	< 0.005		0.01	0.01	0.01		0.01		57.4	57.4	< 0.005	< 0.005		57.6
Total	2.16	11.3	0.22	23.8	< 0.005		0.01	0.01	0.01		0.01	0	57.4	57.4	< 0.005	< 0.005		57.6

4.3.2. Mitigated

Source	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Hearths	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Consumer Products		45.2																
Architectural Coatings		5.43																
Landscape	17.3	16.4	1.77	190	0.01	0.09		0.09	0.07		0.07		506	506	0.02	< 0.005		508
Total	17.3	67	1.77	190	0.01	0.09		0.09	0.07		0.07	0	506	506	0.02	< 0.005		508
Daily, Winter (Max)																		
Hearths	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Consumer Products		45.2																
Architectural Coatings		5.43																
Total	0	50.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual																		
Hearths	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Consumer Products		8.25																
Architectural Coatings		0.99																
Landscape	2.16	2.05	0.22	23.8	< 0.005		0.01	0.01	0.01		0.01		57.4	57.4	< 0.005	< 0.005		57.6
Total	2.16	11.3	0.22	23.8	< 0.005		0.01	0.01	0.01		0.01	0	57.4	57.4	< 0.005	< 0.005		57.6

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartments Low Rise												252	230	481	0.88	0.55		668
Total												252	230	481	0.88	0.55		668
Daily, Winter (Max)																		
Apartments Low Rise												252	230	481	0.88	0.55		668
Total												252	230	481	0.88	0.55		668
Annual																		
Apartments Low Rise												41.6	38.1	79.7	0.15	0.09		111
Total												41.6	38.1	79.7	0.15	0.09		111

4.4.2. Mitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartments Low Rise												252	230	481	0.88	0.55		668
Total												252	230	481	0.88	0.55		668
Daily, Winter (Max)																		
Apartments Low Rise												252	230	481	0.88	0.55		668
Total												252	230	481	0.88	0.55		668
Annual																		
Apartments Low Rise												41.6	38.1	79.7	0.15	0.09		111
Total												41.6	38.1	79.7	0.15	0.09		111

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartments Low Rise												1330	0	1330	133	0		4654
Total												1330	0	1330	133	0		4654
Daily, Winter (Max)																		
Apartments Low Rise												1330	0	1330	133	0		4654
Total												1330	0	1330	133	0		4654
Annual																		
Apartments Low Rise												220	0	220	22	0		771
Total												220	0	220	22	0		771

4.5.2. Mitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartments Low Rise												1330	0	1330	133	0		4654
Total												1330	0	1330	133	0		4654
Daily, Winter (Max)																		
Apartments Low Rise												1330	0	1330	133	0		4654
Total												1330	0	1330	133	0		4654
Annual																		
Apartments Low Rise												220	0	220	22	0		771
Total												220	0	220	22	0		771

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e

Daily, Summer (Max)																	
Apartments Low Rise																15.1	15.1
Total																15.1	15.1
Daily, Winter (Max)																	
Apartments Low Rise																15.1	15.1
Total																15.1	15.1
Annual																	
Apartments Low Rise																2.51	2.51
Total																2.51	2.51

4.6.2. Mitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e	
Daily, Summer (Max)																			
Apartments Low Rise																	15.1	15.1	
Total																	15.1	15.1	
Daily, Winter (Max)																			
Apartments Low Rise																	15.1	15.1	
Total																	15.1	15.1	
Annual																			
Apartments Low Rise																	2.51	2.51	
Total																	2.51	2.51	

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Equipment	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.7.2. Mitigated

Equipment	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Equipment	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.8.2. Mitigated

Equipment	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Equipment	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.9.2. Mitigated

Equipment	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Vegetation	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		

Total

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Species	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		
Removed																		
Subtotal																		
Daily, Winter (Max)																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		
Removed																		
Subtotal																		
Annual																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		
Removed																		
Subtotal																		

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Vegetation	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Species	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		
Removed																		
Subtotal																		
Daily, Winter (Max)																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		
Removed																		
Subtotal																		
Annual																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		
Removed																		
Subtotal																		

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use	T	Trips/Week	Trips/Satur	Trips/Sund	Trips/Year	VMT/Week	VMT/Satur	VMT/Sund	VMT/Year
Apartment		24434	27171	20963	8880177	205150	228131	176003	74558290

5.9.2. Mitigated

Land Use	T	Trips/Week	Trips/Satur	Trips/Sund	Trips/Year	VMT/Week	VMT/Satur	VMT/Sund	VMT/Year
Apartment		24434	27171	20963	8880177	205150	228131	176003	74558290

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Typ	Unmitigated (number)
Apartments Low Rise	
Wood Fire	0
Gas Firepla	0
Propane Fi	0
Electric Fire	0
No Fireplac	3338
Conventior	0
Catalytic W	0

Non-Cataly	0
Pellet Woo	0

5.10.1.2. Mitigated

Hearth Typ	Unmitigated (number)
Apartments	Low Rise
Wood Fire	0
Gas Firepla	0
Propane Fi	0
Electric Fire	0
No Fireplac	3338
Conventior	0
Catalytic W	0
Non-Cataly	0
Pellet Woo	0

5.10.2. Architectural Coatings

Residential	Residential	Non-Reside	Non-Reside	Parking Area Coated (sq ft)
4278707	1426236	0	0	

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0
Summer D	day/yr	250

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0
Summer D	day/yr	250

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Land Use	Electricity (	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Apartment	37761761	223	0.0129	0.0017	1.02E+08

5.11.2. Mitigated

Land Use	Electricity (	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Apartment	37763883	223	0.0129	0.0017	0

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Wa	Outdoor Water (gal/year)
Apartment	1.18E+08	36067862

5.12.2. Mitigated

Land Use	Indoor Wa	Outdoor Water (gal/year)
Apartment	1.18E+08	36067862

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton	Cogeneration (kWh/year)
Apartment	2468	

5.13.2. Mitigated

Land Use	Waste (ton	Cogeneration (kWh/year)
Apartment	2468	

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use T	Equipment	Refrigerant	GWP	Quantity (k	Operations	Service Lea	Times Serviced
Apartment	Average ro	R-410A	2088	< 0.005	2.5	2.5	10
Apartment	Household	R-134a	1430	0.12	0.6	0	1

5.14.2. Mitigated

Land Use T	Equipment	Refrigerant	GWP	Quantity (k	Operations	Service Lea	Times Serviced
Apartment	Average ro	R-410A	2088	< 0.005	2.5	2.5	10
Apartment	Household	R-134a	1430	0.12	0.6	0	1

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Fuel Type	Engine Tier	Number pe	Hours Per I	Horsepowe	Load Factor

5.15.2. Mitigated

Equipment Fuel Type	Engine Tier	Number pe	Hours Per I	Horsepowe	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Fuel Type	Number pe	Hours per I	Hours per \	Horsepowe	Load Factor

5.16.2. Process Boilers

Equipment Fuel Type	Number	Boiler Ratir	Daily Heat	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation	Vegetation	Initial Acre:	Final Acres

5.18.1.2. Mitigated

Vegetation	Vegetation	Initial Acre:	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cc	Initial Acre:	Final Acres

5.18.1.2. Mitigated

Biomass Cc	Initial Acre:	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity S	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity S	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Ha	Result for F	Unit
Temperatu	18.8	annual days of extreme heat
Extreme Pr	6.2	annual days with precipitation above 20 mm
Sea Level Rise		meters of inundation depth
Wildfire	0	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid

6.2. Initial Climate Risk Scores

Climate Ha	Exposure S	Sensitivity	Adaptive C	Vulnerability Score
Temperatu	1	0	0	N/A
Extreme Pr	2	0	0	N/A
Sea Level R	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack I	N/A	N/A	N/A	N/A
Air Quality	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Ha	Exposure S	Sensitivity	Adaptive C	Vulnerability Score
Temperatu	1	1	1	2
Extreme Pr	2	1	1	3
Sea Level R	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack I	N/A	N/A	N/A	N/A
Air Quality	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	
AQ-Ozone	48.5
AQ-PM	37.5
AQ-DPM	65.4
Drinking W	56.6
Lead Risk H	38.1
Pesticides	29.5
Toxic Relea	41.1
Traffic	78.6
Effect Indicators	
CleanUp Sit	0
Groundwat	28.3
Haz Waste	40.9
Impaired W	51.2
Solid Waste	73
Sensitive Population	
Asthma	87.9
Cardio-vas	72
Low Birth W	9.08
Socioeconomic Factor Indicators	
Education	20.9
Housing	22.7
Linguistic	21.4

Poverty	43.5
Unemployr	40.6

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	
Above Pove	65.76415
Employed	89.43924
Median HI	66.04645
Education	
Bachelor's	71.14077
High schoo	100
Preschool e	54.90825
Transportation	
Auto Acces	28.53843
Active com	72.93725
Social	
2-parent h	56.35827
Voting	87.62992
Neighborhood	
Alcohol ava	60.41319
Park access	81.35506
Retail dens	56.7304
Supermark	55.3702
Tree canop	89.60606
Housing	
Homeowne	69.85756
Housing ha	79.08379
Low-inc ho	69.62659
Low-inc rer	61.37559
Uncrowdec	59.34813
Health Outcomes	
Insured adu	68.56153
Arthritis	8.6
Asthma ER	26
High Blood	9.1
Cancer (exc	7.2
Asthma	46
Coronary H	12
Chronic Ob	31
Diagnosed	50
Life Expect	28
Cognitively	73
Physically I	62
Heart Attac	24
Mental Hea	70
Chronic Kid	27
Obesity	53
Pedestrian	75
Physical He	59
Stroke	26
Health Risk Behaviors	
Binge Drink	54
Current Sm	64
No Leisure	74
Climate Change Exposures	
Wildfire Ris	0
SLR Inunda	0
Children	42
Elderly	9
English Spe	62
Foreign-bo	13
Outdoor W	28
Climate Change Adaptive Capacity	
Impervious	55
Traffic Den	84
Traffic Acce	61
Other Indices	
Hardship	33
Other Decision Support	
2016 Votin	77

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroSc	49
Healthy Pla	77
Project Loc	No
Project Loc	No
Project Loc	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

Measure Ti	Co-Benefits Achieved

7.5. Evaluation Scorecard

Category	Number of Total Point Max Possib	Weighted Score

7.6. Health & Equity Custom Measures

Measure Ti	Sponsor

8. User Changes to Default Data

Screen	Justification
Operations ...	
Land Use	3338 units on 236 acres

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Nar	Sac Rezone Fair Oaks operations (before)
Operationa	2030
Lead Agency	
Land Use S	Project/site
Analysis Le	County
Windspeed	3.5
Precipitatic	39.2
Location	38.637469230516956, -121.32836613666706
County	Sacramento
City	Unincorporated
Air District	Sacramento Metropolitan AQMD
Air Basin	Sacramento Valley
TAZ	619
EDFZ	13
Electric Uti	Sacramento Municipal Utility District
Gas Utility	Pacific Gas & Electric
App Versio	2022.1.1.21

1.2. Land Use Types

Land Use S	Size	Unit	Lot Acreag	Building Ar	Landscape	Special Lan	Population	Description
Apartment	25	Dwelling U	1.25	26500	10890		70	

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Energy	E-15	Require All-Electric Development

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Un/Mit.	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Unmit.	1	1.55	0.8	9.54	0.02	0.02	1.81	1.83	0.02	0.46	0.48	11.8	2195	2207	1.09	0.08	4.89	2264
Mit.	0.99	1.54	0.72	9.51	0.02	0.01	1.81	1.82	0.01	0.46	0.47	11.8	2095	2107	1.08	0.08	4.89	2163
% Reduced	0.94	0.3	10	0.36		33.6		0.36	35.2		1.36		4.59	4.56	0.82			4.46
Daily, Winter (Max)																		
Unmit.	0.8	1.35	0.92	6.68	0.02	0.02	1.81	1.83	0.02	0.46	0.48	11.8	2016	2028	1.1	0.09	0.31	2082
Mit.	0.79	1.35	0.84	6.64	0.02	0.01	1.81	1.82	0.01	0.46	0.47	11.8	1915	1927	1.09	0.09	0.31	1981
% Reduced	1.17	0.35	8.77	0.51		34.7		0.36	36.2		1.36		5	4.97	0.82			4.85
Average Daily (Max)																		
Unmit.	0.81	1.36	0.79	6.96	0.02	0.02	1.58	1.6	0.02	0.4	0.42	11.8	1859	1871	1.08	0.08	2.01	1923
Mit.	0.8	1.36	0.71	6.92	0.02	0.01	1.58	1.59	0.01	0.4	0.41	11.8	1759	1770	1.08	0.08	2.01	1822
% Reduced	1.16	0.34	10.2	0.49		36.3		0.41	38		1.55		5.42	5.38	0.83			5.25
Annual (Max)																		
Unmit.	0.15	0.25	0.14	1.27	< 0.005	< 0.005	0.29	0.29	< 0.005	0.07	0.08	1.96	308	310	0.18	0.01	0.33	318
Mit.	0.15	0.25	0.13	1.26	< 0.005	< 0.005	0.29	0.29	< 0.005	0.07	0.08	1.96	291	293	0.18	0.01	0.33	302
% Reduced	1.16	0.34	10.2	0.49	3.03	36.3		0.41	38		1.55		5.42	5.38	0.83	0.24		5.25

2.5. Operations Emissions by Sector, Unmitigated

Sector	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Mobile	0.86	0.79	0.71	8.08	0.02	0.01	1.81	1.82	0.01	0.46	0.47		2012	2012	0.07	0.08	4.7	2042
Area	0.13	0.76	0.01	1.42	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005	0	3.79	3.79	< 0.005	< 0.005		3.81
Energy	0.01	< 0.005	0.08	0.03	< 0.005	0.01		0.01	0.01		0.01		178	178	0.01	< 0.005		178
Water												1.88	1.64	3.52	0.01	< 0.005		4.92
Waste												9.96	0	9.96	1	0		34.9
Refrig.																	0.19	0.19
Total	1	1.55	0.8	9.54	0.02	0.02	1.81	1.83	0.02	0.46	0.48	11.8	2195	2207	1.09	0.08	4.89	2264
Daily, Winter (Max)																		
Mobile	0.79	0.71	0.84	6.64	0.02	0.01	1.81	1.82	0.01	0.46	0.47		1837	1837	0.08	0.08	0.12	1864
Area	0	0.64	0	0	0	0		0	0		0	0	0	0	0	0		0
Energy	0.01	< 0.005	0.08	0.03	< 0.005	0.01		0.01	0.01		0.01		178	178	0.01	< 0.005		178
Water												1.88	1.64	3.52	0.01	< 0.005		4.92
Waste												9.96	0	9.96	1	0		34.9
Refrig.																	0.19	0.19
Total	0.8	1.35	0.92	6.68	0.02	0.02	1.81	1.83	0.02	0.46	0.48	11.8	2016	2028	1.1	0.09	0.31	2082
Average Daily																		
Mobile	0.71	0.64	0.7	5.95	0.02	0.01	1.58	1.59	0.01	0.4	0.41		1677	1677	0.07	0.07	1.82	1702
Area	0.09	0.72	0.01	0.97	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005	0	2.6	2.6	< 0.005	< 0.005		2.61
Energy	0.01	< 0.005	0.08	0.03	< 0.005	0.01		0.01	0.01		0.01		178	178	0.01	< 0.005		178
Water												1.88	1.64	3.52	0.01	< 0.005		4.92
Waste												9.96	0	9.96	1	0		34.9
Refrig.																	0.19	0.19
Total	0.81	1.36	0.79	6.96	0.02	0.02	1.58	1.6	0.02	0.4	0.42	11.8	1859	1871	1.08	0.08	2.01	1923
Annual																		
Mobile	0.13	0.12	0.13	1.09	< 0.005	< 0.005	0.29	0.29	< 0.005	0.07	0.08		278	278	0.01	0.01	0.3	282
Area	0.02	0.13	< 0.005	0.18	< 0.005	< 0.005		0	< 0.005		0	0	0.43	0.43	< 0.005	< 0.005		0.43
Energy	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005		0	< 0.005		0		29.4	29.4	< 0.005	< 0.005		29.5
Water												0.31	0.27	0.58	< 0.005	< 0.005		0.81
Waste												1.65	0	1.65	0.16	0		5.77
Refrig.																	0.03	0.03
Total	0.15	0.25	0.14	1.27	< 0.005	< 0.005	0.29	0.29	< 0.005	0.07	0.08	1.96	308	310	0.18	0.01	0.33	318

2.6. Operations Emissions by Sector, Mitigated

Sector	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Mobile	0.86	0.79	0.71	8.08	0.02	0.01	1.81	1.82	0.01	0.46	0.47		2012	2012	0.07	0.08	4.7	2042
Area	0.13	0.76	0.01	1.42	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005	0	3.79	3.79	< 0.005	< 0.005		3.81
Energy	0	0	0	0	0	0		0	0		0		76.9	76.9	< 0.005	< 0.005		77.2
Water												1.88	1.64	3.52	0.01	< 0.005		4.92
Waste												9.96	0	9.96	1	0		34.9
Refrig.																	0.19	0.19
Total	0.99	1.54	0.72	9.51	0.02	0.01	1.81	1.82	0.01	0.46	0.47	11.8	2095	2107	1.08	0.08	4.89	2163
Daily, Winter (Max)																		
Mobile	0.79	0.71	0.84	6.64	0.02	0.01	1.81	1.82	0.01	0.46	0.47		1837	1837	0.08	0.08	0.12	1864

Area	0	0.64	0	0	0	0		0	0		0	0	0	0	0	0		0
Energy	0	0	0	0	0	0		0	0		0		76.9	76.9	< 0.005	< 0.005		77.2
Water												1.88	1.64	3.52	0.01	< 0.005		4.92
Waste												9.96	0	9.96	1	0		34.9
Refrig.																	0.19	0.19
Total	0.79	1.35	0.84	6.64	0.02	0.01	1.81	1.82	0.01	0.46	0.47	11.8	1915	1927	1.09	0.09	0.31	1981
Average Daily																		
Mobile	0.71	0.64	0.7	5.95	0.02	0.01	1.58	1.59	0.01	0.4	0.41		1677	1677	0.07	0.07	1.82	1702
Area	0.09	0.72	0.01	0.97	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005	0	2.6	2.6	< 0.005	< 0.005		2.61
Energy	0	0	0	0	0	0		0	0		0		76.9	76.9	< 0.005	< 0.005		77.2
Water												1.88	1.64	3.52	0.01	< 0.005		4.92
Waste												9.96	0	9.96	1	0		34.9
Refrig.																	0.19	0.19
Total	0.8	1.36	0.71	6.92	0.02	0.01	1.58	1.59	0.01	0.4	0.41	11.8	1759	1770	1.08	0.08	2.01	1822
Annual																		
Mobile	0.13	0.12	0.13	1.09	< 0.005	< 0.005	0.29	0.29	< 0.005	0.07	0.08		278	278	0.01	0.01	0.3	282
Area	0.02	0.13	< 0.005	0.18	< 0.005	< 0.005		0	< 0.005		0	0	0.43	0.43	< 0.005	< 0.005		0.43
Energy	0	0	0	0	0	0		0	0		0		12.7	12.7	< 0.005	< 0.005		12.8
Water												0.31	0.27	0.58	< 0.005	< 0.005		0.81
Waste												1.65	0	1.65	0.16	0		5.77
Refrig.																	0.03	0.03
Total	0.15	0.25	0.13	1.26	< 0.005	< 0.005	0.29	0.29	< 0.005	0.07	0.08	1.96	291	293	0.18	0.01	0.33	302

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartment	0.86	0.79	0.71	8.08	0.02	0.01	1.81	1.82	0.01	0.46	0.47		2012	2012	0.07	0.08	4.7	2042
Total	0.86	0.79	0.71	8.08	0.02	0.01	1.81	1.82	0.01	0.46	0.47		2012	2012	0.07	0.08	4.7	2042
Daily, Winter (Max)																		
Apartment	0.79	0.71	0.84	6.64	0.02	0.01	1.81	1.82	0.01	0.46	0.47		1837	1837	0.08	0.08	0.12	1864
Total	0.79	0.71	0.84	6.64	0.02	0.01	1.81	1.82	0.01	0.46	0.47		1837	1837	0.08	0.08	0.12	1864
Annual																		
Apartment	0.13	0.12	0.13	1.09	< 0.005	< 0.005	0.29	0.29	< 0.005	0.07	0.08		278	278	0.01	0.01	0.3	282
Total	0.13	0.12	0.13	1.09	< 0.005	< 0.005	0.29	0.29	< 0.005	0.07	0.08		278	278	0.01	0.01	0.3	282

4.1.2. Mitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartment	0.86	0.79	0.71	8.08	0.02	0.01	1.81	1.82	0.01	0.46	0.47		2012	2012	0.07	0.08	4.7	2042
Total	0.86	0.79	0.71	8.08	0.02	0.01	1.81	1.82	0.01	0.46	0.47		2012	2012	0.07	0.08	4.7	2042
Daily, Winter (Max)																		
Apartment	0.79	0.71	0.84	6.64	0.02	0.01	1.81	1.82	0.01	0.46	0.47		1837	1837	0.08	0.08	0.12	1864
Total	0.79	0.71	0.84	6.64	0.02	0.01	1.81	1.82	0.01	0.46	0.47		1837	1837	0.08	0.08	0.12	1864
Annual																		
Apartment	0.13	0.12	0.13	1.09	< 0.005	< 0.005	0.29	0.29	< 0.005	0.07	0.08		278	278	0.01	0.01	0.3	282
Total	0.13	0.12	0.13	1.09	< 0.005	< 0.005	0.29	0.29	< 0.005	0.07	0.08		278	278	0.01	0.01	0.3	282

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartments Low Rise													75.6	75.6	< 0.005	< 0.005		75.9
Total													75.6	75.6	< 0.005	< 0.005		75.9
Daily, Winter (Max)																		
Apartments Low Rise													75.6	75.6	< 0.005	< 0.005		75.9
Total													75.6	75.6	< 0.005	< 0.005		75.9
Annual																		
Apartments Low Rise													12.5	12.5	< 0.005	< 0.005		12.6
Total													12.5	12.5	< 0.005	< 0.005		12.6

4.2.2. Electricity Emissions By Land Use - Mitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartments Low Rise													76.9	76.9	< 0.005	< 0.005		77.2
Total													76.9	76.9	< 0.005	< 0.005		77.2
Daily, Winter (Max)																		
Apartments Low Rise													76.9	76.9	< 0.005	< 0.005		77.2
Total													76.9	76.9	< 0.005	< 0.005		77.2
Annual																		
Apartments Low Rise													12.7	12.7	< 0.005	< 0.005		12.8
Total													12.7	12.7	< 0.005	< 0.005		12.8

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartment	0.01	< 0.005	0.08	0.03	< 0.005	0.01		0.01	0.01		0.01		102	102	0.01	< 0.005		102
Total	0.01	< 0.005	0.08	0.03	< 0.005	0.01		0.01	0.01		0.01		102	102	0.01	< 0.005		102
Daily, Winter (Max)																		
Apartment	0.01	< 0.005	0.08	0.03	< 0.005	0.01		0.01	0.01		0.01		102	102	0.01	< 0.005		102
Total	0.01	< 0.005	0.08	0.03	< 0.005	0.01		0.01	0.01		0.01		102	102	0.01	< 0.005		102
Annual																		
Apartment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		16.9	16.9	< 0.005	< 0.005		16.9
Total	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		16.9	16.9	< 0.005	< 0.005		16.9

4.2.4. Natural Gas Emissions By Land Use - Mitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartment	0	0	0	0	0	0		0	0		0		0	0	0	0		0
Total	0	0	0	0	0	0		0	0		0		0	0	0	0		0
Daily, Winter (Max)																		
Apartment	0	0	0	0	0	0		0	0		0		0	0	0	0		0
Total	0	0	0	0	0	0		0	0		0		0	0	0	0		0
Annual																		
Apartment	0	0	0	0	0	0		0	0		0		0	0	0	0		0

Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

4.3. Area Emissions by Source

4.3.1. Unmitigated

Source	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Hearths	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Consumer Products		0.57																
Architectural Coatings		0.07																
Landscape	0.13	0.12	0.01	1.42	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		3.79	3.79	< 0.005	< 0.005		3.81
Total	0.13	0.76	0.01	1.42	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005	0	3.79	3.79	< 0.005	< 0.005		3.81
Daily, Winter (Max)																		
Hearths	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Consumer Products		0.57																
Architectural Coatings		0.07																
Total	0	0.64	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual																		
Hearths	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Consumer Products		0.1																
Architectural Coatings		0.01																
Landscape	0.02	0.02	< 0.005	0.18	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		0.43	0.43	< 0.005	< 0.005		0.43
Total	0.02	0.13	< 0.005	0.18	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005	0	0.43	0.43	< 0.005	< 0.005		0.43

4.3.2. Mitigated

Source	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Hearths	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Consumer Products		0.57																
Architectural Coatings		0.07																
Landscape	0.13	0.12	0.01	1.42	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		3.79	3.79	< 0.005	< 0.005		3.81
Total	0.13	0.76	0.01	1.42	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005	0	3.79	3.79	< 0.005	< 0.005		3.81
Daily, Winter (Max)																		
Hearths	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Consumer Products		0.57																
Architectural Coatings		0.07																
Total	0	0.64	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual																		
Hearths	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Consumer Products		0.1																
Architectural Coatings		0.01																
Landscape	0.02	0.02	< 0.005	0.18	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		0.43	0.43	< 0.005	< 0.005		0.43
Total	0.02	0.13	< 0.005	0.18	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005	0	0.43	0.43	< 0.005	< 0.005		0.43

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartments Low Rise												1.88	1.64	3.52	0.01	< 0.005		4.92
Total												1.88	1.64	3.52	0.01	< 0.005		4.92
Daily, Winter (Max)																		
Apartments Low Rise												1.88	1.64	3.52	0.01	< 0.005		4.92
Total												1.88	1.64	3.52	0.01	< 0.005		4.92
Annual																		
Apartments Low Rise												0.31	0.27	0.58	< 0.005	< 0.005		0.81
Total												0.31	0.27	0.58	< 0.005	< 0.005		0.81

4.4.2. Mitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartments Low Rise												1.88	1.64	3.52	0.01	< 0.005		4.92
Total												1.88	1.64	3.52	0.01	< 0.005		4.92
Daily, Winter (Max)																		
Apartments Low Rise												1.88	1.64	3.52	0.01	< 0.005		4.92
Total												1.88	1.64	3.52	0.01	< 0.005		4.92
Annual																		
Apartments Low Rise												0.31	0.27	0.58	< 0.005	< 0.005		0.81
Total												0.31	0.27	0.58	< 0.005	< 0.005		0.81

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartments Low Rise												9.96	0	9.96	1	0		34.9
Total												9.96	0	9.96	1	0		34.9
Daily, Winter (Max)																		
Apartments Low Rise												9.96	0	9.96	1	0		34.9
Total												9.96	0	9.96	1	0		34.9
Annual																		
Apartments Low Rise												1.65	0	1.65	0.16	0		5.77
Total												1.65	0	1.65	0.16	0		5.77

4.5.2. Mitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartments Low Rise												9.96	0	9.96	1	0		34.9
Total												9.96	0	9.96	1	0		34.9
Daily, Winter (Max)																		
Apartments Low Rise												9.96	0	9.96	1	0		34.9
Total												9.96	0	9.96	1	0		34.9
Annual																		
Apartments Low Rise												1.65	0	1.65	0.16	0		5.77
Total												1.65	0	1.65	0.16	0		5.77

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e

Daily, Summer (Max)																		
Apartments Low Rise																	0.19	0.19
Total																	0.19	0.19
Daily, Winter (Max)																		
Apartments Low Rise																	0.19	0.19
Total																	0.19	0.19
Annual																		
Apartments Low Rise																	0.03	0.03
Total																	0.03	0.03

4.6.2. Mitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e	
Daily, Summer (Max)																			
Apartments Low Rise																		0.19	0.19
Total																		0.19	0.19
Daily, Winter (Max)																			
Apartments Low Rise																		0.19	0.19
Total																		0.19	0.19
Annual																			
Apartments Low Rise																		0.03	0.03
Total																		0.03	0.03

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Equipment	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.7.2. Mitigated

Equipment	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Equipment	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.8.2. Mitigated

Equipment	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Equipment	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.9.2. Mitigated

Equipment	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Vegetation	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		

Total

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Species	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		
Removed																		
Subtotal																		
Daily, Winter (Max)																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		
Removed																		
Subtotal																		
Annual																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		
Removed																		
Subtotal																		

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Vegetation	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Species	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		
Removed																		
Subtotal																		
Daily, Winter (Max)																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		
Removed																		
Subtotal																		
Annual																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		
Removed																		
Subtotal																		

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use	T	Trips/Week	Trips/Satur	Trips/Sund	Trips/Year	VMT/Week	VMT/Satur	VMT/Sund	VMT/Year
Apartment		183	204	157	66508	2295	2552	1969	834025

5.9.2. Mitigated

Land Use	T	Trips/Week	Trips/Satur	Trips/Sund	Trips/Year	VMT/Week	VMT/Satur	VMT/Sund	VMT/Year
Apartment		183	204	157	66508	2295	2552	1969	834025

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Typ	Unmitigated (number)
Apartments Low Rise	
Wood Fire	0
Gas Firepla	0
Propane Fi	0
Electric Fir	0
No Fireplac	25
Conventior	0
Catalytic W	0

Non-Cataly	0
Pellet Woo	0

5.10.1.2. Mitigated

Hearth Typ	Unmitigated (number)
Apartments	Low Rise
Wood Fire	0
Gas Firepla	0
Propane Fi	0
Electric Fire	0
No Fireplac	25
Conventior	0
Catalytic W	0
Non-Cataly	0
Pellet Woo	0

5.10.2. Architectural Coatings

Residential	Residential	Non-Reside	Non-Reside	Parking Area Coated (sq ft)
53663	17888	0	0	

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0
Summer D	day/yr	250

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0
Summer D	day/yr	250

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Land Use	Electricity (	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Apartment	123709	223	0.0129	0.0017	318402

5.11.2. Mitigated

Land Use	Electricity (	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Apartment	125832	223	0.0129	0.0017	0

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Wa	Outdoor Water (gal/year)
Apartment	881475	185892

5.12.2. Mitigated

Land Use	Indoor Wa	Outdoor Water (gal/year)
Apartment	881475	185892

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton	Cogeneration (kWh/year)
Apartment	18.5	

5.13.2. Mitigated

Land Use	Waste (ton	Cogeneration (kWh/year)
Apartment	18.5	

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use T	Equipment	Refrigerant	GWP	Quantity (k	Operations	Service Lea	Times Serviced
Apartment	Average ro	R-410A	2088	< 0.005	2.5	2.5	10
Apartment	Household	R-134a	1430	0.12	0.6	0	1

5.14.2. Mitigated

Land Use T	Equipment	Refrigerant	GWP	Quantity (k	Operations	Service Lea	Times Serviced
Apartment	Average ro	R-410A	2088	< 0.005	2.5	2.5	10
Apartment	Household	R-134a	1430	0.12	0.6	0	1

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Fuel Type	Engine Tier	Number pe	Hours Per I	Horsepowe	Load Factor

5.15.2. Mitigated

Equipment Fuel Type	Engine Tier	Number pe	Hours Per I	Horsepowe	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Fuel Type	Number pe	Hours per I	Hours per \	Horsepowe	Load Factor

5.16.2. Process Boilers

Equipment Fuel Type	Number	Boiler Ratir	Daily Heat	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation	Vegetation	Initial Acre:	Final Acres

5.18.1.2. Mitigated

Vegetation	Vegetation	Initial Acre:	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cc	Initial Acre:	Final Acres

5.18.1.2. Mitigated

Biomass Cc	Initial Acre:	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity S	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity S	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Ha	Result for F	Unit
Temperatu	24.1	annual days of extreme heat
Extreme Pr	6.45	annual days with precipitation above 20 mm
Sea Level Rise		meters of inundation depth
Wildfire	0.69	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Ha	Exposure S	Sensitivity S	Adaptive C	Vulnerability Score
Temperatu	2	0	0	N/A
Extreme Pr	2	0	0	N/A
Sea Level R	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack I	N/A	N/A	N/A	N/A
Air Quality	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Ha	Exposure S	Sensitivity S	Adaptive C	Vulnerability Score
Temperatu	2	1	1	3
Extreme Pr	2	1	1	3
Sea Level R	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack I	N/A	N/A	N/A	N/A
Air Quality	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	
AQ-Ozone	59.7
AQ-PM	39.5
AQ-DPM	50.3
Drinking W	47.8
Lead Risk H	54.5
Pesticides	0
Toxic Relea	20.9
Traffic	21.4
Effect Indicators	
CleanUp Sit	18.7
Groundwat	78.3
Haz Waste	59.8
Impaired W	77.3
Solid Waste	0
Sensitive Population	
Asthma	88.7
Cardio-vas	62.6
Low Birth V	7.38
Socioeconomic Factor Indicators	
Education	25.1
Housing	70.2
Linguistic	37

Poverty	67.4
Unemployr	14.4

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	
Above Pove	37.16156
Employed	15.56525
Median HI	23.82908
Education	
Bachelor's	54.33081
High schoo	26.62646
Preschool e	15.20595
Transportation	
Auto Acces	28.94906
Active com	46.06698
Social	
2-parent h	11.18953
Voting	74.93905
Neighborhood	
Alcohol ava	37.77749
Park access	30.25792
Retail dens	94.59772
Supermark	42.71782
Tree canop	91.62069
Housing	
Homeowne	51.98255
Housing ha	41.55011
Low-inc ho	37.45669
Low-inc rer	6.736815
Uncrowdec	66.91903
Health Outcomes	
Insured adu	47.9148
Arthritis	0
Asthma ER	6
High Blood	0
Cancer (exc	0
Asthma	0
Coronary H	0
Chronic Ob	0
Diagnosed	0
Life Expect	11
Cognitively	14
Physically I	27
Heart Attac	49
Mental Hea	0
Chronic Kid	0
Obesity	0
Pedestrian	53
Physical He	0
Stroke	0
Health Risk Behaviors	
Binge Drink	0
Current Sm	0
No Leisure	0
Climate Change Exposures	
Wildfire Ris	0
SLR Inunda	0
Children	67
Elderly	28
English Spe	75
Foreign-bo	11
Outdoor W	47
Climate Change Adaptive Capacity	
Impervious	61
Traffic Den	60
Traffic Acce	23
Other Indices	
Hardship	64
Other Decision Support	
2016 Votin	65

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroSc	47
Healthy Pla	30
Project Loc	No
Project Loc	Yes
Project Loc	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

Measure Ti	Co-Benefits Achieved

7.5. Evaluation Scorecard

Category	Number of Total Point	Max Possib	Weighted Score

7.6. Health & Equity Custom Measures

Measure Ti	Sponsor

8. User Changes to Default Data

Screen	Justification
Constructio	no demo
Land Use	PD

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Nai	Sac Rezone North Watt operations (before)
Operationa	2030
Lead Agency	
Land Use S	Project/site
Analysis Le	County
Windspeec	3.5
Precipitatic	39.2
Location	38.66735756395545, -121.38321539651498
County	Sacramento
City	Unincorporated
Air District	Sacramento Metropolitan AQMD
Air Basin	Sacramento Valley
TAZ	657
EDFZ	13
Electric Uti	Sacramento Municipal Utility District
Gas Utility	Pacific Gas & Electric
App Versio	2022.1.1.21

1.2. Land Use Types

Land Use S	Size	Unit	Lot Acreag	Building Ar	Landscape	Special Lan	Population	Description
Apartment	505	Dwelling U	21.3	535300	185653		1414	

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Energy	E-15	Require All-Electric Development

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Un/Mit.	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Unmit.	19.5	30.7	14.7	174	0.36	0.36	31.7	32	0.34	8.04	8.38	239	39007	39246	21.9	1.47	86.1	40316
Mit.	19.3	30.6	13.1	173	0.35	0.23	31.7	31.9	0.21	8.04	8.25	239	36947	37186	21.7	1.46	86.1	38250
% Reduced	0.97	0.31	11	0.4	2.9	36.4		0.41	38.2		1.57		5.28	5.25	0.83	0.26		5.12
Daily, Winter (Max)																		
Unmit.	15.5	26.8	16.7	121	0.33	0.35	31.7	32	0.33	8.04	8.37	239	35862	36102	22	1.59	5.97	37133
Mit.	15.3	26.7	15.1	120	0.32	0.22	31.7	31.9	0.2	8.04	8.24	239	33802	34042	21.8	1.59	5.97	35067
% Reduced	1.23	0.35	9.71	0.57	3.18	37.8		0.41	39.3		1.57		5.74	5.71	0.83	0.24		5.56
Average Daily (Max)																		
Unmit.	15.7	27.1	14.5	127	0.3	0.33	27.6	28	0.32	7.02	7.34	239	33112	33351	21.8	1.38	35.6	34343
Mit.	15.5	27	12.8	127	0.29	0.2	27.6	27.8	0.19	7.02	7.21	239	31052	31291	21.6	1.38	35.6	32278
% Reduced	1.21	0.35	11.2	0.54	3.46	39.4		0.47	41.1		1.79		6.22	6.18	0.84	0.28		6.01
Annual (Max)																		
Unmit.	2.86	4.94	2.64	23.3	0.05	0.06	5.04	5.1	0.06	1.28	1.34	39.6	5482	5522	3.61	0.23	5.9	5686
Mit.	2.83	4.92	2.34	23.1	0.05	0.04	5.04	5.08	0.03	1.28	1.32	39.6	5141	5181	3.58	0.23	5.9	5344
% Reduced	1.21	0.35	11.2	0.54	3.46	39.4		0.47	41.1		1.79		6.22	6.18	0.84	0.28		6.01

2.5. Operations Emissions by Sector, Unmitigated

Sector	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Mobile	16.7	15.3	12.8	144	0.35	0.22	31.7	31.9	0.2	8.04	8.24		35310	35310	1.34	1.37	82.3	35833
Area	2.62	15.3	0.27	28.7	< 0.005	0.01		0.01	0.01		0.01	0	76.6	76.6	< 0.005	< 0.005		76.9
Energy	0.19	0.1	1.62	0.69	0.01	0.13		0.13	0.13		0.13		3588	3588	0.27	0.02		3599
Water												38.1	32.5	70.6	0.13	0.08		98.8
Waste												201	0	201	20.1	0		704
Refrig.																	3.83	3.83
Total	19.5	30.7	14.7	174	0.36	0.36	31.7	32	0.34	8.04	8.38	239	39007	39246	21.9	1.47	86.1	40316
Daily, Winter (Max)																		
Mobile	15.3	13.9	15.1	120	0.32	0.22	31.7	31.9	0.2	8.04	8.24		32242	32242	1.49	1.49	2.13	32727
Area	0	12.8	0	0	0	0		0	0		0	0	0	0	0	0		0
Energy	0.19	0.1	1.62	0.69	0.01	0.13		0.13	0.13		0.13		3588	3588	0.27	0.02		3599
Water												38.1	32.5	70.6	0.13	0.08		98.8
Waste												201	0	201	20.1	0		704
Refrig.																	3.83	3.83
Total	15.5	26.8	16.7	121	0.33	0.35	31.7	32	0.33	8.04	8.37	239	35862	36102	22	1.59	5.97	37133
Average Daily																		
Mobile	13.7	12.4	12.6	107	0.29	0.19	27.6	27.8	0.18	7.02	7.2		29439	29439	1.26	1.28	31.8	29885
Area	1.79	14.5	0.18	19.7	< 0.005	0.01		0.01	0.01		0.01	0	52.5	52.5	< 0.005	< 0.005		52.7
Energy	0.19	0.1	1.62	0.69	0.01	0.13		0.13	0.13		0.13		3588	3588	0.27	0.02		3599
Water												38.1	32.5	70.6	0.13	0.08		98.8
Waste												201	0	201	20.1	0		704
Refrig.																	3.83	3.83
Total	15.7	27.1	14.5	127	0.3	0.33	27.6	28	0.32	7.02	7.34	239	33112	33351	21.8	1.38	35.6	34343
Annual																		
Mobile	2.5	2.27	2.31	19.5	0.05	0.04	5.04	5.08	0.03	1.28	1.31		4874	4874	0.21	0.21	5.27	4948
Area	0.33	2.65	0.03	3.59	< 0.005	< 0.005		0	< 0.005		0	0	8.69	8.69	< 0.005	< 0.005		8.72
Energy	0.03	0.02	0.3	0.13	< 0.005	0.02		0.02	0.02		0.02		594	594	0.04	< 0.005		596
Water												6.3	5.39	11.7	0.02	0.01		16.3
Waste												33.3	0	33.3	3.33	0		117
Refrig.																	0.63	0.63
Total	2.86	4.94	2.64	23.3	0.05	0.06	5.04	5.1	0.06	1.28	1.34	39.6	5482	5522	3.61	0.23	5.9	5686

2.6. Operations Emissions by Sector, Mitigated

Sector	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		

Mobile	16.7	15.3	12.8	144	0.35	0.22	31.7	31.9	0.2	8.04	8.24		35310	35310	1.34	1.37	82.3	35833
Area	2.62	15.3	0.27	28.7	< 0.005	0.01		0.01	0.01		0.01	0	76.6	76.6	< 0.005	< 0.005		76.9
Energy	0	0	0	0	0	0		0	0		0		1528	1528	0.09	0.01		1534
Water												38.1	32.5	70.6	0.13	0.08		98.8
Waste												201	0	201	20.1	0		704
Refrig.																	3.83	3.83
Total	19.3	30.6	13.1	173	0.35	0.23	31.7	31.9	0.21	8.04	8.25	239	36947	37186	21.7	1.46	86.1	38250
Daily, Winter (Max)																		
Mobile	15.3	13.9	15.1	120	0.32	0.22	31.7	31.9	0.2	8.04	8.24		32242	32242	1.49	1.49	2.13	32727
Area	0	12.8	0	0	0	0		0	0		0	0	0	0	0	0		0
Energy	0	0	0	0	0	0		0	0		0		1528	1528	0.09	0.01		1534
Water												38.1	32.5	70.6	0.13	0.08		98.8
Waste												201	0	201	20.1	0		704
Refrig.																	3.83	3.83
Total	15.3	26.7	15.1	120	0.32	0.22	31.7	31.9	0.2	8.04	8.24	239	33802	34042	21.8	1.59	5.97	35067
Average Daily																		
Mobile	13.7	12.4	12.6	107	0.29	0.19	27.6	27.8	0.18	7.02	7.2		29439	29439	1.26	1.28	31.8	29885
Area	1.79	14.5	0.18	19.7	< 0.005	0.01		0.01	0.01		0.01	0	52.5	52.5	< 0.005	< 0.005		52.7
Energy	0	0	0	0	0	0		0	0		0		1528	1528	0.09	0.01		1534
Water												38.1	32.5	70.6	0.13	0.08		98.8
Waste												201	0	201	20.1	0		704
Refrig.																	3.83	3.83
Total	15.5	27	12.8	127	0.29	0.2	27.6	27.8	0.19	7.02	7.21	239	31052	31291	21.6	1.38	35.6	32278
Annual																		
Mobile	2.5	2.27	2.31	19.5	0.05	0.04	5.04	5.08	0.03	1.28	1.31		4874	4874	0.21	0.21	5.27	4948
Area	0.33	2.65	0.03	3.59	< 0.005	< 0.005		0	< 0.005		0	0	8.69	8.69	< 0.005	< 0.005		8.72
Energy	0	0	0	0	0	0		0	0		0		253	253	0.01	< 0.005		254
Water												6.3	5.39	11.7	0.02	0.01		16.3
Waste												33.3	0	33.3	3.33	0		117
Refrig.																	0.63	0.63
Total	2.83	4.92	2.34	23.1	0.05	0.04	5.04	5.08	0.03	1.28	1.32	39.6	5141	5181	3.58	0.23	5.9	5344

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartment	16.7	15.3	12.8	144	0.35	0.22	31.7	31.9	0.2	8.04	8.24		35310	35310	1.34	1.37	82.3	35833
Total	16.7	15.3	12.8	144	0.35	0.22	31.7	31.9	0.2	8.04	8.24		35310	35310	1.34	1.37	82.3	35833
Daily, Winter (Max)																		
Apartment	15.3	13.9	15.1	120	0.32	0.22	31.7	31.9	0.2	8.04	8.24		32242	32242	1.49	1.49	2.13	32727
Total	15.3	13.9	15.1	120	0.32	0.22	31.7	31.9	0.2	8.04	8.24		32242	32242	1.49	1.49	2.13	32727
Annual																		
Apartment	2.5	2.27	2.31	19.5	0.05	0.04	5.04	5.08	0.03	1.28	1.31		4874	4874	0.21	0.21	5.27	4948
Total	2.5	2.27	2.31	19.5	0.05	0.04	5.04	5.08	0.03	1.28	1.31		4874	4874	0.21	0.21	5.27	4948

4.1.2. Mitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartment	16.7	15.3	12.8	144	0.35	0.22	31.7	31.9	0.2	8.04	8.24		35310	35310	1.34	1.37	82.3	35833
Total	16.7	15.3	12.8	144	0.35	0.22	31.7	31.9	0.2	8.04	8.24		35310	35310	1.34	1.37	82.3	35833
Daily, Winter (Max)																		
Apartment	15.3	13.9	15.1	120	0.32	0.22	31.7	31.9	0.2	8.04	8.24		32242	32242	1.49	1.49	2.13	32727
Total	15.3	13.9	15.1	120	0.32	0.22	31.7	31.9	0.2	8.04	8.24		32242	32242	1.49	1.49	2.13	32727
Annual																		
Apartment	2.5	2.27	2.31	19.5	0.05	0.04	5.04	5.08	0.03	1.28	1.31		4874	4874	0.21	0.21	5.27	4948
Total	2.5	2.27	2.31	19.5	0.05	0.04	5.04	5.08	0.03	1.28	1.31		4874	4874	0.21	0.21	5.27	4948

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartments Low Rise													1527	1527	0.09	0.01		1532
Total													1527	1527	0.09	0.01		1532
Daily, Winter (Max)																		
Apartments Low Rise													1527	1527	0.09	0.01		1532
Total													1527	1527	0.09	0.01		1532
Annual																		
Apartments Low Rise													253	253	0.01	< 0.005		254
Total													253	253	0.01	< 0.005		254

4.2.2. Electricity Emissions By Land Use - Mitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartments Low Rise													1528	1528	0.09	0.01		1534
Total													1528	1528	0.09	0.01		1534
Daily, Winter (Max)																		
Apartments Low Rise													1528	1528	0.09	0.01		1534
Total													1528	1528	0.09	0.01		1534
Annual																		
Apartments Low Rise													253	253	0.01	< 0.005		254
Total													253	253	0.01	< 0.005		254

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartment	0.19	0.1	1.62	0.69	0.01	0.13		0.13	0.13		0.13		2061	2061	0.18	< 0.005		2067

Total	0.19	0.1	1.62	0.69	0.01	0.13	0.13	0.13	0.13	2061	2061	0.18	< 0.005		2067
Daily, Winter (Max)															
Apartment	0.19	0.1	1.62	0.69	0.01	0.13	0.13	0.13	0.13	2061	2061	0.18	< 0.005		2067
Total	0.19	0.1	1.62	0.69	0.01	0.13	0.13	0.13	0.13	2061	2061	0.18	< 0.005		2067
Annual															
Apartment	0.03	0.02	0.3	0.13	< 0.005	0.02	0.02	0.02	0.02	341	341	0.03	< 0.005		342
Total	0.03	0.02	0.3	0.13	< 0.005	0.02	0.02	0.02	0.02	341	341	0.03	< 0.005		342

4.2.4. Natural Gas Emissions By Land Use - Mitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartment	0	0	0	0	0	0		0	0		0		0	0	0	0		0
Total	0	0	0	0	0	0		0	0		0		0	0	0	0		0
Daily, Winter (Max)																		
Apartment	0	0	0	0	0	0		0	0		0		0	0	0	0		0
Total	0	0	0	0	0	0		0	0		0		0	0	0	0		0
Annual																		
Apartment	0	0	0	0	0	0		0	0		0		0	0	0	0		0
Total	0	0	0	0	0	0		0	0		0		0	0	0	0		0

4.3. Area Emissions by Source

4.3.1. Unmitigated

Source	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Hearths	0	0	0	0	0	0		0	0		0	0	0	0	0	0		0
Consumer Products		11.5																
Architectural Coatings		1.38																
Landscape	2.62	2.48	0.27	28.7	< 0.005	0.01		0.01	0.01		0.01		76.6	76.6	< 0.005	< 0.005		76.9
Total	2.62	15.3	0.27	28.7	< 0.005	0.01		0.01	0.01		0.01	0	76.6	76.6	< 0.005	< 0.005		76.9
Daily, Winter (Max)																		
Hearths	0	0	0	0	0	0		0	0		0	0	0	0	0	0		0
Consumer Products		11.5																
Architectural Coatings		1.38																
Total	0	12.8	0	0	0	0		0	0		0	0	0	0	0	0		0
Annual																		
Hearths	0	0	0	0	0	0		0	0		0	0	0	0	0	0		0
Consumer Products		2.09																
Architectural Coatings		0.25																
Landscape	0.33	0.31	0.03	3.59	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		8.69	8.69	< 0.005	< 0.005		8.72
Total	0.33	2.65	0.03	3.59	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005	0	8.69	8.69	< 0.005	< 0.005		8.72

4.3.2. Mitigated

Source	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Hearths	0	0	0	0	0	0		0	0		0	0	0	0	0	0		0
Consumer Products		11.5																
Architectural Coatings		1.38																
Landscape	2.62	2.48	0.27	28.7	< 0.005	0.01		0.01	0.01		0.01		76.6	76.6	< 0.005	< 0.005		76.9
Total	2.62	15.3	0.27	28.7	< 0.005	0.01		0.01	0.01		0.01	0	76.6	76.6	< 0.005	< 0.005		76.9
Daily, Winter (Max)																		
Hearths	0	0	0	0	0	0		0	0		0	0	0	0	0	0		0
Consumer Products		11.5																
Architectural Coatings		1.38																
Total	0	12.8	0	0	0	0		0	0		0	0	0	0	0	0		0
Annual																		
Hearths	0	0	0	0	0	0		0	0		0	0	0	0	0	0		0
Consumer Products		2.09																
Architectural Coatings		0.25																
Landscape	0.33	0.31	0.03	3.59	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		8.69	8.69	< 0.005	< 0.005		8.72
Total	0.33	2.65	0.03	3.59	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005	0	8.69	8.69	< 0.005	< 0.005		8.72

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartments Low Rise												38.1	32.5	70.6	0.13	0.08		98.8
Total												38.1	32.5	70.6	0.13	0.08		98.8
Daily, Winter (Max)																		
Apartments Low Rise												38.1	32.5	70.6	0.13	0.08		98.8
Total												38.1	32.5	70.6	0.13	0.08		98.8
Annual																		
Apartments Low Rise												6.3	5.39	11.7	0.02	0.01		16.3
Total												6.3	5.39	11.7	0.02	0.01		16.3

4.4.2. Mitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartments Low Rise												38.1	32.5	70.6	0.13	0.08		98.8
Total												38.1	32.5	70.6	0.13	0.08		98.8
Daily, Winter (Max)																		
Apartments Low Rise												38.1	32.5	70.6	0.13	0.08		98.8
Total												38.1	32.5	70.6	0.13	0.08		98.8
Annual																		
Apartments Low Rise												6.3	5.39	11.7	0.02	0.01		16.3
Total												6.3	5.39	11.7	0.02	0.01		16.3

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartments Low Rise												201	0	201	20.1	0		704
Total												201	0	201	20.1	0		704
Daily, Winter (Max)																		
Apartments Low Rise												201	0	201	20.1	0		704
Total												201	0	201	20.1	0		704
Annual																		
Apartments Low Rise												33.3	0	33.3	3.33	0		117
Total												33.3	0	33.3	3.33	0		117

4.5.2. Mitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartments Low Rise												201	0	201	20.1	0		704
Total												201	0	201	20.1	0		704
Daily, Winter (Max)																		
Apartments Low Rise												201	0	201	20.1	0		704
Total												201	0	201	20.1	0		704
Annual																		
Apartments Low Rise												33.3	0	33.3	3.33	0		117
Total												33.3	0	33.3	3.33	0		117

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartments Low Rise																	3.83	3.83
Total																	3.83	3.83
Daily, Winter (Max)																		
Apartments Low Rise																	3.83	3.83
Total																	3.83	3.83
Annual																		
Apartments Low Rise																	0.63	0.63
Total																	0.63	0.63

4.6.2. Mitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Apartments Low Rise																	3.83	3.83
Total																	3.83	3.83
Daily, Winter (Max)																		
Apartments Low Rise																	3.83	3.83
Total																	3.83	3.83
Annual																		
Apartments Low Rise																	0.63	0.63
Total																	0.63	0.63

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Equipment	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.7.2. Mitigated

Equipment	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Equipment	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.8.2. Mitigated

Equipment	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Equipment	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.9.2. Mitigated

Equipment	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Vegetation	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Species	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		
Removed																		
Subtotal																		
Daily, Winter (Max)																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		
Removed																		
Subtotal																		
Annual																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		
Removed																		
Subtotal																		

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Vegetation	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Species	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Avoided																		

Subtotal
Sequestered
Subtotal
Removed
Subtotal

Daily, Winter (Max)
Avoided
Subtotal
Sequestered
Subtotal
Removed
Subtotal

Annual
Avoided
Subtotal
Sequestered
Subtotal
Removed
Subtotal

5. Activity Data
5.9. Operational Mobile Sources
5.9.1. Unmitigated

Land Use T	Trips/Weel	Trips/Satur	Trips/Sund	Trips/Year	VMT/Weel	VMT/Satur	VMT/Sund	VMT/Year
Apartment	3697	4111	3171	1343466	40158	44657	34453	14594777

5.9.2. Mitigated

Land Use T	Trips/Weel	Trips/Satur	Trips/Sund	Trips/Year	VMT/Weel	VMT/Satur	VMT/Sund	VMT/Year
Apartment	3697	4111	3171	1343466	40158	44657	34453	14594777

5.10. Operational Area Sources
5.10.1. Hearths
5.10.1.1. Unmitigated

Hearth Typ	Unmitigated (number)
Apartments Low Rise	
Wood Fire	0
Gas Firepla	0
Propane Fi	0
Electric Fire	0
No Fireplac	505
Conventior	0
Catalytic W	0
Non-Cataly	0
Pellet Woo	0

5.10.1.2. Mitigated

Hearth Typ	Unmitigated (number)
Apartments Low Rise	
Wood Fire	0
Gas Firepla	0
Propane Fi	0
Electric Fire	0
No Fireplac	505
Conventior	0
Catalytic W	0
Non-Cataly	0
Pellet Woo	0

5.10.2. Architectural Coatings

Residential	Residential	Non-Reside	Non-Reside	Parking Area Coated (sq ft)
1083983	361328	0	0	

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0
Summer D	day/yr	250

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0
Summer D	day/yr	250

5.11. Operational Energy Consumption
5.11.1. Unmitigated

Land Use	Electricity (	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Apartment	2498915	223	0.0129	0.0017	6431723

5.11.2. Mitigated

Land Use	Electricity (	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Apartment	2501038	223	0.0129	0.0017	0

5.12. Operational Water and Wastewater Consumption
5.12.1. Unmitigated

Land Use	Indoor Wa	Outdoor Water (gal/year)

Apartment	17805795	3169087

5.12.2. Mitigated

Land Use	Indoor Wa	Outdoor Water (gal/year)
Apartment	17805795	3169087

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton	Cogeneration (kWh/year)
Apartment	373	

5.13.2. Mitigated

Land Use	Waste (ton	Cogeneration (kWh/year)
Apartment	373	

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use T	Equipment	Refrigerant	GWP	Quantity (k	Operations	Service Lea	Times Serviced
Apartment	Average ro	R-410A	2088	< 0.005	2.5	2.5	10
Apartment	Household	R-134a	1430	0.12	0.6	0	1

5.14.2. Mitigated

Land Use T	Equipment	Refrigerant	GWP	Quantity (k	Operations	Service Lea	Times Serviced
Apartment	Average ro	R-410A	2088	< 0.005	2.5	2.5	10
Apartment	Household	R-134a	1430	0.12	0.6	0	1

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment	Fuel Type	Engine Tier	Number pe	Hours Per I	Horsepowe	Load Factor

5.15.2. Mitigated

Equipment	Fuel Type	Engine Tier	Number pe	Hours Per I	Horsepowe	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment	Fuel Type	Number pe	Hours per I	Hours per \	Horsepowe	Load Factor

5.16.2. Process Boilers

Equipment	Fuel Type	Number	Boiler Ratir	Daily Heat	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation	Vegetation	Initial Acre	Final Acres

5.18.1.2. Mitigated

Vegetation	Vegetation	Initial Acre	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cc	Initial Acre	Final Acres

5.18.1.2. Mitigated

Biomass Cc	Initial Acre	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity S	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity S	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Ha	Result for F	Unit
Temperatu	21.8	annual days of extreme heat
Extreme Pr	6.35	annual days with precipitation above 20 mm
Sea Level Rise		meters of inundation depth
Wildfire	0	annual hectares burned

Temperat

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities

6.2. Initial Climate Risk Scores

Climate Ha	Exposure S	Sensitivity	Adaptive C	Vulnerability Score
Temperatu	1	0	0	N/A

Extreme Pr	2	0	0	N/A
Sea Level R	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack	N/A	N/A	N/A	N/A
Air Quality	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Ha	Exposure S	Sensitivity	Adaptive C	Vulnerability Score
Temperatu	1	1	1	2
Extreme Pr	2	1	1	3
Sea Level R	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack	N/A	N/A	N/A	N/A
Air Quality	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	
AQ-Ozone	58.2
AQ-PM	37.4
AQ-DPM	27.5
Drinking W	61.1
Lead Risk H	92.2
Pesticides	7.24
Toxic Relea	21.8
Traffic	47
Effect Indicators	
CleanUp Si	80.9
Groundwat	99.2
Haz Waste	61.6
Impaired W	0
Solid Wast	52.9
Sensitive Population	
Asthma	93.4
Cardio-vas	69.2
Low Birth W	79.4
Socioeconomic Factor Indicators	
Education	62.9
Housing	73.4
Linguistic	39.2
Poverty	91.6
Unemployr	65.6

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	
Above Pov	10.16297
Employed	6.274862
Median HI	6.672655
Education	
Bachelor's	19.73566
High schoo	12.79353
Preschool e	42.65366
Transportation	
Auto Acces	24.89414
Active com	74.06647
Social	
2-parent h	39.00937
Voting	13.02451
Neighborhood	
Alcohol ava	41.65277
Park access	47.42718
Retail dens	38.27794
Supermark	72.19299
Tree canop	82.34313
Housing	

Homeowne	23.13615
Housing ha	24.9198
Low-inc ho	13.20416
Low-inc rer	43.79571
Uncrowdec	25.44591
Health Outcomes	
Insured adı	37.80316
Arthritis	0
Asthma ER	5.9
High Blood	0
Cancer (ex	0
Asthma	0
Coronary H	0
Chronic Ob	0
Diagnosed	0
Life Expect	5.5
Cognitively	4
Physically	5.6
Heart Atta	17
Mental He	0
Chronic Kic	0
Obesity	0
Pedestrian	97
Physical He	0
Stroke	0
Health Risk Behaviors	
Binge Drink	0
Current Sm	0
No Leisure	0
Climate Change Exposures	
Wildfire Ris	0
SLR Inunda	0
Children	16
Elderly	68
English Spe	43
Foreign-bo	30
Outdoor W	49
Climate Change Adaptive Capacity	
Impervious	51
Traffic Den	47
Traffic Acc	66
Other Indices	
Hardship	81
Other Decision Support	
2016 Votin	6.4

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroS	83
Healthy Pla	13
Project Loc	Yes
Project Loc	Yes
Project Loc	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

Measure T	Co-Benefits Achieved

7.5. Evaluation Scorecard

Category	Number of Total Point	Max Possit	Weighted Score

7.6. Health & Equity Custom Measures

Measure T	Sponsor

8. User Changes to Default Data

Screen	Justification
Land Use	20% of total lot acreage is landscaped as in GP
Constructio	no demo

	Adjusted # of Days		Off Model Adjustments
Demolition	0	280.2	Adjusted Arch Coating Days
Site Prep	10		based on 2/3 building days plus paving and arch coating
Grading	35	**251**	Unmitigated ROG lbs/day
Building Construction	370	4518	ROG X Arch Tech Days
Paving	18	**16.1242**	**Adjusted ROG**
Arch Coating	18		
		2.73	Unmitigated ROG TPY
		49.14	ROG X Arch Tech Days
		0.175375	**Adjusted ROG**

Adjustment spread out throughout 2027 and 2028

	Adjusted # of Days		Off Model Adjustments
Demolition	10	156.34	Adjusted Arch Coating Days
Site Prep	7		based on 2/3 building days plus paving and arch coating
Grading	20	**883**	Unmitigated ROG lbs/day
Building Construction	199	10596	ROG X Arch Tech Days
Paving	13	**67.77536**	**Adjusted ROG**
Arch Coating	12		
		6	Unmitigated ROG TPY
		72	ROG X Arch Tech Days
		0.460535	**Adjusted ROG**

	Adjusted # of Days		Off Model Adjustments
Demolition	10	156.34	Adjusted Arch Coating Days
Site Prep	7		based on 2/3 building days plus paving and arch coating
Grading	20	**883**	Unmitigated ROG lbs/day
Building Construction	199	10596	ROG X Arch Tech Days
Paving	13	**67.77536139**	**Adjusted ROG**
Arch Coating	12		
		5.98	Unmitigated ROG TPY
		71.76	ROG X Arch Tech Days
		0.458999616	**Adjusted ROG**

	Adjusted # of Days		
			Off Model Adjustments
Demolition	10	157.34	Adjusted Arch Coating Days
Site Prep	7		based on 2/3 building days plus paving and arch coating
Grading	19	**815**	Unmitigated ROG lbs/day
Building Construction	199	10595	ROG X Arch Tech Days
Paving	13	**67.33825**	**Adjusted ROG**
Arch Coating	13		
		5.93	Unmitigated ROG TPY
		77.09	ROG X Arch Tech Days
		0.489958	**Adjusted ROG**

	Adjusted # of Days		Off Model Adjustments
Demolition	10	155.68	Adjusted Arch Coating Days
Site Prep	7		based on 2/3 building days plus paving and arch coating
Grading	20	**882**	Unmitigated ROG lbs/day
Building Construction	198	10584	ROG X Arch Tech Days
Paving	13	**67.98561**	**Adjusted ROG**
Arch Coating	12		
		5.92	Unmitigated ROG TPY
		71.04	ROG X Arch Tech Days
		0.456321	**Adjusted ROG**

	Adjusted # of Days		Off Model Adjustments
Demolition	10	156.34	Adjusted Arch Coating Days
Site Prep	7		based on 2/3 building days plus paving and arch coating
Grading	20	**882**	Unmitigated ROG lbs/day
Building Construction	199	10584	ROG X Arch Tech Days
Paving	13	**67.69861**	**Adjusted ROG**
Arch Coating	12		
		5.9	Unmitigated ROG TPY
		70.8	ROG X Arch Tech Days
		0.452859	**Adjusted ROG**

	Adjusted # of Days		
			Off Model Adjustments
Demolition	0	76	Adjusted Arch Coating Days
Site Prep	1		based on 2/3 building days plus paving and arch coating
Grading	2	**66.8**	Unmitigated ROG lbs/day
Building Construction	100	334	ROG X Arch Tech Days
Paving	5	**4.394737**	**Adjusted ROG**
Arch Coating	5		
		0.23	Unmitigated ROG TPY
		1.15	ROG X Arch Tech Days
		0.015132	**Adjusted ROG**

Adjustment spread out throughout 2025

	Adjusted # of Days		Off Model Adjustments
Demolition	0	284.2	Adjusted Arch Coating Days
Site Prep	10		based on 2/3 building days plus paving and arch coating
Grading	35	**332**	Unmitigated ROG lbs/day
Building Construction	370	6640	ROG X Arch Tech Days
Paving	20	**23.36383**	**Adjusted ROG**
Arch Coating	20		
		3.33	Unmitigated ROG TPY
		66.6	ROG X Arch Tech Days
		0.234342	**Adjusted ROG**

Adjustment spread out throughout 2026 and 2027

	Adjusted # of Days		Off Model Adjustments
Demolition	0	280.2	Adjusted Arch Coating Days
Site Prep	10		based on 2/3 building days plus paving and arch coating
Grading	35	**390**	Unmitigated ROG lbs/day
Building Construction	370	7020	ROG X Arch Tech Days
Paving	18	**25.05353**	**Adjusted ROG**
Arch Coating	18		
		3.79	Unmitigated ROG TPY
		68.22	ROG X Arch Tech Days
		0.243469	**Adjusted ROG**

Adjustment spread out throughout 2027 and 2028

	Adjusted # of Days		
			Off Model Adjustments
Demolition	0	163.96	Adjusted Arch Coating Days
Site Prep	7		based on 2/3 building days plus paving and arch coating
Grading	20	**328**	Unmitigated ROG lbs/day
Building Construction	206	4592	ROG X Arch Tech Days
Paving	14	**28.00683**	**Adjusted ROG**
Arch Coating	14		
		2.6	Unmitigated ROG TPY
		36.4	ROG X Arch Tech Days
		0.222005	**Adjusted ROG**

	Adjusted # of Days		
			Off Model Adjustments
Demolition	0	163.96	Adjusted Arch Coating Days
Site Prep	7		based on 2/3 building days plus paving and arch coating
Grading	20	**328**	Unmitigated ROG lbs/day
Building Construction	206	4592	ROG X Arch Tech Days
Paving	14	**28.00683**	**Adjusted ROG**
Arch Coating	14		
		2.6	Unmitigated ROG TPY
		36.4	ROG X Arch Tech Days
		0.222005	**Adjusted ROG**

	Adjusted # of Days		
			Off Model Adjustments
Demolition	0	163.96	Adjusted Arch Coating Days
Site Prep	7		based on 2/3 building days plus paving and arch coating
Grading	20	**328**	Unmitigated ROG lbs/day
Building Construction	206	4592	ROG X Arch Tech Days
Paving	14	**28.00683**	**Adjusted ROG**
Arch Coating	14		
		2.6	Unmitigated ROG TPY
		36.4	ROG X Arch Tech Days
		0.222005	**Adjusted ROG**

	Adjusted # of Days		
			Off Model Adjustments
Demolition	0	162.96	Adjusted Arch Coating Days
Site Prep	7		based on 2/3 building days plus paving and arch coating
Grading	20	**353**	Unmitigated ROG lbs/day
Building Construction	206	4589	ROG X Arch Tech Days
Paving	14	**28.16028**	**Adjusted ROG**
Arch Coating	13		
		2.6	Unmitigated ROG TPY
		33.8	ROG X Arch Tech Days
		0.207413	**Adjusted ROG**

	Adjusted # of Days
Demolition	0
Site Prep	7
Grading	20
Building Construction	206
Paving	14
Arch Coating	14

Off Model Adjustments

163.96	Adjusted Arch Coating Days
	based on 2/3 building days plus paving and arch coating
328	Unmitigated ROG lbs/day
4592	ROG X Arch Tech Days
28.00683	**Adjusted ROG**
2.6	Unmitigated ROG TPY
36.4	ROG X Arch Tech Days
0.222005	**Adjusted ROG**

	Adjusted # of Days		
			Off Model Adjustments
Demolition	0	76	Adjusted Arch Coating Days
Site Prep	1		based on 2/3 building days plus paving and arch coating
Grading	2	**49.9**	Unmitigated ROG lbs/day
Building Construction	100	249.5	ROG X Arch Tech Days
Paving	5	**3.282895**	**Adjusted ROG**
Arch Coating	5		
		0.19	Unmitigated ROG TPY
		0.95	ROG X Arch Tech Days
		0.0125	**Adjusted ROG**

Adjustment spread out throughout 2025

	Adjusted # of Days		
			Off Model Adjustments
Demolition	0	284.2	Adjusted Arch Coating Days
Site Prep	10		based on 2/3 building days plus paving and arch coating
Grading	35	**252**	Unmitigated ROG lbs/day
Building Construction	370	5040	ROG X Arch Tech Days
Paving	20	**17.73399**	**Adjusted ROG**
Arch Coating	20		
		2.53	Unmitigated ROG TPY
		50.6	ROG X Arch Tech Days
		0.178044	**Adjusted ROG**

Adjustment spread out throughout 2026 and 2027

	Adjusted # of Days		
			Off Model Adjustments
Demolition	0	238	Adjusted Arch Coating Days
Site Prep	10		based on 2/3 building days plus paving and arch coating
Grading	30	**190**	Unmitigated ROG lbs/day
Building Construction	300	3800	ROG X Arch Tech Days
Paving	20	**15.96639**	**Adjusted ROG**
Arch Coating	20		
		2.53	Unmitigated ROG TPY
		50.6	ROG X Arch Tech Days
		0.212605	**Adjusted ROG**

Adjustment spread out throughout 2026 and 2027

Sac Rezone after (2025) Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Sac Rezone after (2025)
Construction Start Date	1/1/2025
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.00
Precipitation (days)	36.6
Location	38.496642743017276, -121.4302236650689
County	Sacramento
City	Unincorporated
Air District	Sacramento Metropolitan AQMD
Air Basin	Sacramento Valley
TAZ	732
EDFZ	13
Electric Utility	Sacramento Municipal Utility District
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.21

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Apartments Mid Rise	1,174	Dwelling Unit	37.5	1,127,040	327,122	—	3,287	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	5.64	4.86	19.5	66.4	0.05	0.48	9.49	9.97	0.45	2.26	2.70	—	15,623	15,623	0.48	0.90	46.3	15,948
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	5.30	883	31.7	53.1	0.06	1.37	9.49	9.97	1.26	3.98	5.24	—	14,544	14,544	0.54	0.90	1.20	14,826
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.32	31.8	14.2	32.8	0.03	0.40	5.50	5.90	0.37	1.38	1.74	—	8,767	8,767	0.30	0.50	11.0	8,934
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.61	5.80	2.59	5.98	0.01	0.07	1.00	1.08	0.07	0.25	0.32	—	1,451	1,451	0.05	0.08	1.83	1,479

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2025	5.64	4.86	19.5	66.4	0.05	0.48	9.49	9.97	0.45	2.26	2.70	—	15,623	15,623	0.48	0.90	46.3	15,948
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	5.30	883	31.7	53.1	0.06	1.37	9.49	9.97	1.26	3.98	5.24	—	14,544	14,544	0.54	0.90	1.20	14,826
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	3.32	31.8	14.2	32.8	0.03	0.40	5.50	5.90	0.37	1.38	1.74	—	8,767	8,767	0.30	0.50	11.0	8,934
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.61	5.80	2.59	5.98	0.01	0.07	1.00	1.08	0.07	0.25	0.32	—	1,451	1,451	0.05	0.08	1.83	1,479

3. Construction Emissions Details

3.1. Demolition (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.86	2.40	22.2	19.9	0.03	0.92	—	0.92	0.84	—	0.84	—	3,425	3,425	0.14	0.03	—	3,437
Demolition	—	—	—	—	—	—	0.75	0.75	—	0.11	0.11	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.08	0.07	0.61	0.55	< 0.005	0.03	—	0.03	0.02	—	0.02	—	93.8	93.8	< 0.005	< 0.005	—	94.2
Demolition	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.11	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	15.5	15.5	< 0.005	< 0.005	—	15.6
Demolition	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.06	0.67	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	151	151	< 0.005	0.01	0.02	153
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.08	0.02	1.23	0.45	< 0.005	0.01	0.16	0.17	0.01	0.04	0.06	—	637	637	0.06	0.10	0.03	669
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.25	4.25	< 0.005	< 0.005	0.01	4.31
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	17.5	17.5	< 0.005	< 0.005	0.02	18.3
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.70	0.70	< 0.005	< 0.005	< 0.005	0.71
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.89	2.89	< 0.005	< 0.005	< 0.005	3.04

3.3. Site Preparation (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.94	3.31	31.6	30.2	0.05	1.37	—	1.37	1.26	—	1.26	—	5,295	5,295	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	7.67	7.67	—	3.94	3.94	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.06	0.61	0.58	< 0.005	0.03	—	0.03	0.02	—	0.02	—	102	102	< 0.005	< 0.005	—	102
Dust From Material Movement	—	—	—	—	—	—	0.15	0.15	—	0.08	0.08	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.11	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	16.8	16.8	< 0.005	< 0.005	—	16.9

Dust From Material Movement	—	—	—	—	—	—	0.03	0.03	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.06	0.78	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	176	176	< 0.005	0.01	0.02	179
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.47	3.47	< 0.005	< 0.005	0.01	3.52
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.57	0.57	< 0.005	< 0.005	< 0.005	0.58
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Grading (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.80	3.20	29.7	28.3	0.06	1.23	—	1.23	1.14	—	1.14	—	6,599	6,599	0.27	0.05	—	6,622
Dust From Material Movement	—	—	—	—	—	—	3.59	3.59	—	1.42	1.42	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.21	0.18	1.63	1.55	< 0.005	0.07	—	0.07	0.06	—	0.06	—	362	362	0.01	< 0.005	—	363
Dust From Material Movement	—	—	—	—	—	—	0.20	0.20	—	0.08	0.08	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.30	0.28	< 0.005	0.01	—	0.01	0.01	—	0.01	—	59.9	59.9	< 0.005	< 0.005	—	60.1
Dust From Material Movement	—	—	—	—	—	—	0.04	0.04	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.07	0.89	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	202	202	< 0.005	0.01	0.02	204
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.3	11.3	< 0.005	< 0.005	0.02	11.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.88	1.88	< 0.005	< 0.005	< 0.005	1.90
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Building Construction (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.73	0.61	5.69	7.11	0.01	0.24	—	0.24	0.22	—	0.22	—	1,307	1,307	0.05	0.01	—	1,312
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	1.04	1.30	< 0.005	0.04	—	0.04	0.04	—	0.04	—	216	216	0.01	< 0.005	—	217
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.89	3.57	2.46	50.9	0.00	0.00	8.54	8.54	0.00	2.00	2.00	—	9,595	9,595	0.15	0.34	36.8	9,737
Vendor	0.40	0.16	6.58	2.44	0.02	0.05	0.95	1.00	0.05	0.26	0.30	—	3,630	3,630	0.24	0.54	9.44	3,805
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.56	3.18	3.13	37.5	0.00	0.00	8.54	8.54	0.00	2.00	2.00	—	8,518	8,518	0.20	0.34	0.96	8,626
Vendor	0.39	0.13	7.03	2.50	0.02	0.05	0.95	1.00	0.05	0.26	0.31	—	3,628	3,628	0.24	0.54	0.25	3,794
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	1.93	1.74	1.52	20.9	0.00	0.00	4.55	4.55	0.00	1.06	1.06	—	4,766	4,766	0.09	0.19	8.66	4,833
Vendor	0.22	0.08	3.78	1.34	0.01	0.03	0.51	0.54	0.03	0.14	0.17	—	1,979	1,979	0.13	0.29	2.22	2,071
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.35	0.32	0.28	3.81	0.00	0.00	0.83	0.83	0.00	0.19	0.19	—	789	789	0.02	0.03	1.43	800
Vendor	0.04	0.02	0.69	0.24	< 0.005	0.01	0.09	0.10	0.01	0.03	0.03	—	328	328	0.02	0.05	0.37	343
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Paving (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.95	0.80	7.45	9.98	0.01	0.35	—	0.35	0.32	—	0.32	—	1,511	1,511	0.06	0.01	—	1,517
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.27	0.36	< 0.005	0.01	—	0.01	0.01	—	0.01	—	53.8	53.8	< 0.005	< 0.005	—	54.0
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.91	8.91	< 0.005	< 0.005	—	8.94
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.06	0.67	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	151	151	< 0.005	0.01	0.02	153
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.53	5.53	< 0.005	< 0.005	0.01	5.60
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.91	0.91	< 0.005	< 0.005	< 0.005	0.93
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Architectural Coating (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.13	0.88	1.14	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	882	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	< 0.005	0.03	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.39	4.39	< 0.005	< 0.005	—	4.40
Architectural Coatings	—	29.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.73	0.73	< 0.005	< 0.005	—	0.73
Architectural Coatings	—	5.29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.71	0.64	0.63	7.50	0.00	0.00	1.71	1.71	0.00	0.40	0.40	—	1,704	1,704	0.04	0.07	0.19	1,725
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.25	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	57.5	57.5	< 0.005	< 0.005	0.10	58.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.52	9.52	< 0.005	< 0.005	0.02	9.65
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequest	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	1/1/2025	1/14/2025	5.00	10.0	—
Site Preparation	Site Preparation	1/15/2025	1/23/2025	5.00	7.00	—
Grading	Grading	1/24/2025	2/20/2025	5.00	20.0	—
Building Construction	Building Construction	2/21/2025	11/26/2025	5.00	199	—
Paving	Paving	11/27/2025	12/15/2025	5.00	13.0	—
Architectural Coating	Architectural Coating	12/16/2025	12/31/2025	5.00	12.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Demolition	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40

Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	15.0	14.3	LDA,LDT1,LDT2
Demolition	Vendor	—	8.80	HHDT,MHDT
Demolition	Hauling	8.60	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	14.3	LDA,LDT1,LDT2
Site Preparation	Vendor	—	8.80	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	14.3	LDA,LDT1,LDT2
Grading	Vendor	—	8.80	HHDT,MHDT

Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	845	14.3	LDA,LDT1,LDT2
Building Construction	Vendor	126	8.80	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	14.3	LDA,LDT1,LDT2
Paving	Vendor	—	8.80	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	169	14.3	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	8.80	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	2,282,256	760,752	0.00	0.00	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (Building Square Footage)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	7,404	—
Site Preparation	—	—	10.5	0.00	—
Grading	—	—	60.0	0.00	—
Paving	0.00	0.00	0.00	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Apartments Mid Rise	—	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2025	0.00	375	0.01	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	19.3	annual days of extreme heat
Extreme Precipitation	5.70	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	2	0	0	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	2	1	1	3
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2

Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	40.0
AQ-PM	35.1
AQ-DPM	76.8
Drinking Water	78.5
Lead Risk Housing	72.2
Pesticides	0.00
Toxic Releases	22.2
Traffic	82.0
Effect Indicators	—
CleanUp Sites	51.3
Groundwater	82.5
Haz Waste Facilities/Generators	10.2
Impaired Water Bodies	43.8

Solid Waste	0.00
Sensitive Population	—
Asthma	89.8
Cardio-vascular	78.3
Low Birth Weights	53.5
Socioeconomic Factor Indicators	—
Education	87.3
Housing	99.3
Linguistic	93.9
Poverty	87.8
Unemployment	81.7

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	15.01347363
Employed	17.64403952
Median HI	2.065956628
Education	—
Bachelor's or higher	23.94456564
High school enrollment	100
Preschool enrollment	52.58565379
Transportation	—
Auto Access	6.351854228
Active commuting	46.04131913
Social	—

2-parent households	26.27999487
Voting	29.56499423
Neighborhood	—
Alcohol availability	31.10483767
Park access	62.08135506
Retail density	73.19389195
Supermarket access	94.25125112
Tree canopy	79.53291415
Housing	—
Homeownership	13.08866932
Housing habitability	6.108045682
Low-inc homeowner severe housing cost burden	69.52393173
Low-inc renter severe housing cost burden	0.898242012
Uncrowded housing	24.76581548
Health Outcomes	—
Insured adults	41.04965995
Arthritis	88.1
Asthma ER Admissions	8.1
High Blood Pressure	54.9
Cancer (excluding skin)	98.2
Asthma	2.1
Coronary Heart Disease	85.5
Chronic Obstructive Pulmonary Disease	29.1
Diagnosed Diabetes	48.6
Life Expectancy at Birth	3.1
Cognitively Disabled	9.6
Physically Disabled	13.7

Heart Attack ER Admissions	14.0
Mental Health Not Good	5.0
Chronic Kidney Disease	73.0
Obesity	10.1
Pedestrian Injuries	90.5
Physical Health Not Good	18.5
Stroke	51.7
Health Risk Behaviors	—
Binge Drinking	69.8
Current Smoker	1.9
No Leisure Time for Physical Activity	16.7
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	11.1
Elderly	80.0
English Speaking	12.4
Foreign-born	65.6
Outdoor Workers	48.1
Climate Change Adaptive Capacity	—
Impervious Surface Cover	19.6
Traffic Density	77.2
Traffic Access	87.4
Other Indices	—
Hardship	92.6
Other Decision Support	—
2016 Voting	10.1

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	86.0
Healthy Places Index Score for Project Location (b)	14.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	South Florin

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	1/5th of project in 2025
Construction: Construction Phases	1/5th of project

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5.6.2. Construction Earthmoving Control Strategies

5.7. Construction Paving

5.8. Construction Electricity Consumption and Emissions Factors

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

6.2. Initial Climate Risk Scores

6.3. Adjusted Climate Risk Scores

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

7.2. Healthy Places Index Scores

7.3. Overall Health & Equity Scores

7.4. Health & Equity Measures

7.5. Evaluation Scorecard

7.6. Health & Equity Custom Measures

8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Sac Rezone after (2026)
Construction Start Date	1/1/2026
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.00
Precipitation (days)	36.6
Location	38.496642743017276, -121.4302236650689
County	Sacramento
City	Unincorporated
Air District	Sacramento Metropolitan AQMD
Air Basin	Sacramento Valley
TAZ	732
EDFZ	13
Electric Utility	Sacramento Municipal Utility District
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.21

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Apartments Mid Rise	1,174	Dwelling Unit	37.5	1,127,040	327,122	—	3,287	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	5.38	4.58	18.2	62.9	0.05	0.43	9.49	9.92	0.40	2.26	2.65	—	15,362	15,362	0.46	0.88	42.2	15,677
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.81	883	29.2	50.4	0.06	1.24	9.49	9.92	1.14	3.98	5.12	—	14,307	14,307	0.52	0.89	1.10	14,588
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.02	31.7	13.2	31.2	0.03	0.36	5.50	5.86	0.33	1.38	1.71	—	8,633	8,633	0.30	0.50	10.1	8,799
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.55	5.78	2.41	5.69	0.01	0.06	1.00	1.07	0.06	0.25	0.31	—	1,429	1,429	0.05	0.08	1.67	1,457

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2026	5.38	4.58	18.2	62.9	0.05	0.43	9.49	9.92	0.40	2.26	2.65	—	15,362	15,362	0.46	0.88	42.2	15,677
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	4.81	883	29.2	50.4	0.06	1.24	9.49	9.92	1.14	3.98	5.12	—	14,307	14,307	0.52	0.89	1.10	14,588
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	3.02	31.7	13.2	31.2	0.03	0.36	5.50	5.86	0.33	1.38	1.71	—	8,633	8,633	0.30	0.50	10.1	8,799
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.55	5.78	2.41	5.69	0.01	0.06	1.00	1.07	0.06	0.25	0.31	—	1,429	1,429	0.05	0.08	1.67	1,457

3. Construction Emissions Details

3.1. Demolition (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.72	2.29	20.7	19.0	0.03	0.84	—	0.84	0.78	—	0.78	—	3,427	3,427	0.14	0.03	—	3,438
Demolition	—	—	—	—	—	—	0.75	0.75	—	0.11	0.11	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.07	0.06	0.57	0.52	< 0.005	0.02	—	0.02	0.02	—	0.02	—	93.9	93.9	< 0.005	< 0.005	—	94.2
Demolition	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.10	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	15.5	15.5	< 0.005	< 0.005	—	15.6
Demolition	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.05	0.62	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	148	148	< 0.005	0.01	0.02	150
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.07	0.02	1.17	0.44	< 0.005	0.01	0.16	0.17	0.01	0.04	0.06	—	623	623	0.06	0.10	0.03	655
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.17	4.17	< 0.005	< 0.005	0.01	4.23
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	17.1	17.1	< 0.005	< 0.005	0.02	18.0
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.69	0.69	< 0.005	< 0.005	< 0.005	0.70
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.83	2.83	< 0.005	< 0.005	< 0.005	2.97

3.3. Site Preparation (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.74	3.14	29.2	28.8	0.05	1.24	—	1.24	1.14	—	1.14	—	5,298	5,298	0.21	0.04	—	5,316
Dust From Material Movement	—	—	—	—	—	—	7.67	7.67	—	3.94	3.94	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.56	0.55	< 0.005	0.02	—	0.02	0.02	—	0.02	—	102	102	< 0.005	< 0.005	—	102
Dust From Material Movement	—	—	—	—	—	—	0.15	0.15	—	0.08	0.08	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.10	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	16.8	16.8	< 0.005	< 0.005	—	16.9

Dust From Material Movement	—	—	—	—	—	—	0.03	0.03	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.06	0.73	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	173	173	< 0.005	0.01	0.02	175
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.40	3.40	< 0.005	< 0.005	0.01	3.45
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.56	0.56	< 0.005	< 0.005	< 0.005	0.57
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Grading (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.62	3.04	27.2	27.6	0.06	1.12	—	1.12	1.03	—	1.03	—	6,599	6,599	0.27	0.05	—	6,621
Dust From Material Movement	—	—	—	—	—	—	3.59	3.59	—	1.42	1.42	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.20	0.17	1.49	1.51	< 0.005	0.06	—	0.06	0.06	—	0.06	—	362	362	0.01	< 0.005	—	363
Dust From Material Movement	—	—	—	—	—	—	0.20	0.20	—	0.08	0.08	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.27	0.28	< 0.005	0.01	—	0.01	0.01	—	0.01	—	59.9	59.9	< 0.005	< 0.005	—	60.1
Dust From Material Movement	—	—	—	—	—	—	0.04	0.04	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.07	0.83	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	198	198	< 0.005	0.01	0.02	200
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.1	11.1	< 0.005	< 0.005	0.02	11.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.84	1.84	< 0.005	< 0.005	< 0.005	1.87
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Building Construction (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.70	0.58	5.37	7.07	0.01	0.21	—	0.21	0.19	—	0.19	—	1,307	1,307	0.05	0.01	—	1,311
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	0.98	1.29	< 0.005	0.04	—	0.04	0.03	—	0.03	—	216	216	0.01	< 0.005	—	217
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.73	3.38	2.18	47.6	0.00	0.00	8.54	8.54	0.00	2.00	2.00	—	9,407	9,407	0.13	0.32	33.6	9,540
Vendor	0.37	0.13	6.15	2.34	0.02	0.05	0.95	1.00	0.05	0.26	0.30	—	3,557	3,557	0.24	0.54	8.57	3,731
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.16	3.07	2.82	35.0	0.00	0.00	8.54	8.54	0.00	2.00	2.00	—	8,355	8,355	0.19	0.34	0.87	8,462
Vendor	0.37	0.13	6.59	2.39	0.02	0.05	0.95	1.00	0.05	0.26	0.31	—	3,556	3,556	0.24	0.53	0.22	3,721
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	1.70	1.66	1.35	19.5	0.00	0.00	4.55	4.55	0.00	1.06	1.06	—	4,674	4,674	0.09	0.19	7.92	4,740
Vendor	0.20	0.07	3.53	1.30	0.01	0.03	0.51	0.54	0.03	0.14	0.16	—	1,939	1,939	0.13	0.29	2.01	2,031
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.31	0.30	0.25	3.55	0.00	0.00	0.83	0.83	0.00	0.19	0.19	—	774	774	0.02	0.03	1.31	785
Vendor	0.04	0.01	0.64	0.24	< 0.005	0.01	0.09	0.10	< 0.005	0.03	0.03	—	321	321	0.02	0.05	0.33	336
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Paving (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.91	0.76	7.12	9.94	0.01	0.32	—	0.32	0.29	—	0.29	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.25	0.35	< 0.005	0.01	—	0.01	0.01	—	0.01	—	53.8	53.8	< 0.005	< 0.005	—	54.0
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	< 0.005	0.05	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.91	8.91	< 0.005	< 0.005	—	8.94
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.05	0.62	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	148	148	< 0.005	0.01	0.02	150
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.42	5.42	< 0.005	< 0.005	0.01	5.49
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.90	0.90	< 0.005	< 0.005	< 0.005	0.91
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Architectural Coating (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	0.86	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	882	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.39	4.39	< 0.005	< 0.005	—	4.40
Architectural Coatings	—	29.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.73	0.73	< 0.005	< 0.005	—	0.73
Architectural Coatings	—	5.29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.63	0.61	0.56	7.00	0.00	0.00	1.71	1.71	0.00	0.40	0.40	—	1,671	1,671	0.04	0.07	0.17	1,692
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.23	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	56.4	56.4	< 0.005	< 0.005	0.10	57.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.33	9.33	< 0.005	< 0.005	0.02	9.46
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequest	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	1/1/2026	1/14/2026	5.00	10.0	—
Site Preparation	Site Preparation	1/15/2026	1/23/2026	5.00	7.00	—
Grading	Grading	1/24/2026	2/20/2026	5.00	20.0	—
Building Construction	Building Construction	2/21/2026	11/26/2026	5.00	199	—
Paving	Paving	11/27/2026	12/15/2026	5.00	13.0	—
Architectural Coating	Architectural Coating	12/16/2026	12/31/2026	5.00	12.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Demolition	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40

Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	15.0	14.3	LDA,LDT1,LDT2
Demolition	Vendor	—	8.80	HHDT,MHDT
Demolition	Hauling	8.60	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	14.3	LDA,LDT1,LDT2
Site Preparation	Vendor	—	8.80	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	14.3	LDA,LDT1,LDT2
Grading	Vendor	—	8.80	HHDT,MHDT

Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	845	14.3	LDA,LDT1,LDT2
Building Construction	Vendor	126	8.80	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	14.3	LDA,LDT1,LDT2
Paving	Vendor	—	8.80	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	169	14.3	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	8.80	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	2,282,256	760,752	0.00	0.00	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (Building Square Footage)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	7,404	—
Site Preparation	—	—	10.5	0.00	—
Grading	—	—	60.0	0.00	—
Paving	0.00	0.00	0.00	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Apartments Mid Rise	—	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2026	0.00	375	0.01	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	19.3	annual days of extreme heat
Extreme Precipitation	5.70	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	2	0	0	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	2	1	1	3
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2

Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	40.0
AQ-PM	35.1
AQ-DPM	76.8
Drinking Water	78.5
Lead Risk Housing	72.2
Pesticides	0.00
Toxic Releases	22.2
Traffic	82.0
Effect Indicators	—
CleanUp Sites	51.3
Groundwater	82.5
Haz Waste Facilities/Generators	10.2
Impaired Water Bodies	43.8

Solid Waste	0.00
Sensitive Population	—
Asthma	89.8
Cardio-vascular	78.3
Low Birth Weights	53.5
Socioeconomic Factor Indicators	—
Education	87.3
Housing	99.3
Linguistic	93.9
Poverty	87.8
Unemployment	81.7

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	15.01347363
Employed	17.64403952
Median HI	2.065956628
Education	—
Bachelor's or higher	23.94456564
High school enrollment	100
Preschool enrollment	52.58565379
Transportation	—
Auto Access	6.351854228
Active commuting	46.04131913
Social	—

2-parent households	26.27999487
Voting	29.56499423
Neighborhood	—
Alcohol availability	31.10483767
Park access	62.08135506
Retail density	73.19389195
Supermarket access	94.25125112
Tree canopy	79.53291415
Housing	—
Homeownership	13.08866932
Housing habitability	6.108045682
Low-inc homeowner severe housing cost burden	69.52393173
Low-inc renter severe housing cost burden	0.898242012
Uncrowded housing	24.76581548
Health Outcomes	—
Insured adults	41.04965995
Arthritis	88.1
Asthma ER Admissions	8.1
High Blood Pressure	54.9
Cancer (excluding skin)	98.2
Asthma	2.1
Coronary Heart Disease	85.5
Chronic Obstructive Pulmonary Disease	29.1
Diagnosed Diabetes	48.6
Life Expectancy at Birth	3.1
Cognitively Disabled	9.6
Physically Disabled	13.7

Heart Attack ER Admissions	14.0
Mental Health Not Good	5.0
Chronic Kidney Disease	73.0
Obesity	10.1
Pedestrian Injuries	90.5
Physical Health Not Good	18.5
Stroke	51.7
Health Risk Behaviors	—
Binge Drinking	69.8
Current Smoker	1.9
No Leisure Time for Physical Activity	16.7
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	11.1
Elderly	80.0
English Speaking	12.4
Foreign-born	65.6
Outdoor Workers	48.1
Climate Change Adaptive Capacity	—
Impervious Surface Cover	19.6
Traffic Density	77.2
Traffic Access	87.4
Other Indices	—
Hardship	92.6
Other Decision Support	—
2016 Voting	10.1

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	86.0
Healthy Places Index Score for Project Location (b)	14.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	South Florin

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	1/5th of project in 2025
Construction: Construction Phases	1/5th of project

Sac Rezone after (2027) Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Sac Rezone after (2027)
Construction Start Date	1/1/2027
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.00
Precipitation (days)	36.6
Location	38.496642743017276, -121.4302236650689
County	Sacramento
City	Unincorporated
Air District	Sacramento Metropolitan AQMD
Air Basin	Sacramento Valley
TAZ	732
EDFZ	13
Electric Utility	Sacramento Municipal Utility District
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.21

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Apartments Mid Rise	1,174	Dwelling Unit	37.5	1,127,040	327,122	—	3,287	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.93	4.43	17.3	60.1	0.05	0.39	9.49	9.88	0.36	2.26	2.62	—	15,112	15,112	0.44	0.85	38.2	15,415
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.63	815	28.0	48.1	0.06	1.17	9.49	9.88	1.08	3.98	5.06	—	14,079	14,079	0.50	0.87	0.99	14,351
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.90	31.4	12.5	29.9	0.03	0.32	5.50	5.82	0.30	1.37	1.67	—	8,490	8,490	0.28	0.47	9.14	8,648
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.53	5.73	2.28	5.45	0.01	0.06	1.00	1.06	0.05	0.25	0.30	—	1,406	1,406	0.05	0.08	1.51	1,432

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2027	4.93	4.43	17.3	60.1	0.05	0.39	9.49	9.88	0.36	2.26	2.62	—	15,112	15,112	0.44	0.85	38.2	15,415
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	4.63	815	28.0	48.1	0.06	1.17	9.49	9.88	1.08	3.98	5.06	—	14,079	14,079	0.50	0.87	0.99	14,351
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	2.90	31.4	12.5	29.9	0.03	0.32	5.50	5.82	0.30	1.37	1.67	—	8,490	8,490	0.28	0.47	9.14	8,648
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.53	5.73	2.28	5.45	0.01	0.06	1.00	1.06	0.05	0.25	0.30	—	1,406	1,406	0.05	0.08	1.51	1,432

3. Construction Emissions Details

3.1. Demolition (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.64	2.21	19.9	18.6	0.03	0.80	—	0.80	0.73	—	0.73	—	3,427	3,427	0.14	0.03	—	3,439
Demolition	—	—	—	—	—	—	0.75	0.75	—	0.11	0.11	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.07	0.06	0.55	0.51	< 0.005	0.02	—	0.02	0.02	—	0.02	—	93.9	93.9	< 0.005	< 0.005	—	94.2
Demolition	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.10	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	15.5	15.5	< 0.005	< 0.005	—	15.6
Demolition	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.05	0.58	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	146	146	< 0.005	0.01	0.01	148
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.07	0.02	1.11	0.42	< 0.005	0.01	0.16	0.17	0.01	0.04	0.06	—	608	608	0.05	0.10	0.03	639
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.09	4.09	< 0.005	< 0.005	0.01	4.15
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	16.7	16.7	< 0.005	< 0.005	0.01	17.5
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.68	0.68	< 0.005	< 0.005	< 0.005	0.69
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.76	2.76	< 0.005	< 0.005	< 0.005	2.90

3.3. Site Preparation (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.63	3.05	28.0	28.3	0.05	1.17	—	1.17	1.08	—	1.08	—	5,298	5,298	0.21	0.04	—	5,316
Dust From Material Movement	—	—	—	—	—	—	7.67	7.67	—	3.94	3.94	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.54	0.54	< 0.005	0.02	—	0.02	0.02	—	0.02	—	102	102	< 0.005	< 0.005	—	102
Dust From Material Movement	—	—	—	—	—	—	0.15	0.15	—	0.08	0.08	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.10	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	16.8	16.8	< 0.005	< 0.005	—	16.9

Dust From Material Movement	—	—	—	—	—	—	0.03	0.03	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.06	0.68	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	170	170	< 0.005	0.01	0.02	172
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.34	3.34	< 0.005	< 0.005	0.01	3.39
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.55	0.55	< 0.005	< 0.005	< 0.005	0.56
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Grading (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.51	2.95	25.6	27.3	0.06	1.04	—	1.04	0.96	—	0.96	—	6,598	6,598	0.27	0.05	—	6,621
Dust From Material Movement	—	—	—	—	—	—	3.59	3.59	—	1.42	1.42	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	0.15	1.33	1.42	< 0.005	0.05	—	0.05	0.05	—	0.05	—	343	343	0.01	< 0.005	—	345
Dust From Material Movement	—	—	—	—	—	—	0.19	0.19	—	0.07	0.07	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.24	0.26	< 0.005	0.01	—	0.01	0.01	—	0.01	—	56.9	56.9	< 0.005	< 0.005	—	57.1
Dust From Material Movement	—	—	—	—	—	—	0.03	0.03	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.07	0.78	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	194	194	< 0.005	0.01	0.02	197
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.4	10.4	< 0.005	< 0.005	0.02	10.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.72	1.72	< 0.005	< 0.005	< 0.005	1.74
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Building Construction (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.23	1.03	9.39	12.9	0.02	0.34	—	0.34	0.31	—	0.31	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.23	1.03	9.39	12.9	0.02	0.34	—	0.34	0.31	—	0.31	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.67	0.56	5.12	7.05	0.01	0.18	—	0.18	0.17	—	0.17	—	1,307	1,307	0.05	0.01	—	1,311
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.93	1.29	< 0.005	0.03	—	0.03	0.03	—	0.03	—	216	216	0.01	< 0.005	—	217
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.33	3.27	2.14	44.9	0.00	0.00	8.54	8.54	0.00	2.00	2.00	—	9,239	9,239	0.13	0.32	30.5	9,369
Vendor	0.37	0.13	5.78	2.27	0.02	0.05	0.95	1.00	0.05	0.26	0.30	—	3,476	3,476	0.21	0.51	7.69	3,641
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.03	2.67	2.78	32.8	0.00	0.00	8.54	8.54	0.00	2.00	2.00	—	8,207	8,207	0.19	0.34	0.79	8,314
Vendor	0.36	0.12	6.17	2.31	0.02	0.05	0.95	1.00	0.05	0.26	0.31	—	3,475	3,475	0.21	0.51	0.20	3,632
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	1.64	1.46	1.33	18.3	0.00	0.00	4.55	4.55	0.00	1.06	1.06	—	4,591	4,591	0.08	0.18	7.19	4,653
Vendor	0.20	0.07	3.30	1.24	0.01	0.03	0.51	0.53	0.03	0.14	0.16	—	1,895	1,895	0.12	0.28	1.81	1,982
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.30	0.27	0.24	3.35	0.00	0.00	0.83	0.83	0.00	0.19	0.19	—	760	760	0.01	0.03	1.19	770
Vendor	0.04	0.01	0.60	0.23	< 0.005	< 0.005	0.09	0.10	< 0.005	0.03	0.03	—	314	314	0.02	0.05	0.30	328
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Paving (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.88	0.74	6.94	9.95	0.01	0.30	—	0.30	0.27	—	0.27	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.25	0.35	< 0.005	0.01	—	0.01	0.01	—	0.01	—	53.8	53.8	< 0.005	< 0.005	—	54.0
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	< 0.005	0.05	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.91	8.91	< 0.005	< 0.005	—	8.94
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.05	0.58	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	146	146	< 0.005	0.01	0.01	148
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.32	5.32	< 0.005	< 0.005	0.01	5.39
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.88	0.88	< 0.005	< 0.005	< 0.005	0.89
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Architectural Coating (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.11	0.83	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	814	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.76	4.76	< 0.005	< 0.005	—	4.77
Architectural Coatings	—	29.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.79	0.79	< 0.005	< 0.005	—	0.79
Architectural Coatings	—	5.29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.61	0.53	0.56	6.57	0.00	0.00	1.71	1.71	0.00	0.40	0.40	—	1,641	1,641	0.04	0.07	0.16	1,663
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.24	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	60.0	60.0	< 0.005	< 0.005	0.09	60.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.93	9.93	< 0.005	< 0.005	0.02	10.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequest	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	1/1/2027	1/14/2027	5.00	10.0	—
Site Preparation	Site Preparation	1/15/2027	1/25/2027	5.00	7.00	—
Grading	Grading	1/26/2027	2/21/2027	5.00	19.0	—
Building Construction	Building Construction	2/22/2027	11/25/2027	5.00	199	—
Paving	Paving	11/26/2027	12/14/2027	5.00	13.0	—
Architectural Coating	Architectural Coating	12/15/2027	12/31/2027	5.00	13.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Demolition	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40

Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	15.0	14.3	LDA,LDT1,LDT2
Demolition	Vendor	—	8.80	HHDT,MHDT
Demolition	Hauling	8.60	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	14.3	LDA,LDT1,LDT2
Site Preparation	Vendor	—	8.80	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	14.3	LDA,LDT1,LDT2
Grading	Vendor	—	8.80	HHDT,MHDT

Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	845	14.3	LDA,LDT1,LDT2
Building Construction	Vendor	126	8.80	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	14.3	LDA,LDT1,LDT2
Paving	Vendor	—	8.80	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	169	14.3	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	8.80	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	2,282,256	760,752	0.00	0.00	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (Building Square Footage)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	7,404	—
Site Preparation	—	—	10.5	0.00	—
Grading	—	—	57.0	0.00	—
Paving	0.00	0.00	0.00	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Apartments Mid Rise	—	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2027	0.00	375	0.01	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	19.3	annual days of extreme heat
Extreme Precipitation	5.70	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	2	0	0	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	2	1	1	3
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2

Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	40.0
AQ-PM	35.1
AQ-DPM	76.8
Drinking Water	78.5
Lead Risk Housing	72.2
Pesticides	0.00
Toxic Releases	22.2
Traffic	82.0
Effect Indicators	—
CleanUp Sites	51.3
Groundwater	82.5
Haz Waste Facilities/Generators	10.2
Impaired Water Bodies	43.8

Solid Waste	0.00
Sensitive Population	—
Asthma	89.8
Cardio-vascular	78.3
Low Birth Weights	53.5
Socioeconomic Factor Indicators	—
Education	87.3
Housing	99.3
Linguistic	93.9
Poverty	87.8
Unemployment	81.7

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	15.01347363
Employed	17.64403952
Median HI	2.065956628
Education	—
Bachelor's or higher	23.94456564
High school enrollment	100
Preschool enrollment	52.58565379
Transportation	—
Auto Access	6.351854228
Active commuting	46.04131913
Social	—

2-parent households	26.27999487
Voting	29.56499423
Neighborhood	—
Alcohol availability	31.10483767
Park access	62.08135506
Retail density	73.19389195
Supermarket access	94.25125112
Tree canopy	79.53291415
Housing	—
Homeownership	13.08866932
Housing habitability	6.108045682
Low-inc homeowner severe housing cost burden	69.52393173
Low-inc renter severe housing cost burden	0.898242012
Uncrowded housing	24.76581548
Health Outcomes	—
Insured adults	41.04965995
Arthritis	88.1
Asthma ER Admissions	8.1
High Blood Pressure	54.9
Cancer (excluding skin)	98.2
Asthma	2.1
Coronary Heart Disease	85.5
Chronic Obstructive Pulmonary Disease	29.1
Diagnosed Diabetes	48.6
Life Expectancy at Birth	3.1
Cognitively Disabled	9.6
Physically Disabled	13.7

Heart Attack ER Admissions	14.0
Mental Health Not Good	5.0
Chronic Kidney Disease	73.0
Obesity	10.1
Pedestrian Injuries	90.5
Physical Health Not Good	18.5
Stroke	51.7
Health Risk Behaviors	—
Binge Drinking	69.8
Current Smoker	1.9
No Leisure Time for Physical Activity	16.7
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	11.1
Elderly	80.0
English Speaking	12.4
Foreign-born	65.6
Outdoor Workers	48.1
Climate Change Adaptive Capacity	—
Impervious Surface Cover	19.6
Traffic Density	77.2
Traffic Access	87.4
Other Indices	—
Hardship	92.6
Other Decision Support	—
2016 Voting	10.1

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	86.0
Healthy Places Index Score for Project Location (b)	14.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	South Florin

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	1/5th of project in 2025
Construction: Construction Phases	1/5th of project

Sac Rezone after (2028) Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Sac Rezone after (2028)
Construction Start Date	1/1/2028
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.00
Precipitation (days)	36.6
Location	38.496642743017276, -121.4302236650689
County	Sacramento
City	Unincorporated
Air District	Sacramento Metropolitan AQMD
Air Basin	Sacramento Valley
TAZ	732
EDFZ	13
Electric Utility	Sacramento Municipal Utility District
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.21

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Apartments Mid Rise	1,174	Dwelling Unit	37.5	1,127,040	327,122	—	3,287	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.74	4.01	16.2	57.2	0.05	0.35	9.49	9.84	0.32	2.26	2.58	—	14,830	14,830	0.42	0.58	34.4	15,049
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.46	882	27.5	46.2	0.06	1.14	9.49	9.84	1.05	3.98	5.03	—	13,819	13,819	0.48	0.87	0.89	14,091
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.80	31.3	11.8	28.6	0.03	0.30	5.48	5.77	0.27	1.37	1.65	—	8,319	8,319	0.28	0.47	8.20	8,475
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.51	5.72	2.15	5.22	0.01	0.05	1.00	1.05	0.05	0.25	0.30	—	1,377	1,377	0.05	0.08	1.36	1,403

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2028	4.74	4.01	16.2	57.2	0.05	0.35	9.49	9.84	0.32	2.26	2.58	—	14,830	14,830	0.42	0.58	34.4	15,049
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2028	4.46	882	27.5	46.2	0.06	1.14	9.49	9.84	1.05	3.98	5.03	—	13,819	13,819	0.48	0.87	0.89	14,091
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2028	2.80	31.3	11.8	28.6	0.03	0.30	5.48	5.77	0.27	1.37	1.65	—	8,319	8,319	0.28	0.47	8.20	8,475
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2028	0.51	5.72	2.15	5.22	0.01	0.05	1.00	1.05	0.05	0.25	0.30	—	1,377	1,377	0.05	0.08	1.36	1,403

3. Construction Emissions Details

3.1. Demolition (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.61	2.19	19.6	18.7	0.03	0.78	—	0.78	0.71	—	0.71	—	3,429	3,429	0.14	0.03	—	3,440
Demolition	—	—	—	—	—	—	0.75	0.75	—	0.11	0.11	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.07	0.06	0.54	0.51	< 0.005	0.02	—	0.02	0.02	—	0.02	—	93.9	93.9	< 0.005	< 0.005	—	94.3
Demolition	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.10	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	15.6	15.6	< 0.005	< 0.005	—	15.6
Demolition	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.04	0.55	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	143	143	< 0.005	0.01	0.01	145
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.07	0.02	1.05	0.41	< 0.005	0.01	0.16	0.17	0.01	0.04	0.06	—	592	592	0.05	0.09	0.03	621
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.01	4.01	< 0.005	< 0.005	0.01	4.06
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	16.2	16.2	< 0.005	< 0.005	0.01	17.0
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.66	0.66	< 0.005	< 0.005	< 0.005	0.67
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.69	2.69	< 0.005	< 0.005	< 0.005	2.82

3.3. Site Preparation (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.61	3.04	27.5	28.4	0.05	1.14	—	1.14	1.05	—	1.05	—	5,300	5,300	0.21	0.04	—	5,318
Dust From Material Movement	—	—	—	—	—	—	7.67	7.67	—	3.94	3.94	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.53	0.54	< 0.005	0.02	—	0.02	0.02	—	0.02	—	102	102	< 0.005	< 0.005	—	102
Dust From Material Movement	—	—	—	—	—	—	0.15	0.15	—	0.08	0.08	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.10	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	16.8	16.8	< 0.005	< 0.005	—	16.9

Dust From Material Movement	—	—	—	—	—	—	0.03	0.03	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.05	0.64	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	166	166	< 0.005	0.01	0.01	169
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.28	3.28	< 0.005	< 0.005	< 0.005	3.32
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.54	0.54	< 0.005	< 0.005	< 0.005	0.55
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Grading (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.43	2.88	24.3	27.2	0.06	0.99	—	0.99	0.91	—	0.91	—	6,598	6,598	0.27	0.05	—	6,621
Dust From Material Movement	—	—	—	—	—	—	3.59	3.59	—	1.42	1.42	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	0.16	1.33	1.49	< 0.005	0.05	—	0.05	0.05	—	0.05	—	362	362	0.01	< 0.005	—	363
Dust From Material Movement	—	—	—	—	—	—	0.20	0.20	—	0.08	0.08	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.24	0.27	< 0.005	0.01	—	0.01	0.01	—	0.01	—	59.9	59.9	< 0.005	< 0.005	—	60.1
Dust From Material Movement	—	—	—	—	—	—	0.04	0.04	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.06	0.73	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	190	190	< 0.005	0.01	0.02	193
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.7	10.7	< 0.005	< 0.005	0.02	10.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.77	1.77	< 0.005	< 0.005	< 0.005	1.79
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Building Construction (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.18	0.99	8.92	12.9	0.02	0.30	—	0.30	0.28	—	0.28	—	2,397	2,397	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.18	0.99	8.92	12.9	0.02	0.30	—	0.30	0.28	—	0.28	—	2,397	2,397	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.64	0.54	4.84	7.02	0.01	0.16	—	0.16	0.15	—	0.15	—	1,301	1,301	0.05	0.01	—	1,305
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.88	1.28	< 0.005	0.03	—	0.03	0.03	—	0.03	—	215	215	0.01	< 0.005	—	216
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.22	2.89	1.85	42.1	0.00	0.00	8.54	8.54	0.00	2.00	2.00	—	9,049	9,049	0.11	0.06	27.6	9,096
Vendor	0.34	0.13	5.40	2.17	0.02	0.05	0.95	1.00	0.05	0.26	0.30	—	3,383	3,383	0.21	0.51	6.82	3,547
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.94	2.60	2.48	31.0	0.00	0.00	8.54	8.54	0.00	2.00	2.00	—	8,039	8,039	0.17	0.34	0.72	8,145
Vendor	0.34	0.12	5.77	2.23	0.02	0.05	0.95	1.00	0.05	0.26	0.30	—	3,383	3,383	0.21	0.51	0.18	3,540
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	1.58	1.41	1.17	17.2	0.00	0.00	4.52	4.52	0.00	1.06	1.06	—	4,475	4,475	0.08	0.17	6.47	4,535
Vendor	0.18	0.07	3.08	1.19	0.01	0.03	0.51	0.53	0.03	0.14	0.16	—	1,835	1,835	0.11	0.28	1.60	1,922
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.29	0.26	0.21	3.13	0.00	0.00	0.83	0.83	0.00	0.19	0.19	—	741	741	0.01	0.03	1.07	751
Vendor	0.03	0.01	0.56	0.22	< 0.005	< 0.005	0.09	0.10	< 0.005	0.02	0.03	—	304	304	0.02	0.05	0.27	318
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Paving (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.82	0.69	6.63	9.91	0.01	0.26	—	0.26	0.24	—	0.24	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.24	0.35	< 0.005	0.01	—	0.01	0.01	—	0.01	—	53.8	53.8	< 0.005	< 0.005	—	54.0
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	< 0.005	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.91	8.91	< 0.005	< 0.005	—	8.94
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.04	0.55	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	143	143	< 0.005	0.01	0.01	145
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.21	5.21	< 0.005	< 0.005	0.01	5.28
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.86	0.86	< 0.005	< 0.005	< 0.005	0.87
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Architectural Coating (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	0.81	1.12	< 0.005	0.02	—	0.02	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	882	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.39	4.39	< 0.005	< 0.005	—	4.40
Architectural Coatings	—	29.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.73	0.73	< 0.005	< 0.005	—	0.73
Architectural Coatings	—	5.29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.59	0.52	0.50	6.20	0.00	0.00	1.71	1.71	0.00	0.40	0.40	—	1,608	1,608	0.03	0.07	0.14	1,629
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.21	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	54.2	54.2	< 0.005	< 0.005	0.08	55.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.98	8.98	< 0.005	< 0.005	0.01	9.10
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequest	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	1/1/2028	1/14/2028	5.00	10.0	—
Site Preparation	Site Preparation	1/15/2028	1/25/2028	5.00	7.00	—
Grading	Grading	1/26/2028	2/22/2028	5.00	20.0	—
Building Construction	Building Construction	2/23/2028	11/26/2028	5.00	198	—
Paving	Paving	11/27/2028	12/13/2028	5.00	13.0	—
Architectural Coating	Architectural Coating	12/14/2028	12/31/2028	5.00	12.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Demolition	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40

Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	15.0	14.3	LDA,LDT1,LDT2
Demolition	Vendor	—	8.80	HHDT,MHDT
Demolition	Hauling	8.60	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	14.3	LDA,LDT1,LDT2
Site Preparation	Vendor	—	8.80	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	14.3	LDA,LDT1,LDT2
Grading	Vendor	—	8.80	HHDT,MHDT

Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	845	14.3	LDA,LDT1,LDT2
Building Construction	Vendor	126	8.80	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	14.3	LDA,LDT1,LDT2
Paving	Vendor	—	8.80	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	169	14.3	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	8.80	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	2,282,256	760,752	0.00	0.00	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (Building Square Footage)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	7,404	—
Site Preparation	—	—	10.5	0.00	—
Grading	—	—	60.0	0.00	—
Paving	0.00	0.00	0.00	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Apartments Mid Rise	—	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2028	0.00	375	0.01	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	19.3	annual days of extreme heat
Extreme Precipitation	5.70	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	2	0	0	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	2	1	1	3
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2

Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	40.0
AQ-PM	35.1
AQ-DPM	76.8
Drinking Water	78.5
Lead Risk Housing	72.2
Pesticides	0.00
Toxic Releases	22.2
Traffic	82.0
Effect Indicators	—
CleanUp Sites	51.3
Groundwater	82.5
Haz Waste Facilities/Generators	10.2
Impaired Water Bodies	43.8

Solid Waste	0.00
Sensitive Population	—
Asthma	89.8
Cardio-vascular	78.3
Low Birth Weights	53.5
Socioeconomic Factor Indicators	—
Education	87.3
Housing	99.3
Linguistic	93.9
Poverty	87.8
Unemployment	81.7

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	15.01347363
Employed	17.64403952
Median HI	2.065956628
Education	—
Bachelor's or higher	23.94456564
High school enrollment	100
Preschool enrollment	52.58565379
Transportation	—
Auto Access	6.351854228
Active commuting	46.04131913
Social	—

2-parent households	26.27999487
Voting	29.56499423
Neighborhood	—
Alcohol availability	31.10483767
Park access	62.08135506
Retail density	73.19389195
Supermarket access	94.25125112
Tree canopy	79.53291415
Housing	—
Homeownership	13.08866932
Housing habitability	6.108045682
Low-inc homeowner severe housing cost burden	69.52393173
Low-inc renter severe housing cost burden	0.898242012
Uncrowded housing	24.76581548
Health Outcomes	—
Insured adults	41.04965995
Arthritis	88.1
Asthma ER Admissions	8.1
High Blood Pressure	54.9
Cancer (excluding skin)	98.2
Asthma	2.1
Coronary Heart Disease	85.5
Chronic Obstructive Pulmonary Disease	29.1
Diagnosed Diabetes	48.6
Life Expectancy at Birth	3.1
Cognitively Disabled	9.6
Physically Disabled	13.7

Heart Attack ER Admissions	14.0
Mental Health Not Good	5.0
Chronic Kidney Disease	73.0
Obesity	10.1
Pedestrian Injuries	90.5
Physical Health Not Good	18.5
Stroke	51.7
Health Risk Behaviors	—
Binge Drinking	69.8
Current Smoker	1.9
No Leisure Time for Physical Activity	16.7
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	11.1
Elderly	80.0
English Speaking	12.4
Foreign-born	65.6
Outdoor Workers	48.1
Climate Change Adaptive Capacity	—
Impervious Surface Cover	19.6
Traffic Density	77.2
Traffic Access	87.4
Other Indices	—
Hardship	92.6
Other Decision Support	—
2016 Voting	10.1

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	86.0
Healthy Places Index Score for Project Location (b)	14.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	South Florin

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	1/5th of project in 2025
Construction: Construction Phases	1/5th of project

Sac Rezone after (2029) Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Sac Rezone after (2029)
Construction Start Date	1/1/2029
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.00
Precipitation (days)	36.6
Location	38.496642743017276, -121.4302236650689
County	Sacramento
City	Unincorporated
Air District	Sacramento Metropolitan AQMD
Air Basin	Sacramento Valley
TAZ	732
EDFZ	13
Electric Utility	Sacramento Municipal Utility District
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.21

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Apartments Mid Rise	1,174	Dwelling Unit	37.5	1,127,040	327,122	—	3,287	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.56	3.83	15.4	54.7	0.05	0.32	9.49	9.82	0.30	2.26	2.56	—	14,566	14,566	0.42	0.56	30.7	14,774
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.27	882	26.0	44.2	0.06	1.09	9.49	9.82	1.00	3.98	4.98	—	13,576	13,576	0.47	0.85	0.79	13,840
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.72	31.2	11.1	27.7	0.03	0.28	5.50	5.78	0.26	1.38	1.63	—	8,221	8,221	0.27	0.46	7.33	8,372
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.50	5.70	2.03	5.05	0.01	0.05	1.00	1.05	0.05	0.25	0.30	—	1,361	1,361	0.04	0.08	1.21	1,386

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2029	4.56	3.83	15.4	54.7	0.05	0.32	9.49	9.82	0.30	2.26	2.56	—	14,566	14,566	0.42	0.56	30.7	14,774
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2029	4.27	882	26.0	44.2	0.06	1.09	9.49	9.82	1.00	3.98	4.98	—	13,576	13,576	0.47	0.85	0.79	13,840
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2029	2.72	31.2	11.1	27.7	0.03	0.28	5.50	5.78	0.26	1.38	1.63	—	8,221	8,221	0.27	0.46	7.33	8,372
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2029	0.50	5.70	2.03	5.05	0.01	0.05	1.00	1.05	0.05	0.25	0.30	—	1,361	1,361	0.04	0.08	1.21	1,386

3. Construction Emissions Details

3.1. Demolition (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.55	2.14	18.6	18.5	0.03	0.74	—	0.74	0.68	—	0.68	—	3,427	3,427	0.14	0.03	—	3,439
Demolition	—	—	—	—	—	—	0.75	0.75	—	0.11	0.11	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.07	0.06	0.51	0.51	< 0.005	0.02	—	0.02	0.02	—	0.02	—	93.9	93.9	< 0.005	< 0.005	—	94.2
Demolition	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.09	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	15.5	15.5	< 0.005	< 0.005	—	15.6
Demolition	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.04	0.52	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	140	140	< 0.005	0.01	0.01	142
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.06	0.02	0.99	0.40	< 0.005	0.01	0.16	0.17	0.01	0.04	0.05	—	575	575	0.05	0.09	0.03	604
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.94	3.94	< 0.005	< 0.005	0.01	3.99
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	15.7	15.7	< 0.005	< 0.005	0.01	16.6
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.65	0.65	< 0.005	< 0.005	< 0.005	0.66
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.61	2.61	< 0.005	< 0.005	< 0.005	2.74

3.3. Site Preparation (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.53	2.97	25.9	28.1	0.05	1.09	—	1.09	1.00	—	1.00	—	5,296	5,296	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	7.67	7.67	—	3.94	3.94	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.50	0.54	< 0.005	0.02	—	0.02	0.02	—	0.02	—	102	102	< 0.005	< 0.005	—	102
Dust From Material Movement	—	—	—	—	—	—	0.15	0.15	—	0.08	0.08	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.09	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	16.8	16.8	< 0.005	< 0.005	—	16.9

Dust From Material Movement	—	—	—	—	—	—	0.03	0.03	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.05	0.60	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	163	163	< 0.005	0.01	0.01	166
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.22	3.22	< 0.005	< 0.005	< 0.005	3.26
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.53	0.53	< 0.005	< 0.005	< 0.005	0.54
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Grading (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.32	2.79	22.7	26.9	0.06	0.92	—	0.92	0.84	—	0.84	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	3.59	3.59	—	1.42	1.42	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	0.15	1.25	1.47	< 0.005	0.05	—	0.05	0.05	—	0.05	—	361	361	0.01	< 0.005	—	363
Dust From Material Movement	—	—	—	—	—	—	0.20	0.20	—	0.08	0.08	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.23	0.27	< 0.005	0.01	—	0.01	0.01	—	0.01	—	59.8	59.8	< 0.005	< 0.005	—	60.0
Dust From Material Movement	—	—	—	—	—	—	0.04	0.04	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.05	0.69	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	187	187	< 0.005	0.01	0.02	189
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.5	10.5	< 0.005	< 0.005	0.01	10.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.74	1.74	< 0.005	< 0.005	< 0.005	1.76
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Building Construction (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.15	0.97	8.58	12.9	0.02	0.28	—	0.28	0.25	—	0.25	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.15	0.97	8.58	12.9	0.02	0.28	—	0.28	0.25	—	0.25	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.63	0.53	4.68	7.03	0.01	0.15	—	0.15	0.14	—	0.14	—	1,307	1,307	0.05	0.01	—	1,311
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.10	0.85	1.28	< 0.005	0.03	—	0.03	0.03	—	0.03	—	216	216	0.01	< 0.005	—	217
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.09	2.76	1.82	39.7	0.00	0.00	8.54	8.54	0.00	2.00	2.00	—	8,886	8,886	0.11	0.06	24.8	8,931
Vendor	0.32	0.10	5.04	2.09	0.02	0.05	0.95	1.00	0.05	0.26	0.30	—	3,283	3,283	0.21	0.48	5.95	3,438
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.81	2.47	2.20	29.2	0.00	0.00	8.54	8.54	0.00	2.00	2.00	—	7,896	7,896	0.17	0.34	0.64	8,002
Vendor	0.31	0.10	5.40	2.15	0.02	0.05	0.95	1.00	0.05	0.26	0.30	—	3,283	3,283	0.21	0.48	0.15	3,433
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	1.54	1.35	1.01	16.3	0.00	0.00	4.55	4.55	0.00	1.06	1.06	—	4,417	4,417	0.07	0.18	5.82	4,477
Vendor	0.17	0.06	2.89	1.15	0.01	0.03	0.51	0.53	0.03	0.14	0.16	—	1,790	1,790	0.11	0.26	1.40	1,873
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.28	0.25	0.18	2.98	0.00	0.00	0.83	0.83	0.00	0.19	0.19	—	731	731	0.01	0.03	0.96	741
Vendor	0.03	0.01	0.53	0.21	< 0.005	< 0.005	0.09	0.10	< 0.005	0.03	0.03	—	296	296	0.02	0.04	0.23	310
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Paving (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.80	0.67	6.46	9.92	0.01	0.24	—	0.24	0.22	—	0.22	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.23	0.35	< 0.005	0.01	—	0.01	0.01	—	0.01	—	53.8	53.8	< 0.005	< 0.005	—	54.0
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	< 0.005	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.91	8.91	< 0.005	< 0.005	—	8.94
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.04	0.52	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	140	140	< 0.005	0.01	0.01	142
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.12	5.12	< 0.005	< 0.005	0.01	5.19
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.85	0.85	< 0.005	< 0.005	< 0.005	0.86
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Architectural Coating (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.79	1.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	882	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.39	4.39	< 0.005	< 0.005	—	4.40
Architectural Coatings	—	29.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.73	0.73	< 0.005	< 0.005	—	0.73
Architectural Coatings	—	5.29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.56	0.49	0.44	5.83	0.00	0.00	1.71	1.71	0.00	0.40	0.40	—	1,579	1,579	0.03	0.07	0.13	1,600
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.20	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	53.3	53.3	< 0.005	< 0.005	0.07	54.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.82	8.82	< 0.005	< 0.005	0.01	8.94
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequest	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	1/1/2029	1/14/2029	5.00	10.0	—
Site Preparation	Site Preparation	1/15/2029	1/23/2029	5.00	7.00	—
Grading	Grading	1/24/2029	2/20/2029	5.00	20.0	—
Building Construction	Building Construction	2/21/2029	11/26/2029	5.00	199	—
Paving	Paving	11/27/2029	12/13/2029	5.00	13.0	—
Architectural Coating	Architectural Coating	12/14/2029	12/31/2029	5.00	12.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Demolition	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40

Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	15.0	14.3	LDA,LDT1,LDT2
Demolition	Vendor	—	8.80	HHDT,MHDT
Demolition	Hauling	8.60	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	14.3	LDA,LDT1,LDT2
Site Preparation	Vendor	—	8.80	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	14.3	LDA,LDT1,LDT2
Grading	Vendor	—	8.80	HHDT,MHDT

Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	845	14.3	LDA,LDT1,LDT2
Building Construction	Vendor	126	8.80	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	14.3	LDA,LDT1,LDT2
Paving	Vendor	—	8.80	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	169	14.3	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	8.80	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	2,282,256	760,752	0.00	0.00	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (Building Square Footage)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	7,404	—
Site Preparation	—	—	10.5	0.00	—
Grading	—	—	60.0	0.00	—
Paving	0.00	0.00	0.00	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Apartments Mid Rise	—	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2029	0.00	375	0.01	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	19.3	annual days of extreme heat
Extreme Precipitation	5.70	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	2	0	0	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	2	1	1	3
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2

Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	40.0
AQ-PM	35.1
AQ-DPM	76.8
Drinking Water	78.5
Lead Risk Housing	72.2
Pesticides	0.00
Toxic Releases	22.2
Traffic	82.0
Effect Indicators	—
CleanUp Sites	51.3
Groundwater	82.5
Haz Waste Facilities/Generators	10.2
Impaired Water Bodies	43.8

Solid Waste	0.00
Sensitive Population	—
Asthma	89.8
Cardio-vascular	78.3
Low Birth Weights	53.5
Socioeconomic Factor Indicators	—
Education	87.3
Housing	99.3
Linguistic	93.9
Poverty	87.8
Unemployment	81.7

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	15.01347363
Employed	17.64403952
Median HI	2.065956628
Education	—
Bachelor's or higher	23.94456564
High school enrollment	100
Preschool enrollment	52.58565379
Transportation	—
Auto Access	6.351854228
Active commuting	46.04131913
Social	—

2-parent households	26.27999487
Voting	29.56499423
Neighborhood	—
Alcohol availability	31.10483767
Park access	62.08135506
Retail density	73.19389195
Supermarket access	94.25125112
Tree canopy	79.53291415
Housing	—
Homeownership	13.08866932
Housing habitability	6.108045682
Low-inc homeowner severe housing cost burden	69.52393173
Low-inc renter severe housing cost burden	0.898242012
Uncrowded housing	24.76581548
Health Outcomes	—
Insured adults	41.04965995
Arthritis	88.1
Asthma ER Admissions	8.1
High Blood Pressure	54.9
Cancer (excluding skin)	98.2
Asthma	2.1
Coronary Heart Disease	85.5
Chronic Obstructive Pulmonary Disease	29.1
Diagnosed Diabetes	48.6
Life Expectancy at Birth	3.1
Cognitively Disabled	9.6
Physically Disabled	13.7

Heart Attack ER Admissions	14.0
Mental Health Not Good	5.0
Chronic Kidney Disease	73.0
Obesity	10.1
Pedestrian Injuries	90.5
Physical Health Not Good	18.5
Stroke	51.7
Health Risk Behaviors	—
Binge Drinking	69.8
Current Smoker	1.9
No Leisure Time for Physical Activity	16.7
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	11.1
Elderly	80.0
English Speaking	12.4
Foreign-born	65.6
Outdoor Workers	48.1
Climate Change Adaptive Capacity	—
Impervious Surface Cover	19.6
Traffic Density	77.2
Traffic Access	87.4
Other Indices	—
Hardship	92.6
Other Decision Support	—
2016 Voting	10.1

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	86.0
Healthy Places Index Score for Project Location (b)	14.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	South Florin

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	1/5th of project in 2025
Construction: Construction Phases	1/5th of project

Sac Rezone Fair Oaks (rezoned) Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Sac Rezone Fair Oaks (rezoned)
Construction Start Date	1/1/2025
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.50
Precipitation (days)	39.2
Location	38.637469230516956, -121.32836613666706
County	Sacramento
City	Unincorporated
Air District	Sacramento Metropolitan AQMD
Air Basin	Sacramento Valley
TAZ	619
EDFZ	13
Electric Utility	Sacramento Municipal Utility District
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.21

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Apartments Mid Rise	37.0	Dwelling Unit	1.25	35,520	10,890	—	104	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.42	66.8	9.23	11.7	0.02	0.33	0.30	0.63	0.30	0.07	0.37	—	2,218	2,218	0.09	0.04	1.46	2,234
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.84	1.55	14.1	15.0	0.02	0.64	2.86	3.51	0.59	1.36	1.95	—	2,555	2,555	0.10	0.04	0.04	2,565
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.41	1.26	2.72	3.33	0.01	0.10	0.10	0.20	0.09	0.03	0.12	—	638	638	0.02	0.01	0.18	643
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.07	0.23	0.50	0.61	< 0.005	0.02	0.02	0.04	0.02	0.01	0.02	—	106	106	< 0.005	< 0.005	0.03	106

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2025	1.42	66.8	9.23	11.7	0.02	0.33	0.30	0.63	0.30	0.07	0.37	—	2,218	2,218	0.09	0.04	1.46	2,234
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	1.84	1.55	14.1	15.0	0.02	0.64	2.86	3.51	0.59	1.36	1.95	—	2,555	2,555	0.10	0.04	0.04	2,565
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.41	1.26	2.72	3.33	0.01	0.10	0.10	0.20	0.09	0.03	0.12	—	638	638	0.02	0.01	0.18	643
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.07	0.23	0.50	0.61	< 0.005	0.02	0.02	0.04	0.02	0.01	0.02	—	106	106	< 0.005	< 0.005	0.03	106

3. Construction Emissions Details

3.1. Site Preparation (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.56	1.31	12.1	12.1	0.02	0.56	—	0.56	0.52	—	0.52	—	2,065	2,065	0.08	0.02	—	2,072
Dust From Material Movement	—	—	—	—	—	—	2.44	2.44	—	1.17	1.17	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.66	5.66	< 0.005	< 0.005	—	5.68
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.94	0.94	< 0.005	< 0.005	—	0.94
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.33	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	75.6	75.6	< 0.005	< 0.005	0.01	76.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.21	0.21	< 0.005	< 0.005	< 0.005	0.22
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.04	0.04	< 0.005	< 0.005	< 0.005	0.04
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Grading (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.80	1.51	14.1	14.5	0.02	0.64	—	0.64	0.59	—	0.59	—	2,455	2,455	0.10	0.02	—	2,463
Dust From Material Movement	—	—	—	—	—	—	2.76	2.76	—	1.34	1.34	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.08	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	13.5	13.5	< 0.005	< 0.005	—	13.5
Dust From Material Movement	—	—	—	—	—	—	0.02	0.02	—	0.01	0.01	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.23	2.23	< 0.005	< 0.005	—	2.23
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.04	0.44	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	101	101	< 0.005	< 0.005	0.01	102
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.57	0.57	< 0.005	< 0.005	< 0.005	0.57
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.09	0.09	< 0.005	< 0.005	< 0.005	0.10
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Building Construction (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	8.95	10.0	0.02	0.33	—	0.33	0.30	—	0.30	—	1,801	1,801	0.07	0.01	—	1,807
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	8.95	10.0	0.02	0.33	—	0.33	0.30	—	0.30	—	1,801	1,801	0.07	0.01	—	1,807
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.35	0.29	2.45	2.75	0.01	0.09	—	0.09	0.08	—	0.08	—	493	493	0.02	< 0.005	—	495
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.45	0.50	< 0.005	0.02	—	0.02	0.02	—	0.02	—	81.7	81.7	< 0.005	< 0.005	—	82.0
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.11	0.08	1.61	0.00	0.00	0.27	0.27	0.00	0.06	0.06	—	302	302	< 0.005	0.01	1.16	307
Vendor	0.01	< 0.005	0.21	0.08	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	114	114	0.01	0.02	0.30	120
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.10	1.18	0.00	0.00	0.27	0.27	0.00	0.06	0.06	—	268	268	0.01	0.01	0.03	272
Vendor	0.01	< 0.005	0.22	0.08	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	114	114	0.01	0.02	0.01	120
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.33	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	75.5	75.5	< 0.005	< 0.005	0.14	76.5
Vendor	< 0.005	< 0.005	0.06	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	31.3	31.3	< 0.005	< 0.005	0.04	32.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	12.5	12.5	< 0.005	< 0.005	0.02	12.7
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.19	5.19	< 0.005	< 0.005	0.01	5.43
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Paving (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.59	0.49	4.63	6.50	0.01	0.20	—	0.20	0.19	—	0.19	—	992	992	0.04	0.01	—	995
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	13.6	13.6	< 0.005	< 0.005	—	13.6
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.25	2.25	< 0.005	< 0.005	—	2.26
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.04	0.75	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	142	142	< 0.005	0.01	0.54	144
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.77	1.77	< 0.005	< 0.005	< 0.005	1.80
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.29	0.29	< 0.005	< 0.005	< 0.005	0.30
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Architectural Coating (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.13	0.88	1.14	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	66.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.83	1.83	< 0.005	< 0.005	—	1.84
Architectural Coatings	—	0.91	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.30	0.30	< 0.005	< 0.005	—	0.30
Architectural Coatings	—	0.17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.32	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	60.5	60.5	< 0.005	< 0.005	0.23	61.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.75	0.75	< 0.005	< 0.005	< 0.005	0.77
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.12	0.12	< 0.005	< 0.005	< 0.005	0.13
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	1/1/2025	1/1/2025	5.00	1.00	—
Grading	Grading	1/2/2025	1/3/2025	5.00	2.00	—
Building Construction	Building Construction	1/4/2025	5/23/2025	5.00	100	—
Paving	Paving	5/24/2025	5/30/2025	5.00	5.00	—
Architectural Coating	Architectural Coating	5/31/2025	6/6/2025	5.00	5.00	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Graders	Diesel	Average	1.00	8.00	148	0.41
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37

Site Preparation	Rubber Tired Dozers	Diesel	Average	1.00	7.00	367	0.40
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	7.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	6.00	367	0.29
Building Construction	Forklifts	Diesel	Average	1.00	6.00	82.0	0.20
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	1.00	6.00	84.0	0.37
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Welders	Diesel	Average	3.00	8.00	46.0	0.45
Paving	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Paving	Cement and Mortar Mixers	Diesel	Average	1.00	6.00	10.0	0.56
Paving	Pavers	Diesel	Average	1.00	6.00	81.0	0.42
Paving	Rollers	Diesel	Average	1.00	7.00	36.0	0.38
Paving	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	7.50	14.3	LDA,LDT1,LDT2
Site Preparation	Vendor	—	8.80	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT

Grading	—	—	—	—
Grading	Worker	10.0	14.3	LDA,LDT1,LDT2
Grading	Vendor	—	8.80	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	26.6	14.3	LDA,LDT1,LDT2
Building Construction	Vendor	3.96	8.80	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	12.5	14.3	LDA,LDT1,LDT2
Paving	Vendor	—	8.80	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	5.33	14.3	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	8.80	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	71,928	23,976	0.00	0.00	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	—	—	0.94	0.00	—
Grading	—	—	2.00	0.00	—
Paving	0.00	0.00	0.00	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%
Water Demolished Area	2	36%	36%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Apartments Mid Rise	—	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2025	0.00	375	0.01	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	24.1	annual days of extreme heat
Extreme Precipitation	6.45	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.69	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	2	0	0	N/A
Extreme Precipitation	2	0	0	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	2	1	1	3
Extreme Precipitation	2	1	1	3
Sea Level Rise	N/A	N/A	N/A	N/A

Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	59.7
AQ-PM	39.5
AQ-DPM	50.3
Drinking Water	47.8
Lead Risk Housing	54.5
Pesticides	0.00
Toxic Releases	20.9
Traffic	21.4
Effect Indicators	—
CleanUp Sites	18.7

Groundwater	78.3
Haz Waste Facilities/Generators	59.8
Impaired Water Bodies	77.3
Solid Waste	0.00
Sensitive Population	—
Asthma	88.7
Cardio-vascular	62.6
Low Birth Weights	7.38
Socioeconomic Factor Indicators	—
Education	25.1
Housing	70.2
Linguistic	37.0
Poverty	67.4
Unemployment	14.4

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	37.16155524
Employed	15.56525087
Median HI	23.82907738
Education	—
Bachelor's or higher	54.3308097
High school enrollment	26.62645964
Preschool enrollment	15.20595406
Transportation	—

Auto Access	28.94905685
Active commuting	46.06698319
Social	—
2-parent households	11.18952906
Voting	74.93904786
Neighborhood	—
Alcohol availability	37.77749262
Park access	30.25792378
Retail density	94.5977159
Supermarket access	42.71782369
Tree canopy	91.62068523
Housing	—
Homeownership	51.98254844
Housing habitability	41.55010907
Low-inc homeowner severe housing cost burden	37.4566919
Low-inc renter severe housing cost burden	6.73681509
Uncrowded housing	66.9190299
Health Outcomes	—
Insured adults	47.91479533
Arthritis	0.0
Asthma ER Admissions	6.0
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0

Life Expectancy at Birth	11.1
Cognitively Disabled	13.7
Physically Disabled	26.6
Heart Attack ER Admissions	48.8
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	52.9
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	67.0
Elderly	27.8
English Speaking	75.3
Foreign-born	10.6
Outdoor Workers	46.7
Climate Change Adaptive Capacity	—
Impervious Surface Cover	61.1
Traffic Density	59.6
Traffic Access	23.0
Other Indices	—

Hardship	64.4
Other Decision Support	—
2016 Voting	65.5

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	47.0
Healthy Places Index Score for Project Location (b)	30.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	no demo
Land Use	PD

Sac Rezone North Watt (rezoned) Detailed Report

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5.1. Construction Schedule

5.2. Off-Road Equipment

5.2.1. Unmitigated

5.3. Construction Vehicles

5.3.1. Unmitigated

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

5.5. Architectural Coatings

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

5.6.2. Construction Earthmoving Control Strategies

5.7. Construction Paving

5.8. Construction Electricity Consumption and Emissions Factors

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

6.2. Initial Climate Risk Scores

6.3. Adjusted Climate Risk Scores

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

7.2. Healthy Places Index Scores

7.3. Overall Health & Equity Scores

7.4. Health & Equity Measures

7.5. Evaluation Scorecard

7.6. Health & Equity Custom Measures

8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Sac Rezone North Watt (rezoned)
Construction Start Date	1/1/2025
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.50
Precipitation (days)	39.2
Location	38.66735756395545, -121.38321539651498
County	Sacramento
City	Unincorporated
Air District	Sacramento Metropolitan AQMD
Air Basin	Sacramento Valley
TAZ	657
EDFZ	13
Electric Utility	Sacramento Municipal Utility District
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.21

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Apartments Mid Rise	735	Dwelling Unit	21.3	705,600	185,653	—	2,058	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.03	3.46	31.7	46.5	0.06	1.37	7.84	9.21	1.26	3.98	5.24	—	10,677	10,677	0.34	0.57	29.0	10,884
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.82	332	16.8	38.1	0.04	0.46	5.94	6.41	0.43	1.41	1.84	—	10,002	10,002	0.38	0.57	0.75	10,182
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.48	18.3	11.0	26.3	0.03	0.29	4.14	4.43	0.27	0.98	1.25	—	7,136	7,136	0.25	0.40	8.14	7,272
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.45	3.33	2.02	4.80	0.01	0.05	0.76	0.81	0.05	0.18	0.23	—	1,182	1,182	0.04	0.07	1.35	1,204

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2025	4.03	3.46	31.7	46.5	0.06	1.37	7.84	9.21	1.26	3.98	5.24	—	10,677	10,677	0.34	0.57	29.0	10,884
2026	3.84	3.27	15.1	44.2	0.04	0.41	5.94	6.35	0.38	1.41	1.79	—	10,514	10,514	0.33	0.56	26.4	10,714
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	3.82	3.20	16.8	38.1	0.04	0.46	5.94	6.41	0.43	1.41	1.84	—	10,002	10,002	0.38	0.57	0.75	10,182
2026	3.49	3.07	15.7	36.4	0.04	0.41	5.94	6.35	0.38	1.41	1.79	—	9,854	9,854	0.36	0.57	0.69	10,032
2027	3.36	332	15.0	35.0	0.04	0.37	5.94	6.31	0.34	1.41	1.76	—	9,711	9,711	0.35	0.55	0.62	9,884
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	1.56	1.32	8.41	14.6	0.02	0.29	2.22	2.51	0.27	0.64	0.91	—	3,681	3,681	0.13	0.17	3.59	3,738
2026	2.48	2.19	11.0	26.3	0.03	0.29	4.14	4.43	0.27	0.98	1.25	—	7,136	7,136	0.25	0.40	8.14	7,272
2027	0.13	18.3	0.68	1.43	< 0.005	0.02	0.16	0.18	0.02	0.04	0.06	—	310	310	0.01	0.01	0.27	314
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.29	0.24	1.53	2.66	< 0.005	0.05	0.41	0.46	0.05	0.12	0.17	—	609	609	0.02	0.03	0.59	619
2026	0.45	0.40	2.02	4.80	0.01	0.05	0.76	0.81	0.05	0.18	0.23	—	1,182	1,182	0.04	0.07	1.35	1,204
2027	0.02	3.33	0.12	0.26	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	51.4	51.4	< 0.005	< 0.005	0.04	52.0

3. Construction Emissions Details

3.1. Site Preparation (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.94	3.31	31.6	30.2	0.05	1.37	—	1.37	1.26	—	1.26	—	5,295	5,295	0.21	0.04	—	5,314

Dust From Material Movement	—	—	—	—	—	—	7.67	7.67	—	3.94	3.94	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.87	0.83	< 0.005	0.04	—	0.04	0.03	—	0.03	—	145	145	0.01	< 0.005	—	146
Dust From Material Movement	—	—	—	—	—	—	0.21	0.21	—	0.11	0.11	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.16	0.15	< 0.005	0.01	—	0.01	0.01	—	0.01	—	24.0	24.0	< 0.005	< 0.005	—	24.1
Dust From Material Movement	—	—	—	—	—	—	0.04	0.04	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.05	1.05	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	199	199	< 0.005	0.01	0.76	202
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.96	4.96	< 0.005	< 0.005	0.01	5.03
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.82	0.82	< 0.005	< 0.005	< 0.005	0.83
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Grading (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.80	3.20	29.7	28.3	0.06	1.23	—	1.23	1.14	—	1.14	—	6,599	6,599	0.27	0.05	—	6,622
Dust From Material Movement	—	—	—	—	—	—	3.59	3.59	—	1.42	1.42	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.36	0.31	2.85	2.71	0.01	0.12	—	0.12	0.11	—	0.11	—	633	633	0.03	0.01	—	635
Dust From Material Movement	—	—	—	—	—	—	0.34	0.34	—	0.14	0.14	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.52	0.50	< 0.005	0.02	—	0.02	0.02	—	0.02	—	105	105	< 0.005	< 0.005	—	105
Dust From Material Movement	—	—	—	—	—	—	0.06	0.06	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.06	1.21	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	227	227	< 0.005	0.01	0.87	230
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	19.8	19.8	< 0.005	< 0.005	0.04	20.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.28	3.28	< 0.005	< 0.005	0.01	3.33
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Building Construction (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.38	0.32	2.96	3.70	0.01	0.12	—	0.12	0.11	—	0.11	—	680	680	0.03	0.01	—	683
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.07	0.06	0.54	0.68	< 0.005	0.02	—	0.02	0.02	—	0.02	—	113	113	< 0.005	< 0.005	—	113
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.44	2.24	1.54	31.9	0.00	0.00	5.35	5.35	0.00	1.25	1.25	—	6,007	6,007	0.09	0.21	23.1	6,096
Vendor	0.25	0.10	4.12	1.53	0.02	0.03	0.60	0.63	0.03	0.16	0.19	—	2,273	2,273	0.15	0.34	5.91	2,382
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.23	1.99	1.96	23.5	0.00	0.00	5.35	5.35	0.00	1.25	1.25	—	5,333	5,333	0.13	0.21	0.60	5,400
Vendor	0.25	0.08	4.40	1.56	0.02	0.03	0.60	0.63	0.03	0.16	0.19	—	2,272	2,272	0.15	0.34	0.15	2,376
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.63	0.57	0.49	6.81	0.00	0.00	1.48	1.48	0.00	0.35	0.35	—	1,553	1,553	0.03	0.06	2.82	1,575
Vendor	0.07	0.03	1.23	0.44	< 0.005	0.01	0.17	0.17	0.01	0.04	0.05	—	645	645	0.04	0.10	0.72	675
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.09	1.24	0.00	0.00	0.27	0.27	0.00	0.06	0.06	—	257	257	< 0.005	0.01	0.47	261
Vendor	0.01	0.01	0.22	0.08	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	107	107	0.01	0.02	0.12	112
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Building Construction (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.91	0.77	7.04	9.26	0.02	0.27	—	0.27	0.25	—	0.25	—	1,712	1,712	0.07	0.01	—	1,718
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	1.28	1.69	< 0.005	0.05	—	0.05	0.05	—	0.05	—	283	283	0.01	< 0.005	—	284
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.33	2.12	1.36	29.8	0.00	0.00	5.35	5.35	0.00	1.25	1.25	—	5,890	5,890	0.08	0.20	21.0	5,973
Vendor	0.23	0.08	3.85	1.47	0.02	0.03	0.60	0.63	0.03	0.16	0.19	—	2,227	2,227	0.15	0.34	5.36	2,336
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.98	1.92	1.77	21.9	0.00	0.00	5.35	5.35	0.00	1.25	1.25	—	5,231	5,231	0.12	0.21	0.55	5,298
Vendor	0.23	0.08	4.13	1.50	0.02	0.03	0.60	0.63	0.03	0.16	0.19	—	2,226	2,226	0.15	0.33	0.14	2,329
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.40	1.36	1.11	16.0	0.00	0.00	3.72	3.72	0.00	0.87	0.87	—	3,834	3,834	0.08	0.15	6.49	3,888
Vendor	0.17	0.06	2.90	1.06	0.01	0.02	0.42	0.44	0.02	0.11	0.13	—	1,590	1,590	0.11	0.24	1.65	1,666
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.25	0.25	0.20	2.91	0.00	0.00	0.68	0.68	0.00	0.16	0.16	—	635	635	0.01	0.03	1.07	644
Vendor	0.03	0.01	0.53	0.19	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.02	—	263	263	0.02	0.04	0.27	276
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Building Construction (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.23	1.03	9.39	12.9	0.02	0.34	—	0.34	0.31	—	0.31	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.15	0.20	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	37.5	37.5	< 0.005	< 0.005	—	37.7
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.21	6.21	< 0.005	< 0.005	—	6.23
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.90	1.67	1.74	20.6	0.00	0.00	5.35	5.35	0.00	1.25	1.25	—	5,138	5,138	0.12	0.21	0.50	5,205
Vendor	0.23	0.08	3.86	1.45	0.02	0.03	0.60	0.63	0.03	0.16	0.19	—	2,176	2,176	0.13	0.32	0.12	2,274
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.33	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	82.5	82.5	< 0.005	< 0.005	0.13	83.6
Vendor	< 0.005	< 0.005	0.06	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	34.1	34.1	< 0.005	< 0.005	0.03	35.6
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	< 0.005	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	13.7	13.7	< 0.005	< 0.005	0.02	13.8
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.64	5.64	< 0.005	< 0.005	0.01	5.90
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Paving (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.88	0.74	6.94	9.95	0.01	0.30	—	0.30	0.27	—	0.27	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.38	0.55	< 0.005	0.02	—	0.02	0.02	—	0.02	—	82.8	82.8	< 0.005	< 0.005	—	83.1
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.07	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	13.7	13.7	< 0.005	< 0.005	—	13.8
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.05	0.58	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	146	146	< 0.005	0.01	0.01	148
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.19	8.19	< 0.005	< 0.005	0.01	8.30
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.36	1.36	< 0.005	< 0.005	< 0.005	1.37
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Architectural Coating (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.11	0.83	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	331	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.32	7.32	< 0.005	< 0.005	—	7.34
Architectural Coatings	—	18.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.21	1.21	< 0.005	< 0.005	—	1.22
Architectural Coatings	—	3.31	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.38	0.33	0.35	4.11	0.00	0.00	1.07	1.07	0.00	0.25	0.25	—	1,028	1,028	0.02	0.04	0.10	1,041
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.23	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	57.8	57.8	< 0.005	< 0.005	0.09	58.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.57	9.57	< 0.005	< 0.005	0.01	9.69
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequest	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	6/7/2025	6/20/2025	5.00	10.0	—
Grading	Grading	6/21/2025	8/8/2025	5.00	35.0	—
Building Construction	Building Construction	8/9/2025	1/8/2027	5.00	370	—
Paving	Paving	1/9/2027	2/5/2027	5.00	20.0	—
Architectural Coating	Architectural Coating	2/6/2027	3/5/2027	5.00	20.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	14.3	LDA,LDT1,LDT2

Site Preparation	Vendor	—	8.80	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	14.3	LDA,LDT1,LDT2
Grading	Vendor	—	8.80	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	529	14.3	LDA,LDT1,LDT2
Building Construction	Vendor	78.6	8.80	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	14.3	LDA,LDT1,LDT2
Paving	Vendor	—	8.80	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	106	14.3	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	8.80	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	1,428,840	476,280	0.00	0.00	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	—	—	15.0	0.00	—
Grading	—	—	105	0.00	—
Paving	0.00	0.00	0.00	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Apartments Mid Rise	—	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2025	0.00	375	0.01	< 0.005
2026	0.00	375	0.01	< 0.005

2027	0.00	375	0.01	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	21.8	annual days of extreme heat
Extreme Precipitation	6.35	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth

Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	2	0	0	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2

Extreme Precipitation	2	1	1	3
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	58.2
AQ-PM	37.4
AQ-DPM	27.5
Drinking Water	61.1
Lead Risk Housing	92.2
Pesticides	7.24
Toxic Releases	21.8
Traffic	47.0

Effect Indicators	—
CleanUp Sites	80.9
Groundwater	99.2
Haz Waste Facilities/Generators	61.6
Impaired Water Bodies	0.00
Solid Waste	52.9
Sensitive Population	—
Asthma	93.4
Cardio-vascular	69.2
Low Birth Weights	79.4
Socioeconomic Factor Indicators	—
Education	62.9
Housing	73.4
Linguistic	39.2
Poverty	91.6
Unemployment	65.6

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	10.16296677
Employed	6.274862056
Median HI	6.672654947
Education	—
Bachelor's or higher	19.73566021
High school enrollment	12.79353266

Preschool enrollment	42.65366354
Transportation	—
Auto Access	24.89413576
Active commuting	74.06646991
Social	—
2-parent households	39.00936738
Voting	13.02450917
Neighborhood	—
Alcohol availability	41.6527653
Park access	47.42717824
Retail density	38.27794174
Supermarket access	72.19299371
Tree canopy	82.34312845
Housing	—
Homeownership	23.13614782
Housing habitability	24.91979982
Low-inc homeowner severe housing cost burden	13.20415758
Low-inc renter severe housing cost burden	43.7957141
Uncrowded housing	25.445913
Health Outcomes	—
Insured adults	37.80315668
Arthritis	0.0
Asthma ER Admissions	5.9
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0

Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	5.5
Cognitively Disabled	4.0
Physically Disabled	5.6
Heart Attack ER Admissions	16.8
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	96.7
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	16.3
Elderly	67.6
English Speaking	43.4
Foreign-born	30.0
Outdoor Workers	48.6
Climate Change Adaptive Capacity	—
Impervious Surface Cover	51.3
Traffic Density	47.2

Traffic Access	66.1
Other Indices	—
Hardship	80.5
Other Decision Support	—
2016 Voting	6.4

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	83.0
Healthy Places Index Score for Project Location (b)	13.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	20% of total lot acreage is landscaped as in GP
Construction: Construction Phases	no demo

Sac Rezone Old Florin (rezoned) Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Sac Rezone Old Florin (rezoned)
Construction Start Date	3/6/2027
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.00
Precipitation (days)	37.8
Location	38.49656099729435, -121.39733654991514
County	Sacramento
City	Unincorporated
Air District	Sacramento Metropolitan AQMD
Air Basin	Sacramento Valley
TAZ	774
EDFZ	13
Electric Utility	Sacramento Municipal Utility District
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.21

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Apartments Mid Rise	777	Dwelling Unit	25.2	745,920	219,717	—	2,176	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.68	3.28	25.6	44.1	0.06	1.04	6.28	6.65	0.96	1.49	2.43	—	10,812	10,812	0.32	0.57	25.3	11,016
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.69	390	28.0	36.2	0.06	1.17	7.84	9.01	1.08	3.98	5.06	—	10,129	10,129	0.36	0.58	0.66	10,312
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.06	20.8	10.2	20.6	0.03	0.30	3.43	3.74	0.28	0.93	1.21	—	5,674	5,674	0.19	0.32	5.48	5,778
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.38	3.79	1.87	3.76	< 0.005	0.06	0.63	0.68	0.05	0.17	0.22	—	939	939	0.03	0.05	0.91	957

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2027	3.68	3.28	25.6	44.1	0.06	1.04	6.28	6.65	0.96	1.49	2.43	—	10,812	10,812	0.32	0.57	25.3	11,016
2028	3.54	2.99	13.7	42.2	0.04	0.33	6.28	6.61	0.31	1.49	1.80	—	10,626	10,626	0.31	0.39	22.8	10,774
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	3.69	3.11	28.0	36.2	0.06	1.17	7.84	9.01	1.08	3.98	5.06	—	10,129	10,129	0.36	0.58	0.66	10,312
2028	3.35	390	14.4	34.9	0.04	0.33	6.28	6.61	0.31	1.49	1.80	—	9,957	9,957	0.35	0.58	0.59	10,140
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	2.06	1.72	10.2	20.6	0.03	0.30	3.43	3.74	0.28	0.93	1.21	—	5,585	5,585	0.19	0.27	5.12	5,676
2028	1.90	20.8	8.12	20.1	0.02	0.20	3.42	3.62	0.18	0.81	0.99	—	5,674	5,674	0.19	0.32	5.48	5,778
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.38	0.31	1.87	3.76	< 0.005	0.06	0.63	0.68	0.05	0.17	0.22	—	925	925	0.03	0.05	0.85	940
2028	0.35	3.79	1.48	3.67	< 0.005	0.04	0.62	0.66	0.03	0.15	0.18	—	939	939	0.03	0.05	0.91	957

3. Construction Emissions Details

3.1. Site Preparation (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.63	3.05	28.0	28.3	0.05	1.17	—	1.17	1.08	—	1.08	—	5,298	5,298	0.21	0.04	—	5,316

Dust From Material Movement	—	—	—	—	—	—	7.67	7.67	—	3.94	3.94	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.08	0.77	0.77	< 0.005	0.03	—	0.03	0.03	—	0.03	—	145	145	0.01	< 0.005	—	146
Dust From Material Movement	—	—	—	—	—	—	0.21	0.21	—	0.11	0.11	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.14	0.14	< 0.005	0.01	—	0.01	0.01	—	0.01	—	24.0	24.0	< 0.005	< 0.005	—	24.1
Dust From Material Movement	—	—	—	—	—	—	0.04	0.04	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.06	0.68	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	170	170	< 0.005	0.01	0.02	172
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.78	4.78	< 0.005	< 0.005	0.01	4.84
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.79	0.79	< 0.005	< 0.005	< 0.005	0.80
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Grading (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.51	2.95	25.6	27.3	0.06	1.04	—	1.04	0.96	—	0.96	—	6,598	6,598	0.27	0.05	—	6,621
Dust From Material Movement	—	—	—	—	—	—	3.59	3.59	—	1.42	1.42	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.51	2.95	25.6	27.3	0.06	1.04	—	1.04	0.96	—	0.96	—	6,598	6,598	0.27	0.05	—	6,621

Dust From Material Movement	—	—	—	—	—	—	3.59	3.59	—	1.42	1.42	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.34	0.28	2.45	2.62	0.01	0.10	—	0.10	0.09	—	0.09	—	633	633	0.03	0.01	—	635
Dust From Material Movement	—	—	—	—	—	—	0.34	0.34	—	0.14	0.14	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.45	0.48	< 0.005	0.02	—	0.02	0.02	—	0.02	—	105	105	< 0.005	< 0.005	—	105
Dust From Material Movement	—	—	—	—	—	—	0.06	0.06	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.05	1.06	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	219	219	< 0.005	0.01	0.72	222
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.07	0.06	0.07	0.78	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	194	194	< 0.005	0.01	0.02	197
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.08	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	19.1	19.1	< 0.005	< 0.005	0.03	19.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.16	3.16	< 0.005	< 0.005	< 0.005	3.21
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Building Construction (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.23	1.03	9.39	12.9	0.02	0.34	—	0.34	0.31	—	0.31	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.23	1.03	9.39	12.9	0.02	0.34	—	0.34	0.31	—	0.31	—	2,397	2,397	0.10	0.02	—	2,405

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.57	0.48	4.37	6.03	0.01	0.16	—	0.16	0.14	—	0.14	—	1,116	1,116	0.05	0.01	—	1,120
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.09	0.80	1.10	< 0.005	0.03	—	0.03	0.03	—	0.03	—	185	185	0.01	< 0.005	—	185
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.20	2.17	1.42	29.7	0.00	0.00	5.65	5.65	0.00	1.32	1.32	—	6,115	6,115	0.09	0.21	20.2	6,201
Vendor	0.25	0.08	3.82	1.50	0.02	0.03	0.63	0.66	0.03	0.17	0.20	—	2,300	2,300	0.14	0.34	5.09	2,409
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.01	1.77	1.84	21.7	0.00	0.00	5.65	5.65	0.00	1.32	1.32	—	5,432	5,432	0.12	0.23	0.52	5,502
Vendor	0.24	0.08	4.08	1.53	0.02	0.03	0.63	0.66	0.03	0.17	0.20	—	2,300	2,300	0.14	0.34	0.13	2,404
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.93	0.82	0.75	10.4	0.00	0.00	2.57	2.57	0.00	0.60	0.60	—	2,596	2,596	0.05	0.10	4.06	2,631
Vendor	0.11	0.04	1.87	0.70	0.01	0.02	0.29	0.30	0.02	0.08	0.09	—	1,071	1,071	0.07	0.16	1.02	1,121
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.17	0.15	0.14	1.89	0.00	0.00	0.47	0.47	0.00	0.11	0.11	—	430	430	0.01	0.02	0.67	436
Vendor	0.02	0.01	0.34	0.13	< 0.005	< 0.005	0.05	0.06	< 0.005	0.01	0.02	—	177	177	0.01	0.03	0.17	186
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Building Construction (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.18	0.99	8.92	12.9	0.02	0.30	—	0.30	0.28	—	0.28	—	2,397	2,397	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.18	0.99	8.92	12.9	0.02	0.30	—	0.30	0.28	—	0.28	—	2,397	2,397	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.65	0.54	4.89	7.09	0.01	0.16	—	0.16	0.15	—	0.15	—	1,314	1,314	0.05	0.01	—	1,318
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.89	1.29	< 0.005	0.03	—	0.03	0.03	—	0.03	—	217	217	0.01	< 0.005	—	218

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.13	1.92	1.23	27.9	0.00	0.00	5.65	5.65	0.00	1.32	1.32	—	5,989	5,989	0.07	0.04	18.3	6,020
Vendor	0.23	0.08	3.57	1.44	0.02	0.03	0.63	0.66	0.03	0.17	0.20	—	2,239	2,239	0.14	0.34	4.52	2,348
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.94	1.72	1.64	20.5	0.00	0.00	5.65	5.65	0.00	1.32	1.32	—	5,320	5,320	0.11	0.23	0.47	5,391
Vendor	0.22	0.08	3.82	1.48	0.02	0.03	0.63	0.66	0.03	0.17	0.20	—	2,239	2,239	0.14	0.34	0.12	2,343
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.06	0.94	0.78	11.5	0.00	0.00	3.02	3.02	0.00	0.71	0.71	—	2,991	2,991	0.05	0.12	4.33	3,032
Vendor	0.12	0.05	2.06	0.80	0.01	0.02	0.34	0.36	0.02	0.09	0.11	—	1,227	1,227	0.08	0.18	1.07	1,285
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.19	0.17	0.14	2.09	0.00	0.00	0.55	0.55	0.00	0.13	0.13	—	495	495	0.01	0.02	0.72	502
Vendor	0.02	0.01	0.38	0.15	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	203	203	0.01	0.03	0.18	213
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Paving (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.82	0.69	6.63	9.91	0.01	0.26	—	0.26	0.24	—	0.24	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.33	0.49	< 0.005	0.01	—	0.01	0.01	—	0.01	—	74.5	74.5	< 0.005	< 0.005	—	74.8
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	12.3	12.3	< 0.005	< 0.005	—	12.4
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.04	0.55	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	143	143	< 0.005	0.01	0.01	145
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.22	7.22	< 0.005	< 0.005	0.01	7.32
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.20	1.20	< 0.005	< 0.005	< 0.005	1.21
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Architectural Coating (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	0.81	1.12	< 0.005	0.02	—	0.02	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	389	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.01	0.01	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.58	6.58	< 0.005	< 0.005	—	6.61
Architectural Coatings	—	19.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.09	1.09	< 0.005	< 0.005	—	1.09
Architectural Coatings	—	3.50	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.39	0.34	0.33	4.10	0.00	0.00	1.13	1.13	0.00	0.26	0.26	—	1,064	1,064	0.02	0.05	0.09	1,078
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.21	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	53.8	53.8	< 0.005	< 0.005	0.08	54.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.91	8.91	< 0.005	< 0.005	0.01	9.04

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	3/6/2027	3/19/2027	5.00	10.0	—
Grading	Grading	3/20/2027	5/7/2027	5.00	35.0	—
Building Construction	Building Construction	5/8/2027	10/6/2028	5.00	370	—
Paving	Paving	10/7/2028	11/1/2028	5.00	18.0	—
Architectural Coating	Architectural Coating	11/2/2028	11/27/2028	5.00	18.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	14.3	LDA,LDT1,LDT2
Site Preparation	Vendor	—	8.80	HHDT,MHDT

Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	14.3	LDA,LDT1,LDT2
Grading	Vendor	—	8.80	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	559	14.3	LDA,LDT1,LDT2
Building Construction	Vendor	83.1	8.80	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	14.3	LDA,LDT1,LDT2
Paving	Vendor	—	8.80	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	112	14.3	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	8.80	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	1,510,488	503,496	0.00	0.00	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	—	—	15.0	0.00	—
Grading	—	—	105	0.00	—
Paving	0.00	0.00	0.00	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Apartments Mid Rise	—	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2027	0.00	375	0.01	< 0.005
2028	0.00	375	0.01	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	19.3	annual days of extreme heat
Extreme Precipitation	5.70	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	2	0	0	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	2	1	1	3
Sea Level Rise	N/A	N/A	N/A	N/A

Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	48.6
AQ-PM	23.7
AQ-DPM	22.3
Drinking Water	78.8
Lead Risk Housing	41.2
Pesticides	73.8
Toxic Releases	30.3
Traffic	28.5
Effect Indicators	—
CleanUp Sites	86.5

Groundwater	88.9
Haz Waste Facilities/Generators	99.8
Impaired Water Bodies	51.2
Solid Waste	99.9
Sensitive Population	—
Asthma	50.2
Cardio-vascular	53.9
Low Birth Weights	36.4
Socioeconomic Factor Indicators	—
Education	47.5
Housing	61.9
Linguistic	43.9
Poverty	58.5
Unemployment	62.4

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	36.84075452
Employed	20.45425382
Median HI	23.26446811
Education	—
Bachelor's or higher	39.34300013
High school enrollment	100
Preschool enrollment	18.64493776
Transportation	—

Auto Access	37.4566919
Active commuting	70.79430258
Social	—
2-parent households	14.75683306
Voting	58.51405107
Neighborhood	—
Alcohol availability	64.62209675
Park access	12.70370846
Retail density	22.81534711
Supermarket access	13.65327858
Tree canopy	2.065956628
Housing	—
Homeownership	60.60567176
Housing habitability	41.69126139
Low-inc homeowner severe housing cost burden	38.58591043
Low-inc renter severe housing cost burden	7.737713332
Uncrowded housing	46.38778391
Health Outcomes	—
Insured adults	43.96253048
Arthritis	0.0
Asthma ER Admissions	49.9
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0

Life Expectancy at Birth	16.0
Cognitively Disabled	21.0
Physically Disabled	7.2
Heart Attack ER Admissions	53.7
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	98.4
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	59.5
Elderly	21.1
English Speaking	31.0
Foreign-born	59.3
Outdoor Workers	28.8
Climate Change Adaptive Capacity	—
Impervious Surface Cover	91.1
Traffic Density	37.8
Traffic Access	23.0
Other Indices	—

Hardship	62.5
Other Decision Support	—
2016 Voting	63.7

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	70.0
Healthy Places Index Score for Project Location (b)	29.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	South Florin

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	No demo
Land Use	landscape area = 20% of total lot acreage

Sac Rezone Main Operations (after) Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Sac Rezone Main Operations (after)
Operational Year	2030
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.70
Precipitation (days)	37.8
Location	38.550592607076084, -121.39691856340349
County	Sacramento
City	Sacramento
Air District	Sacramento Metropolitan AQMD
Air Basin	Sacramento Valley
TAZ	765
EDFZ	13
Electric Utility	Sacramento Municipal Utility District
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.21

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Apartments Mid Rise	7,419	Dwelling Unit	236	7,122,240	2,051,870	—	20,773	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Energy	E-15	Require All-Electric Development

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	195	351	134	1,574	2.82	3.95	240	244	3.79	61.0	64.8	3,516	326,844	330,360	313	12.4	675	342,564
Mit.	192	349	108	1,563	2.66	1.86	240	242	1.71	61.0	62.7	3,516	294,165	297,681	310	12.4	675	309,795
% Reduced	2%	< 0.5%	19%	1%	6%	53%	—	1%	55%	—	3%	—	10%	10%	1%	< 0.5%	—	10%
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	143	300	148	993	2.57	3.76	240	244	3.65	61.0	64.7	3,516	302,484	306,000	314	13.5	67.2	317,942
Mit.	140	299	122	982	2.41	1.67	240	242	1.57	61.0	62.6	3,516	269,805	273,321	312	13.4	67.2	285,172
% Reduced	2%	1%	17%	1%	6%	55%	—	1%	57%	—	3%	—	11%	11%	1%	< 0.5%	—	10%
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	162	319	137	1,216	2.51	3.80	223	227	3.67	56.6	60.3	3,516	295,662	299,178	313	12.4	307	311,001
Mit.	159	318	111	1,205	2.35	1.72	223	225	1.59	56.6	58.2	3,516	262,983	266,499	310	12.3	307	278,232
% Reduced	2%	< 0.5%	19%	1%	7%	55%	—	1%	57%	—	3%	—	11%	11%	1%	< 0.5%	—	11%

Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	29.6	58.3	25.0	222	0.46	0.69	40.7	41.4	0.67	10.3	11.0	582	48,950	49,532	51.8	2.05	50.9	51,490
Mit.	29.1	58.0	20.3	220	0.43	0.31	40.7	41.0	0.29	10.3	10.6	582	43,540	44,122	51.4	2.04	50.9	46,064
% Reduced	2%	< 0.5%	19%	1%	7%	55%	—	1%	57%	—	3%	—	11%	11%	1%	< 0.5%	—	11%

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	154	142	104	1,141	2.64	1.67	240	242	1.57	61.0	62.6	—	269,501	269,501	11.2	11.0	624	273,673
Area	38.5	207	3.93	422	0.02	0.19	—	0.19	0.14	—	0.14	0.00	1,125	1,125	0.05	0.01	—	1,129
Energy	3.01	1.51	25.7	11.0	0.16	2.08	—	2.08	2.08	—	2.08	—	55,751	55,751	4.23	0.24	—	55,927
Water	—	—	—	—	—	—	—	—	—	—	—	559	467	1,026	1.95	1.22	—	1,439
Waste	—	—	—	—	—	—	—	—	—	—	—	2,957	0.00	2,957	296	0.00	—	10,344
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	51.0	51.0
Total	195	351	134	1,574	2.82	3.95	240	244	3.79	61.0	64.8	3,516	326,844	330,360	313	12.4	675	342,564
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	140	128	122	982	2.41	1.67	240	242	1.57	61.0	62.6	—	246,267	246,267	12.8	12.0	16.2	250,180
Area	0.00	171	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Energy	3.01	1.51	25.7	11.0	0.16	2.08	—	2.08	2.08	—	2.08	—	55,751	55,751	4.23	0.24	—	55,927
Water	—	—	—	—	—	—	—	—	—	—	—	559	467	1,026	1.95	1.22	—	1,439
Waste	—	—	—	—	—	—	—	—	—	—	—	2,957	0.00	2,957	296	0.00	—	10,344
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	51.0	51.0

Total	143	300	148	993	2.57	3.76	240	244	3.65	61.0	64.7	3,516	302,484	306,000	314	13.5	67.2	317,942
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	133	122	109	916	2.33	1.59	223	224	1.49	56.6	58.1	—	238,674	238,674	11.3	10.9	256	242,466
Area	26.3	196	2.69	289	0.01	0.13	—	0.13	0.10	—	0.10	0.00	771	771	0.03	0.01	—	774
Energy	3.01	1.51	25.7	11.0	0.16	2.08	—	2.08	2.08	—	2.08	—	55,751	55,751	4.23	0.24	—	55,927
Water	—	—	—	—	—	—	—	—	—	—	—	559	467	1,026	1.95	1.22	—	1,439
Waste	—	—	—	—	—	—	—	—	—	—	—	2,957	0.00	2,957	296	0.00	—	10,344
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	51.0	51.0
Total	162	319	137	1,216	2.51	3.80	223	227	3.67	56.6	60.3	3,516	295,662	299,178	313	12.4	307	311,001
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	24.2	22.3	19.8	167	0.43	0.29	40.7	41.0	0.27	10.3	10.6	—	39,515	39,515	1.88	1.81	42.4	40,143
Area	4.81	35.7	0.49	52.8	< 0.005	0.02	—	0.02	0.02	—	0.02	0.00	128	128	0.01	< 0.005	—	128
Energy	0.55	0.27	4.70	2.00	0.03	0.38	—	0.38	0.38	—	0.38	—	9,230	9,230	0.70	0.04	—	9,259
Water	—	—	—	—	—	—	—	—	—	—	—	92.5	77.3	170	0.32	0.20	—	238
Waste	—	—	—	—	—	—	—	—	—	—	—	490	0.00	490	48.9	0.00	—	1,713
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8.45	8.45
Total	29.6	58.3	25.0	222	0.46	0.69	40.7	41.4	0.67	10.3	11.0	582	48,950	49,532	51.8	2.05	50.9	51,490

2.6. Operations Emissions by Sector, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	154	142	104	1,141	2.64	1.67	240	242	1.57	61.0	62.6	—	269,501	269,501	11.2	11.0	624	273,673
Area	38.5	207	3.93	422	0.02	0.19	—	0.19	0.14	—	0.14	0.00	1,125	1,125	0.05	0.01	—	1,129
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	23,072	23,072	1.33	0.18	—	23,158

Water	—	—	—	—	—	—	—	—	—	—	—	559	467	1,026	1.95	1.22	—	1,439
Waste	—	—	—	—	—	—	—	—	—	—	—	2,957	0.00	2,957	296	0.00	—	10,344
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	51.0	51.0
Total	192	349	108	1,563	2.66	1.86	240	242	1.71	61.0	62.7	3,516	294,165	297,681	310	12.4	675	309,795
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	140	128	122	982	2.41	1.67	240	242	1.57	61.0	62.6	—	246,267	246,267	12.8	12.0	16.2	250,180
Area	0.00	171	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	23,072	23,072	1.33	0.18	—	23,158
Water	—	—	—	—	—	—	—	—	—	—	—	559	467	1,026	1.95	1.22	—	1,439
Waste	—	—	—	—	—	—	—	—	—	—	—	2,957	0.00	2,957	296	0.00	—	10,344
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	51.0	51.0
Total	140	299	122	982	2.41	1.67	240	242	1.57	61.0	62.6	3,516	269,805	273,321	312	13.4	67.2	285,172
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	133	122	109	916	2.33	1.59	223	224	1.49	56.6	58.1	—	238,674	238,674	11.3	10.9	256	242,466
Area	26.3	196	2.69	289	0.01	0.13	—	0.13	0.10	—	0.10	0.00	771	771	0.03	0.01	—	774
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	23,072	23,072	1.33	0.18	—	23,158
Water	—	—	—	—	—	—	—	—	—	—	—	559	467	1,026	1.95	1.22	—	1,439
Waste	—	—	—	—	—	—	—	—	—	—	—	2,957	0.00	2,957	296	0.00	—	10,344
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	51.0	51.0
Total	159	318	111	1,205	2.35	1.72	223	225	1.59	56.6	58.2	3,516	262,983	266,499	310	12.3	307	278,232
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	24.2	22.3	19.8	167	0.43	0.29	40.7	41.0	0.27	10.3	10.6	—	39,515	39,515	1.88	1.81	42.4	40,143
Area	4.81	35.7	0.49	52.8	< 0.005	0.02	—	0.02	0.02	—	0.02	0.00	128	128	0.01	< 0.005	—	128
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	3,820	3,820	0.22	0.03	—	3,834
Water	—	—	—	—	—	—	—	—	—	—	—	92.5	77.3	170	0.32	0.20	—	238
Waste	—	—	—	—	—	—	—	—	—	—	—	490	0.00	490	48.9	0.00	—	1,713

Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8.45	8.45
Total	29.1	58.0	20.3	220	0.43	0.31	40.7	41.0	0.29	10.3	10.6	582	43,540	44,122	51.4	2.04	50.9	46,064

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	154	142	104	1,141	2.64	1.67	240	242	1.57	61.0	62.6	—	269,501	269,501	11.2	11.0	624	273,673
Total	154	142	104	1,141	2.64	1.67	240	242	1.57	61.0	62.6	—	269,501	269,501	11.2	11.0	624	273,673
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	140	128	122	982	2.41	1.67	240	242	1.57	61.0	62.6	—	246,267	246,267	12.8	12.0	16.2	250,180
Total	140	128	122	982	2.41	1.67	240	242	1.57	61.0	62.6	—	246,267	246,267	12.8	12.0	16.2	250,180
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	24.2	22.3	19.8	167	0.43	0.29	40.7	41.0	0.27	10.3	10.6	—	39,515	39,515	1.88	1.81	42.4	40,143
Total	24.2	22.3	19.8	167	0.43	0.29	40.7	41.0	0.27	10.3	10.6	—	39,515	39,515	1.88	1.81	42.4	40,143

4.1.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	154	142	104	1,141	2.64	1.67	240	242	1.57	61.0	62.6	—	269,501	269,501	11.2	11.0	624	273,673
Total	154	142	104	1,141	2.64	1.67	240	242	1.57	61.0	62.6	—	269,501	269,501	11.2	11.0	624	273,673
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	140	128	122	982	2.41	1.67	240	242	1.57	61.0	62.6	—	246,267	246,267	12.8	12.0	16.2	250,180
Total	140	128	122	982	2.41	1.67	240	242	1.57	61.0	62.6	—	246,267	246,267	12.8	12.0	16.2	250,180
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	24.2	22.3	19.8	167	0.43	0.29	40.7	41.0	0.27	10.3	10.6	—	39,515	39,515	1.88	1.81	42.4	40,143
Total	24.2	22.3	19.8	167	0.43	0.29	40.7	41.0	0.27	10.3	10.6	—	39,515	39,515	1.88	1.81	42.4	40,143

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	23,071	23,071	1.33	0.18	—	23,157
Total	—	—	—	—	—	—	—	—	—	—	—	—	23,071	23,071	1.33	0.18	—	23,157
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	23,071	23,071	1.33	0.18	—	23,157
Total	—	—	—	—	—	—	—	—	—	—	—	—	23,071	23,071	1.33	0.18	—	23,157
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	3,820	3,820	0.22	0.03	—	3,834
Total	—	—	—	—	—	—	—	—	—	—	—	—	3,820	3,820	0.22	0.03	—	3,834

4.2.2. Electricity Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	23,072	23,072	1.33	0.18	—	23,158
Total	—	—	—	—	—	—	—	—	—	—	—	—	23,072	23,072	1.33	0.18	—	23,158
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Apartme Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	23,072	23,072	1.33	0.18	—	23,158
Total	—	—	—	—	—	—	—	—	—	—	—	—	23,072	23,072	1.33	0.18	—	23,158
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartme nts Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	3,820	3,820	0.22	0.03	—	3,834
Total	—	—	—	—	—	—	—	—	—	—	—	—	3,820	3,820	0.22	0.03	—	3,834

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartme nts Mid Rise	3.01	1.51	25.7	11.0	0.16	2.08	—	2.08	2.08	—	2.08	—	32,680	32,680	2.89	0.06	—	32,771
Total	3.01	1.51	25.7	11.0	0.16	2.08	—	2.08	2.08	—	2.08	—	32,680	32,680	2.89	0.06	—	32,771
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartme nts Mid Rise	3.01	1.51	25.7	11.0	0.16	2.08	—	2.08	2.08	—	2.08	—	32,680	32,680	2.89	0.06	—	32,771
Total	3.01	1.51	25.7	11.0	0.16	2.08	—	2.08	2.08	—	2.08	—	32,680	32,680	2.89	0.06	—	32,771
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartme nts Mid Rise	0.55	0.27	4.70	2.00	0.03	0.38	—	0.38	0.38	—	0.38	—	5,411	5,411	0.48	0.01	—	5,426
Total	0.55	0.27	4.70	2.00	0.03	0.38	—	0.38	0.38	—	0.38	—	5,411	5,411	0.48	0.01	—	5,426

4.2.4. Natural Gas Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	152	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	18.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	38.5	36.4	3.93	422	0.02	0.19	—	0.19	0.14	—	0.14	—	1,125	1,125	0.05	0.01	—	1,129
Total	38.5	207	3.93	422	0.02	0.19	—	0.19	0.14	—	0.14	0.00	1,125	1,125	0.05	0.01	—	1,129
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	152	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	18.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00	171	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	27.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	3.34	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	4.81	4.55	0.49	52.8	< 0.005	0.02	—	0.02	0.02	—	0.02	—	128	128	0.01	< 0.005	—	128

Total	4.81	35.7	0.49	52.8	< 0.005	0.02	—	0.02	0.02	—	0.02	0.00	128	128	0.01	< 0.005	—	128

4.3.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	152	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	18.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	38.5	36.4	3.93	422	0.02	0.19	—	0.19	0.14	—	0.14	—	1,125	1,125	0.05	0.01	—	1,129
Total	38.5	207	3.93	422	0.02	0.19	—	0.19	0.14	—	0.14	0.00	1,125	1,125	0.05	0.01	—	1,129
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	152	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	18.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00	171	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00

Consum Products	—	27.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	3.34	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	4.81	4.55	0.49	52.8	< 0.005	0.02	—	0.02	0.02	—	0.02	—	128	128	0.01	< 0.005	—	128
Total	4.81	35.7	0.49	52.8	< 0.005	0.02	—	0.02	0.02	—	0.02	0.00	128	128	0.01	< 0.005	—	128

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	559	467	1,026	1.95	1.22	—	1,439
Total	—	—	—	—	—	—	—	—	—	—	—	559	467	1,026	1.95	1.22	—	1,439
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	559	467	1,026	1.95	1.22	—	1,439
Total	—	—	—	—	—	—	—	—	—	—	—	559	467	1,026	1.95	1.22	—	1,439
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Apartments	—	—	—	—	—	—	—	—	—	—	—	92.5	77.3	170	0.32	0.20	—	238
Total	—	—	—	—	—	—	—	—	—	—	—	92.5	77.3	170	0.32	0.20	—	238

4.4.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	559	467	1,026	1.95	1.22	—	1,439
Total	—	—	—	—	—	—	—	—	—	—	—	559	467	1,026	1.95	1.22	—	1,439
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	559	467	1,026	1.95	1.22	—	1,439
Total	—	—	—	—	—	—	—	—	—	—	—	559	467	1,026	1.95	1.22	—	1,439
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	92.5	77.3	170	0.32	0.20	—	238
Total	—	—	—	—	—	—	—	—	—	—	—	92.5	77.3	170	0.32	0.20	—	238

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	2,957	0.00	2,957	296	0.00	—	10,344
Total	—	—	—	—	—	—	—	—	—	—	—	2,957	0.00	2,957	296	0.00	—	10,344
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	2,957	0.00	2,957	296	0.00	—	10,344
Total	—	—	—	—	—	—	—	—	—	—	—	2,957	0.00	2,957	296	0.00	—	10,344
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	490	0.00	490	48.9	0.00	—	1,713
Total	—	—	—	—	—	—	—	—	—	—	—	490	0.00	490	48.9	0.00	—	1,713

4.5.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	2,957	0.00	2,957	296	0.00	—	10,344
Total	—	—	—	—	—	—	—	—	—	—	—	2,957	0.00	2,957	296	0.00	—	10,344

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	2,957	0.00	2,957	296	0.00	—	10,344
Total	—	—	—	—	—	—	—	—	—	—	—	2,957	0.00	2,957	296	0.00	—	10,344
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	490	0.00	490	48.9	0.00	—	1,713
Total	—	—	—	—	—	—	—	—	—	—	—	490	0.00	490	48.9	0.00	—	1,713

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	51.0	51.0
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	51.0	51.0
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	51.0	51.0
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	51.0	51.0

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8.45	8.45
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8.45	8.45

4.6.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	51.0	51.0
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	51.0	51.0
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	51.0	51.0
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	51.0	51.0
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8.45	8.45
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8.45	8.45

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Apartments Mid Rise	40,359	36,427	30,344	14,003,893	338,859	305,845	254,767	117,577,192

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Apartments Mid Rise	40,359	36,427	30,344	14,003,893	338,859	305,845	254,767	117,577,192

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Apartments Mid Rise	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	7419
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.1.2. Mitigated

Hearth Type	Unmitigated (number)
Apartments Mid Rise	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0

Electric Fireplaces	0
No Fireplaces	7419
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
14422536	4,807,512	0.00	0.00	—

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)

Apartments Mid Rise	37,761,761	223	0.0129	0.0017	101,970,872

5.11.2. Mitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Apartments Mid Rise	37,763,762	223	0.0129	0.0017	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Apartments Mid Rise	261,586,521	35,025,380

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Apartments Mid Rise	261,586,521	35,025,380

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Apartments Mid Rise	5,486	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Apartments Mid Rise	5,486	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Apartments Mid Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Mid Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Apartments Mid Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Mid Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.15.2. Mitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	18.8	annual days of extreme heat
Extreme Precipitation	6.20	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	2	0	0	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	2	1	1	3
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A

Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	48.5
AQ-PM	37.5
AQ-DPM	65.4
Drinking Water	56.6
Lead Risk Housing	38.1
Pesticides	29.5
Toxic Releases	41.1
Traffic	78.6
Effect Indicators	—
CleanUp Sites	0.00
Groundwater	28.3
Haz Waste Facilities/Generators	40.9
Impaired Water Bodies	51.2
Solid Waste	73.0

Sensitive Population	—
Asthma	87.9
Cardio-vascular	72.0
Low Birth Weights	9.08
Socioeconomic Factor Indicators	—
Education	20.9
Housing	22.7
Linguistic	21.4
Poverty	43.5
Unemployment	40.6

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	65.76414731
Employed	89.43924034
Median HI	66.04645194
Education	—
Bachelor's or higher	71.14076736
High school enrollment	100
Preschool enrollment	54.90825099
Transportation	—
Auto Access	28.53843193
Active commuting	72.93725138
Social	—
2-parent households	56.35827024

Voting	87.62992429
Neighborhood	—
Alcohol availability	60.41319133
Park access	81.35506224
Retail density	56.73039908
Supermarket access	55.37020403
Tree canopy	89.60605672
Housing	—
Homeownership	69.85756448
Housing habitability	79.08379315
Low-inc homeowner severe housing cost burden	69.62658796
Low-inc renter severe housing cost burden	61.37559348
Uncrowded housing	59.34813294
Health Outcomes	—
Insured adults	68.56152958
Arthritis	8.6
Asthma ER Admissions	25.7
High Blood Pressure	9.1
Cancer (excluding skin)	7.2
Asthma	46.1
Coronary Heart Disease	12.2
Chronic Obstructive Pulmonary Disease	31.1
Diagnosed Diabetes	50.0
Life Expectancy at Birth	28.4
Cognitively Disabled	72.6
Physically Disabled	62.2
Heart Attack ER Admissions	23.7

Mental Health Not Good	69.9
Chronic Kidney Disease	27.1
Obesity	53.5
Pedestrian Injuries	75.4
Physical Health Not Good	59.3
Stroke	26.0
Health Risk Behaviors	—
Binge Drinking	54.2
Current Smoker	63.8
No Leisure Time for Physical Activity	73.6
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	41.8
Elderly	9.0
English Speaking	62.3
Foreign-born	12.8
Outdoor Workers	27.9
Climate Change Adaptive Capacity	—
Impervious Surface Cover	54.8
Traffic Density	83.9
Traffic Access	60.7
Other Indices	—
Hardship	33.4
Other Decision Support	—
2016 Voting	77.1

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	49.0
Healthy Places Index Score for Project Location (b)	77.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Operations: Energy Use	...
Land Use	236 acres with 7419 units

Sac Rezone Fair Oaks Operations (rezoned) Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Sac Rezone Fair Oaks Operations (rezoned)
Operational Year	2030
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.50
Precipitation (days)	39.2
Location	38.637469230516956, -121.32836613666706
County	Sacramento
City	Unincorporated
Air District	Sacramento Metropolitan AQMD
Air Basin	Sacramento Valley
TAZ	619
EDFZ	13
Electric Utility	Sacramento Municipal Utility District
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.21

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Apartments Mid Rise	37.0	Dwelling Unit	1.25	35,520	10,890	—	104	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Energy	E-15	Require All-Electric Development

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.06	1.82	0.85	10.2	0.02	0.02	1.79	1.81	0.02	0.45	0.48	17.6	2,347	2,364	1.58	0.08	4.90	2,433
Mit.	1.05	1.81	0.72	10.1	0.02	0.01	1.79	1.80	0.01	0.45	0.47	17.6	2,190	2,208	1.57	0.08	4.90	2,276
% Reduced	1%	< 0.5%	15%	1%	—	44%	—	1%	46%	—	2%	—	7%	7%	1%	—	—	6%
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.80	1.56	0.95	6.62	0.02	0.02	1.79	1.81	0.02	0.45	0.48	17.6	2,167	2,185	1.59	0.09	0.37	2,252
Mit.	0.79	1.56	0.83	6.57	0.02	0.01	1.79	1.80	0.01	0.45	0.47	17.6	2,011	2,029	1.58	0.09	0.37	2,095
% Reduced	2%	< 0.5%	13%	1%	—	45%	—	1%	47%	—	2%	—	7%	7%	1%	—	—	7%
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.89	1.66	0.87	7.74	0.02	0.02	1.66	1.68	0.02	0.42	0.44	17.6	2,116	2,133	1.58	0.08	2.16	2,200
Mit.	0.88	1.65	0.75	7.69	0.02	0.01	1.66	1.67	0.01	0.42	0.43	17.6	1,959	1,977	1.57	0.08	2.16	2,043
% Reduced	2%	< 0.5%	14%	1%	—	45%	—	1%	47%	—	2%	—	7%	7%	1%	—	—	7%

Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.16	0.30	0.16	1.41	< 0.005	< 0.005	0.30	0.31	< 0.005	0.08	0.08	2.91	350	353	0.26	0.01	0.36	364
Mit.	0.16	0.30	0.14	1.40	< 0.005	< 0.005	0.30	0.30	< 0.005	0.08	0.08	2.91	324	327	0.26	0.01	0.36	338
% Reduced	2%	< 0.5%	14%	1%	4%	45%	—	1%	47%	—	2%	—	7%	7%	1%	< 0.5%	—	7%

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.86	0.78	0.70	7.99	0.02	0.01	1.79	1.80	0.01	0.45	0.47	—	1,990	1,990	0.07	0.08	4.65	2,019
Area	0.19	1.03	0.02	2.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	5.61	5.61	< 0.005	< 0.005	—	5.63
Energy	0.01	0.01	0.12	0.05	< 0.005	0.01	—	0.01	0.01	—	0.01	—	347	347	0.02	< 0.005	—	347
Water	—	—	—	—	—	—	—	—	—	—	—	2.79	3.93	6.72	0.01	0.01	—	8.78
Waste	—	—	—	—	—	—	—	—	—	—	—	14.8	0.00	14.8	1.48	0.00	—	51.8
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.25	0.25
Total	1.06	1.82	0.85	10.2	0.02	0.02	1.79	1.81	0.02	0.45	0.48	17.6	2,347	2,364	1.58	0.08	4.90	2,433
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.79	0.71	0.83	6.57	0.02	0.01	1.79	1.80	0.01	0.45	0.47	—	1,817	1,817	0.08	0.08	0.12	1,844
Area	0.00	0.85	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Energy	0.01	0.01	0.12	0.05	< 0.005	0.01	—	0.01	0.01	—	0.01	—	347	347	0.02	< 0.005	—	347
Water	—	—	—	—	—	—	—	—	—	—	—	2.79	3.93	6.72	0.01	0.01	—	8.78
Waste	—	—	—	—	—	—	—	—	—	—	—	14.8	0.00	14.8	1.48	0.00	—	51.8
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.25	0.25

Total	0.80	1.56	0.95	6.62	0.02	0.02	1.79	1.81	0.02	0.45	0.48	17.6	2,167	2,185	1.59	0.09	0.37	2,252
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.75	0.67	0.74	6.25	0.02	0.01	1.66	1.67	0.01	0.42	0.43	—	1,761	1,761	0.07	0.07	1.91	1,788
Area	0.13	0.98	0.01	1.44	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	3.84	3.84	< 0.005	< 0.005	—	3.86
Energy	0.01	0.01	0.12	0.05	< 0.005	0.01	—	0.01	0.01	—	0.01	—	347	347	0.02	< 0.005	—	347
Water	—	—	—	—	—	—	—	—	—	—	—	2.79	3.93	6.72	0.01	0.01	—	8.78
Waste	—	—	—	—	—	—	—	—	—	—	—	14.8	0.00	14.8	1.48	0.00	—	51.8
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.25	0.25
Total	0.89	1.66	0.87	7.74	0.02	0.02	1.66	1.68	0.02	0.42	0.44	17.6	2,116	2,133	1.58	0.08	2.16	2,200
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.14	0.12	0.13	1.14	< 0.005	< 0.005	0.30	0.30	< 0.005	0.08	0.08	—	292	292	0.01	0.01	0.32	296
Area	0.02	0.18	< 0.005	0.26	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	0.64	0.64	< 0.005	< 0.005	—	0.64
Energy	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	57.4	57.4	< 0.005	< 0.005	—	57.5
Water	—	—	—	—	—	—	—	—	—	—	—	0.46	0.65	1.11	< 0.005	< 0.005	—	1.45
Waste	—	—	—	—	—	—	—	—	—	—	—	2.45	0.00	2.45	0.24	0.00	—	8.57
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04
Total	0.16	0.30	0.16	1.41	< 0.005	< 0.005	0.30	0.31	< 0.005	0.08	0.08	2.91	350	353	0.26	0.01	0.36	364

2.6. Operations Emissions by Sector, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.86	0.78	0.70	7.99	0.02	0.01	1.79	1.80	0.01	0.45	0.47	—	1,990	1,990	0.07	0.08	4.65	2,019
Area	0.19	1.03	0.02	2.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	5.61	5.61	< 0.005	< 0.005	—	5.63
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	190	190	0.01	< 0.005	—	191

Water	—	—	—	—	—	—	—	—	—	—	—	2.79	3.93	6.72	0.01	0.01	—	8.78
Waste	—	—	—	—	—	—	—	—	—	—	—	14.8	0.00	14.8	1.48	0.00	—	51.8
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.25	0.25
Total	1.05	1.81	0.72	10.1	0.02	0.01	1.79	1.80	0.01	0.45	0.47	17.6	2,190	2,208	1.57	0.08	4.90	2,276
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.79	0.71	0.83	6.57	0.02	0.01	1.79	1.80	0.01	0.45	0.47	—	1,817	1,817	0.08	0.08	0.12	1,844
Area	0.00	0.85	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	190	190	0.01	< 0.005	—	191
Water	—	—	—	—	—	—	—	—	—	—	—	2.79	3.93	6.72	0.01	0.01	—	8.78
Waste	—	—	—	—	—	—	—	—	—	—	—	14.8	0.00	14.8	1.48	0.00	—	51.8
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.25	0.25
Total	0.79	1.56	0.83	6.57	0.02	0.01	1.79	1.80	0.01	0.45	0.47	17.6	2,011	2,029	1.58	0.09	0.37	2,095
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.75	0.67	0.74	6.25	0.02	0.01	1.66	1.67	0.01	0.42	0.43	—	1,761	1,761	0.07	0.07	1.91	1,788
Area	0.13	0.98	0.01	1.44	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	3.84	3.84	< 0.005	< 0.005	—	3.86
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	190	190	0.01	< 0.005	—	191
Water	—	—	—	—	—	—	—	—	—	—	—	2.79	3.93	6.72	0.01	0.01	—	8.78
Waste	—	—	—	—	—	—	—	—	—	—	—	14.8	0.00	14.8	1.48	0.00	—	51.8
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.25	0.25
Total	0.88	1.65	0.75	7.69	0.02	0.01	1.66	1.67	0.01	0.42	0.43	17.6	1,959	1,977	1.57	0.08	2.16	2,043
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.14	0.12	0.13	1.14	< 0.005	< 0.005	0.30	0.30	< 0.005	0.08	0.08	—	292	292	0.01	0.01	0.32	296
Area	0.02	0.18	< 0.005	0.26	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	0.64	0.64	< 0.005	< 0.005	—	0.64
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	31.5	31.5	< 0.005	< 0.005	—	31.6
Water	—	—	—	—	—	—	—	—	—	—	—	0.46	0.65	1.11	< 0.005	< 0.005	—	1.45
Waste	—	—	—	—	—	—	—	—	—	—	—	2.45	0.00	2.45	0.24	0.00	—	8.57

Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04
Total	0.16	0.30	0.14	1.40	< 0.005	< 0.005	0.30	0.30	< 0.005	0.08	0.08	2.91	324	327	0.26	0.01	0.36	338

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.86	0.78	0.70	7.99	0.02	0.01	1.79	1.80	0.01	0.45	0.47	—	1,990	1,990	0.07	0.08	4.65	2,019
Total	0.86	0.78	0.70	7.99	0.02	0.01	1.79	1.80	0.01	0.45	0.47	—	1,990	1,990	0.07	0.08	4.65	2,019
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.79	0.71	0.83	6.57	0.02	0.01	1.79	1.80	0.01	0.45	0.47	—	1,817	1,817	0.08	0.08	0.12	1,844
Total	0.79	0.71	0.83	6.57	0.02	0.01	1.79	1.80	0.01	0.45	0.47	—	1,817	1,817	0.08	0.08	0.12	1,844
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.14	0.12	0.13	1.14	< 0.005	< 0.005	0.30	0.30	< 0.005	0.08	0.08	—	292	292	0.01	0.01	0.32	296
Total	0.14	0.12	0.13	1.14	< 0.005	< 0.005	0.30	0.30	< 0.005	0.08	0.08	—	292	292	0.01	0.01	0.32	296

4.1.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.86	0.78	0.70	7.99	0.02	0.01	1.79	1.80	0.01	0.45	0.47	—	1,990	1,990	0.07	0.08	4.65	2,019
Total	0.86	0.78	0.70	7.99	0.02	0.01	1.79	1.80	0.01	0.45	0.47	—	1,990	1,990	0.07	0.08	4.65	2,019
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.79	0.71	0.83	6.57	0.02	0.01	1.79	1.80	0.01	0.45	0.47	—	1,817	1,817	0.08	0.08	0.12	1,844
Total	0.79	0.71	0.83	6.57	0.02	0.01	1.79	1.80	0.01	0.45	0.47	—	1,817	1,817	0.08	0.08	0.12	1,844
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.14	0.12	0.13	1.14	< 0.005	< 0.005	0.30	0.30	< 0.005	0.08	0.08	—	292	292	0.01	0.01	0.32	296
Total	0.14	0.12	0.13	1.14	< 0.005	< 0.005	0.30	0.30	< 0.005	0.08	0.08	—	292	292	0.01	0.01	0.32	296

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	188	188	0.01	< 0.005	—	189
Total	—	—	—	—	—	—	—	—	—	—	—	—	188	188	0.01	< 0.005	—	189
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	188	188	0.01	< 0.005	—	189
Total	—	—	—	—	—	—	—	—	—	—	—	—	188	188	0.01	< 0.005	—	189
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	31.1	31.1	< 0.005	< 0.005	—	31.2
Total	—	—	—	—	—	—	—	—	—	—	—	—	31.1	31.1	< 0.005	< 0.005	—	31.2

4.2.2. Electricity Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	190	190	0.01	< 0.005	—	191
Total	—	—	—	—	—	—	—	—	—	—	—	—	190	190	0.01	< 0.005	—	191
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Apartme Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	190	190	0.01	< 0.005	—	191
Total	—	—	—	—	—	—	—	—	—	—	—	—	190	190	0.01	< 0.005	—	191
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartme nts Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	31.5	31.5	< 0.005	< 0.005	—	31.6
Total	—	—	—	—	—	—	—	—	—	—	—	—	31.5	31.5	< 0.005	< 0.005	—	31.6

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartme nts Mid Rise	0.01	0.01	0.12	0.05	< 0.005	0.01	—	0.01	0.01	—	0.01	—	159	159	0.01	< 0.005	—	159
Total	0.01	0.01	0.12	0.05	< 0.005	0.01	—	0.01	0.01	—	0.01	—	159	159	0.01	< 0.005	—	159
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartme nts Mid Rise	0.01	0.01	0.12	0.05	< 0.005	0.01	—	0.01	0.01	—	0.01	—	159	159	0.01	< 0.005	—	159
Total	0.01	0.01	0.12	0.05	< 0.005	0.01	—	0.01	0.01	—	0.01	—	159	159	0.01	< 0.005	—	159
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartme nts Mid Rise	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	26.2	26.2	< 0.005	< 0.005	—	26.3
Total	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	26.2	26.2	< 0.005	< 0.005	—	26.3

4.2.4. Natural Gas Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	0.76	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.19	0.18	0.02	2.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.61	5.61	< 0.005	< 0.005	—	5.63
Total	0.19	1.03	0.02	2.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	5.61	5.61	< 0.005	< 0.005	—	5.63
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	0.76	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00	0.85	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	0.14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.02	0.02	< 0.005	0.26	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.64	0.64	< 0.005	< 0.005	—	0.64

Total	0.02	0.18	< 0.005	0.26	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	0.64	0.64	< 0.005	< 0.005	—	0.64

4.3.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	0.76	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.19	0.18	0.02	2.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.61	5.61	< 0.005	< 0.005	—	5.63
Total	0.19	1.03	0.02	2.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	5.61	5.61	< 0.005	< 0.005	—	5.63
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	0.76	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00	0.85	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00

Consum Products	—	0.14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.02	0.02	< 0.005	0.26	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.64	0.64	< 0.005	< 0.005	—	0.64
Total	0.02	0.18	< 0.005	0.26	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	0.64	0.64	< 0.005	< 0.005	—	0.64

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	2.79	3.93	6.72	0.01	0.01	—	8.78
Total	—	—	—	—	—	—	—	—	—	—	—	2.79	3.93	6.72	0.01	0.01	—	8.78
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	2.79	3.93	6.72	0.01	0.01	—	8.78
Total	—	—	—	—	—	—	—	—	—	—	—	2.79	3.93	6.72	0.01	0.01	—	8.78
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Apartments	—	—	—	—	—	—	—	—	—	—	—	0.46	0.65	1.11	< 0.005	< 0.005	—	1.45
Total	—	—	—	—	—	—	—	—	—	—	—	0.46	0.65	1.11	< 0.005	< 0.005	—	1.45

4.4.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	2.79	3.93	6.72	0.01	0.01	—	8.78
Total	—	—	—	—	—	—	—	—	—	—	—	2.79	3.93	6.72	0.01	0.01	—	8.78
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	2.79	3.93	6.72	0.01	0.01	—	8.78
Total	—	—	—	—	—	—	—	—	—	—	—	2.79	3.93	6.72	0.01	0.01	—	8.78
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	0.46	0.65	1.11	< 0.005	< 0.005	—	1.45
Total	—	—	—	—	—	—	—	—	—	—	—	0.46	0.65	1.11	< 0.005	< 0.005	—	1.45

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	14.8	0.00	14.8	1.48	0.00	—	51.8
Total	—	—	—	—	—	—	—	—	—	—	—	14.8	0.00	14.8	1.48	0.00	—	51.8
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	14.8	0.00	14.8	1.48	0.00	—	51.8
Total	—	—	—	—	—	—	—	—	—	—	—	14.8	0.00	14.8	1.48	0.00	—	51.8
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	2.45	0.00	2.45	0.24	0.00	—	8.57
Total	—	—	—	—	—	—	—	—	—	—	—	2.45	0.00	2.45	0.24	0.00	—	8.57

4.5.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	14.8	0.00	14.8	1.48	0.00	—	51.8
Total	—	—	—	—	—	—	—	—	—	—	—	14.8	0.00	14.8	1.48	0.00	—	51.8

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	14.8	0.00	14.8	1.48	0.00	—	51.8
Total	—	—	—	—	—	—	—	—	—	—	—	14.8	0.00	14.8	1.48	0.00	—	51.8
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	2.45	0.00	2.45	0.24	0.00	—	8.57
Total	—	—	—	—	—	—	—	—	—	—	—	2.45	0.00	2.45	0.24	0.00	—	8.57

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.25	0.25
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.25	0.25
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.25	0.25
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.25	0.25

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04

4.6.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.25	0.25
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.25	0.25
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.25	0.25
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.25	0.25
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Apartments Mid Rise	201	182	151	69,840	2,524	2,278	1,898	875,808

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Apartments Mid Rise	201	182	151	69,840	2,524	2,278	1,898	875,808

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Apartments Mid Rise	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	37
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.1.2. Mitigated

Hearth Type	Unmitigated (number)
Apartments Mid Rise	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0

Electric Fireplaces	0
No Fireplaces	37
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
71928	23,976	0.00	0.00	—

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)

Apartments Mid Rise	183,165	375	0.0129	0.0017	494,615

5.11.2. Mitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Apartments Mid Rise	185,167	375	0.0129	0.0017	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Apartments Mid Rise	1,304,583	185,892

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Apartments Mid Rise	1,304,583	185,892

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Apartments Mid Rise	27.5	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Apartments Mid Rise	27.5	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Apartments Mid Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Mid Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Apartments Mid Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Mid Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.15.2. Mitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	24.1	annual days of extreme heat
Extreme Precipitation	6.45	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.69	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	2	0	0	N/A
Extreme Precipitation	2	0	0	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	2	1	1	3
Extreme Precipitation	2	1	1	3
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A

Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	59.7
AQ-PM	39.5
AQ-DPM	50.3
Drinking Water	47.8
Lead Risk Housing	54.5
Pesticides	0.00
Toxic Releases	20.9
Traffic	21.4
Effect Indicators	—
CleanUp Sites	18.7
Groundwater	78.3
Haz Waste Facilities/Generators	59.8
Impaired Water Bodies	77.3
Solid Waste	0.00

Sensitive Population	—
Asthma	88.7
Cardio-vascular	62.6
Low Birth Weights	7.38
Socioeconomic Factor Indicators	—
Education	25.1
Housing	70.2
Linguistic	37.0
Poverty	67.4
Unemployment	14.4

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	37.16155524
Employed	15.56525087
Median HI	23.82907738
Education	—
Bachelor's or higher	54.3308097
High school enrollment	26.62645964
Preschool enrollment	15.20595406
Transportation	—
Auto Access	28.94905685
Active commuting	46.06698319
Social	—
2-parent households	11.18952906

Voting	74.93904786
Neighborhood	—
Alcohol availability	37.77749262
Park access	30.25792378
Retail density	94.5977159
Supermarket access	42.71782369
Tree canopy	91.62068523
Housing	—
Homeownership	51.98254844
Housing habitability	41.55010907
Low-inc homeowner severe housing cost burden	37.4566919
Low-inc renter severe housing cost burden	6.73681509
Uncrowded housing	66.9190299
Health Outcomes	—
Insured adults	47.91479533
Arthritis	0.0
Asthma ER Admissions	6.0
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	11.1
Cognitively Disabled	13.7
Physically Disabled	26.6
Heart Attack ER Admissions	48.8

Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	52.9
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	67.0
Elderly	27.8
English Speaking	75.3
Foreign-born	10.6
Outdoor Workers	46.7
Climate Change Adaptive Capacity	—
Impervious Surface Cover	61.1
Traffic Density	59.6
Traffic Access	23.0
Other Indices	—
Hardship	64.4
Other Decision Support	—
2016 Voting	65.5

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	47.0
Healthy Places Index Score for Project Location (b)	30.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	no demo
Land Use	PD

Sac Rezone North Watt Operations (rezoned) Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Sac Rezone North Watt Operations (rezoned)
Operational Year	2030
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.50
Precipitation (days)	39.2
Location	38.66735756395545, -121.38321539651498
County	Sacramento
City	Unincorporated
Air District	Sacramento Metropolitan AQMD
Air Basin	Sacramento Valley
TAZ	657
EDFZ	13
Electric Utility	Sacramento Municipal Utility District
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.21

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Apartments Mid Rise	735	Dwelling Unit	21.3	705,600	185,653	—	2,058	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Energy	E-15	Require All-Electric Development

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	20.4	35.6	15.4	183	0.35	0.43	30.8	31.2	0.41	7.82	8.23	348	39,874	40,223	31.2	1.47	85.1	41,527
Mit.	20.1	35.4	12.9	182	0.34	0.23	30.8	31.0	0.21	7.82	8.03	348	36,727	37,075	30.9	1.47	85.1	38,370
% Reduced	1%	< 0.5%	16%	1%	4%	47%	—	1%	49%	—	2%	—	8%	8%	1%	< 0.5%	—	8%
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	15.2	30.5	17.2	118	0.32	0.41	30.8	31.2	0.40	7.82	8.22	348	36,779	37,127	31.3	1.60	7.13	38,394
Mit.	14.9	30.4	14.7	117	0.31	0.21	30.8	31.0	0.20	7.82	8.02	348	33,631	33,980	31.0	1.59	7.13	35,237
% Reduced	2%	< 0.5%	14%	1%	5%	49%	—	1%	50%	—	2%	—	9%	8%	1%	< 0.5%	—	8%
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	17.1	32.4	15.8	140	0.31	0.41	28.5	28.9	0.40	7.25	7.65	348	35,895	36,244	31.2	1.47	37.9	37,499
Mit.	16.8	32.2	13.3	139	0.30	0.21	28.5	28.7	0.20	7.25	7.45	348	32,748	33,096	30.9	1.46	37.9	34,342
% Reduced	2%	< 0.5%	16%	1%	5%	49%	—	1%	50%	—	3%	—	9%	9%	1%	< 0.5%	—	8%

Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.11	5.91	2.88	25.6	0.06	0.08	5.21	5.28	0.07	1.32	1.40	57.7	5,943	6,001	5.16	0.24	6.27	6,208
Mit.	3.06	5.88	2.43	25.4	0.05	0.04	5.21	5.25	0.04	1.32	1.36	57.7	5,422	5,479	5.12	0.24	6.27	5,686
% Reduced	2%	< 0.5%	16%	1%	5%	49%	—	1%	50%	—	3%	—	9%	9%	1%	< 0.5%	—	8%

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	16.3	14.9	12.5	140	0.34	0.21	30.8	31.0	0.20	7.82	8.02	—	34,345	34,345	1.31	1.33	80.0	34,854
Area	3.81	20.5	0.39	41.8	< 0.005	0.02	—	0.02	0.01	—	0.01	0.00	111	111	< 0.005	< 0.005	—	112
Energy	0.29	0.15	2.48	1.06	0.02	0.20	—	0.20	0.20	—	0.20	—	5,372	5,372	0.41	0.02	—	5,389
Water	—	—	—	—	—	—	—	—	—	—	—	55.4	45.9	101	0.19	0.12	—	142
Waste	—	—	—	—	—	—	—	—	—	—	—	293	0.00	293	29.3	0.00	—	1,025
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.05	5.05
Total	20.4	35.6	15.4	183	0.35	0.43	30.8	31.2	0.41	7.82	8.23	348	39,874	40,223	31.2	1.47	85.1	41,527
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	14.9	13.5	14.7	117	0.31	0.21	30.8	31.0	0.20	7.82	8.02	—	31,361	31,361	1.45	1.45	2.07	31,833
Area	0.00	16.9	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Energy	0.29	0.15	2.48	1.06	0.02	0.20	—	0.20	0.20	—	0.20	—	5,372	5,372	0.41	0.02	—	5,389
Water	—	—	—	—	—	—	—	—	—	—	—	55.4	45.9	101	0.19	0.12	—	142
Waste	—	—	—	—	—	—	—	—	—	—	—	293	0.00	293	29.3	0.00	—	1,025
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.05	5.05

Total	15.2	30.5	17.2	118	0.32	0.41	30.8	31.2	0.40	7.82	8.22	348	36,779	37,127	31.3	1.60	7.13	38,394
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	14.2	12.8	13.1	111	0.30	0.20	28.5	28.7	0.19	7.25	7.44	—	30,401	30,401	1.30	1.32	32.8	30,861
Area	2.61	19.4	0.27	28.7	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	76.4	76.4	< 0.005	< 0.005	—	76.6
Energy	0.29	0.15	2.48	1.06	0.02	0.20	—	0.20	0.20	—	0.20	—	5,372	5,372	0.41	0.02	—	5,389
Water	—	—	—	—	—	—	—	—	—	—	—	55.4	45.9	101	0.19	0.12	—	142
Waste	—	—	—	—	—	—	—	—	—	—	—	293	0.00	293	29.3	0.00	—	1,025
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.05	5.05
Total	17.1	32.4	15.8	140	0.31	0.41	28.5	28.9	0.40	7.25	7.65	348	35,895	36,244	31.2	1.47	37.9	37,499
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.58	2.34	2.38	20.2	0.05	0.04	5.21	5.24	0.03	1.32	1.36	—	5,033	5,033	0.22	0.22	5.44	5,109
Area	0.48	3.54	0.05	5.23	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	12.6	12.6	< 0.005	< 0.005	—	12.7
Energy	0.05	0.03	0.45	0.19	< 0.005	0.04	—	0.04	0.04	—	0.04	—	889	889	0.07	< 0.005	—	892
Water	—	—	—	—	—	—	—	—	—	—	—	9.17	7.61	16.8	0.03	0.02	—	23.6
Waste	—	—	—	—	—	—	—	—	—	—	—	48.5	0.00	48.5	4.85	0.00	—	170
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.84	0.84
Total	3.11	5.91	2.88	25.6	0.06	0.08	5.21	5.28	0.07	1.32	1.40	57.7	5,943	6,001	5.16	0.24	6.27	6,208

2.6. Operations Emissions by Sector, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	16.3	14.9	12.5	140	0.34	0.21	30.8	31.0	0.20	7.82	8.02	—	34,345	34,345	1.31	1.33	80.0	34,854
Area	3.81	20.5	0.39	41.8	< 0.005	0.02	—	0.02	0.01	—	0.01	0.00	111	111	< 0.005	< 0.005	—	112
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	2,224	2,224	0.13	0.02	—	2,232

Water	—	—	—	—	—	—	—	—	—	—	—	55.4	45.9	101	0.19	0.12	—	142
Waste	—	—	—	—	—	—	—	—	—	—	—	293	0.00	293	29.3	0.00	—	1,025
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.05	5.05
Total	20.1	35.4	12.9	182	0.34	0.23	30.8	31.0	0.21	7.82	8.03	348	36,727	37,075	30.9	1.47	85.1	38,370
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	14.9	13.5	14.7	117	0.31	0.21	30.8	31.0	0.20	7.82	8.02	—	31,361	31,361	1.45	1.45	2.07	31,833
Area	0.00	16.9	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	2,224	2,224	0.13	0.02	—	2,232
Water	—	—	—	—	—	—	—	—	—	—	—	55.4	45.9	101	0.19	0.12	—	142
Waste	—	—	—	—	—	—	—	—	—	—	—	293	0.00	293	29.3	0.00	—	1,025
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.05	5.05
Total	14.9	30.4	14.7	117	0.31	0.21	30.8	31.0	0.20	7.82	8.02	348	33,631	33,980	31.0	1.59	7.13	35,237
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	14.2	12.8	13.1	111	0.30	0.20	28.5	28.7	0.19	7.25	7.44	—	30,401	30,401	1.30	1.32	32.8	30,861
Area	2.61	19.4	0.27	28.7	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	76.4	76.4	< 0.005	< 0.005	—	76.6
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	2,224	2,224	0.13	0.02	—	2,232
Water	—	—	—	—	—	—	—	—	—	—	—	55.4	45.9	101	0.19	0.12	—	142
Waste	—	—	—	—	—	—	—	—	—	—	—	293	0.00	293	29.3	0.00	—	1,025
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.05	5.05
Total	16.8	32.2	13.3	139	0.30	0.21	28.5	28.7	0.20	7.25	7.45	348	32,748	33,096	30.9	1.46	37.9	34,342
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.58	2.34	2.38	20.2	0.05	0.04	5.21	5.24	0.03	1.32	1.36	—	5,033	5,033	0.22	0.22	5.44	5,109
Area	0.48	3.54	0.05	5.23	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	12.6	12.6	< 0.005	< 0.005	—	12.7
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	368	368	0.02	< 0.005	—	370
Water	—	—	—	—	—	—	—	—	—	—	—	9.17	7.61	16.8	0.03	0.02	—	23.6
Waste	—	—	—	—	—	—	—	—	—	—	—	48.5	0.00	48.5	4.85	0.00	—	170

Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.84	0.84
Total	3.06	5.88	2.43	25.4	0.05	0.04	5.21	5.25	0.04	1.32	1.36	57.7	5,422	5,479	5.12	0.24	6.27	5,686

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	16.3	14.9	12.5	140	0.34	0.21	30.8	31.0	0.20	7.82	8.02	—	34,345	34,345	1.31	1.33	80.0	34,854
Total	16.3	14.9	12.5	140	0.34	0.21	30.8	31.0	0.20	7.82	8.02	—	34,345	34,345	1.31	1.33	80.0	34,854
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	14.9	13.5	14.7	117	0.31	0.21	30.8	31.0	0.20	7.82	8.02	—	31,361	31,361	1.45	1.45	2.07	31,833
Total	14.9	13.5	14.7	117	0.31	0.21	30.8	31.0	0.20	7.82	8.02	—	31,361	31,361	1.45	1.45	2.07	31,833
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	2.58	2.34	2.38	20.2	0.05	0.04	5.21	5.24	0.03	1.32	1.36	—	5,033	5,033	0.22	0.22	5.44	5,109
Total	2.58	2.34	2.38	20.2	0.05	0.04	5.21	5.24	0.03	1.32	1.36	—	5,033	5,033	0.22	0.22	5.44	5,109

4.1.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	16.3	14.9	12.5	140	0.34	0.21	30.8	31.0	0.20	7.82	8.02	—	34,345	34,345	1.31	1.33	80.0	34,854
Total	16.3	14.9	12.5	140	0.34	0.21	30.8	31.0	0.20	7.82	8.02	—	34,345	34,345	1.31	1.33	80.0	34,854
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	14.9	13.5	14.7	117	0.31	0.21	30.8	31.0	0.20	7.82	8.02	—	31,361	31,361	1.45	1.45	2.07	31,833
Total	14.9	13.5	14.7	117	0.31	0.21	30.8	31.0	0.20	7.82	8.02	—	31,361	31,361	1.45	1.45	2.07	31,833
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	2.58	2.34	2.38	20.2	0.05	0.04	5.21	5.24	0.03	1.32	1.36	—	5,033	5,033	0.22	0.22	5.44	5,109
Total	2.58	2.34	2.38	20.2	0.05	0.04	5.21	5.24	0.03	1.32	1.36	—	5,033	5,033	0.22	0.22	5.44	5,109

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	2,223	2,223	0.13	0.02	—	2,231
Total	—	—	—	—	—	—	—	—	—	—	—	—	2,223	2,223	0.13	0.02	—	2,231
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	2,223	2,223	0.13	0.02	—	2,231
Total	—	—	—	—	—	—	—	—	—	—	—	—	2,223	2,223	0.13	0.02	—	2,231
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	368	368	0.02	< 0.005	—	369
Total	—	—	—	—	—	—	—	—	—	—	—	—	368	368	0.02	< 0.005	—	369

4.2.2. Electricity Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	2,224	2,224	0.13	0.02	—	2,232
Total	—	—	—	—	—	—	—	—	—	—	—	—	2,224	2,224	0.13	0.02	—	2,232
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Apartme Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	2,224	2,224	0.13	0.02	—	2,232
Total	—	—	—	—	—	—	—	—	—	—	—	—	2,224	2,224	0.13	0.02	—	2,232
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartme nts Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	368	368	0.02	< 0.005	—	370
Total	—	—	—	—	—	—	—	—	—	—	—	—	368	368	0.02	< 0.005	—	370

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartme nts Mid Rise	0.29	0.15	2.48	1.06	0.02	0.20	—	0.20	0.20	—	0.20	—	3,149	3,149	0.28	0.01	—	3,158
Total	0.29	0.15	2.48	1.06	0.02	0.20	—	0.20	0.20	—	0.20	—	3,149	3,149	0.28	0.01	—	3,158
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartme nts Mid Rise	0.29	0.15	2.48	1.06	0.02	0.20	—	0.20	0.20	—	0.20	—	3,149	3,149	0.28	0.01	—	3,158
Total	0.29	0.15	2.48	1.06	0.02	0.20	—	0.20	0.20	—	0.20	—	3,149	3,149	0.28	0.01	—	3,158
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartme nts Mid Rise	0.05	0.03	0.45	0.19	< 0.005	0.04	—	0.04	0.04	—	0.04	—	521	521	0.05	< 0.005	—	523
Total	0.05	0.03	0.45	0.19	< 0.005	0.04	—	0.04	0.04	—	0.04	—	521	521	0.05	< 0.005	—	523

4.2.4. Natural Gas Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	15.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	1.81	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	3.81	3.61	0.39	41.8	< 0.005	0.02	—	0.02	0.01	—	0.01	—	111	111	< 0.005	< 0.005	—	112
Total	3.81	20.5	0.39	41.8	< 0.005	0.02	—	0.02	0.01	—	0.01	0.00	111	111	< 0.005	< 0.005	—	112
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	15.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	1.81	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00	16.9	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	2.76	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.33	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.48	0.45	0.05	5.23	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	12.6	12.6	< 0.005	< 0.005	—	12.7

Total	0.48	3.54	0.05	5.23	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	12.6	12.6	< 0.005	< 0.005	—	12.7

4.3.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	15.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	1.81	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	3.81	3.61	0.39	41.8	< 0.005	0.02	—	0.02	0.01	—	0.01	—	111	111	< 0.005	< 0.005	—	112
Total	3.81	20.5	0.39	41.8	< 0.005	0.02	—	0.02	0.01	—	0.01	0.00	111	111	< 0.005	< 0.005	—	112
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	15.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	1.81	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00	16.9	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00

Consum Products	—	2.76	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.33	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.48	0.45	0.05	5.23	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	12.6	12.6	< 0.005	< 0.005	—	12.7
Total	0.48	3.54	0.05	5.23	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	12.6	12.6	< 0.005	< 0.005	—	12.7

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	55.4	45.9	101	0.19	0.12	—	142
Total	—	—	—	—	—	—	—	—	—	—	—	55.4	45.9	101	0.19	0.12	—	142
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	55.4	45.9	101	0.19	0.12	—	142
Total	—	—	—	—	—	—	—	—	—	—	—	55.4	45.9	101	0.19	0.12	—	142
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Apartments	—	—	—	—	—	—	—	—	—	—	—	9.17	7.61	16.8	0.03	0.02	—	23.6
Total	—	—	—	—	—	—	—	—	—	—	—	9.17	7.61	16.8	0.03	0.02	—	23.6

4.4.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	55.4	45.9	101	0.19	0.12	—	142
Total	—	—	—	—	—	—	—	—	—	—	—	55.4	45.9	101	0.19	0.12	—	142
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	55.4	45.9	101	0.19	0.12	—	142
Total	—	—	—	—	—	—	—	—	—	—	—	55.4	45.9	101	0.19	0.12	—	142
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	9.17	7.61	16.8	0.03	0.02	—	23.6
Total	—	—	—	—	—	—	—	—	—	—	—	9.17	7.61	16.8	0.03	0.02	—	23.6

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	293	0.00	293	29.3	0.00	—	1,025
Total	—	—	—	—	—	—	—	—	—	—	—	293	0.00	293	29.3	0.00	—	1,025
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	293	0.00	293	29.3	0.00	—	1,025
Total	—	—	—	—	—	—	—	—	—	—	—	293	0.00	293	29.3	0.00	—	1,025
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	48.5	0.00	48.5	4.85	0.00	—	170
Total	—	—	—	—	—	—	—	—	—	—	—	48.5	0.00	48.5	4.85	0.00	—	170

4.5.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	293	0.00	293	29.3	0.00	—	1,025
Total	—	—	—	—	—	—	—	—	—	—	—	293	0.00	293	29.3	0.00	—	1,025

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	293	0.00	293	29.3	0.00	—	1,025
Total	—	—	—	—	—	—	—	—	—	—	—	293	0.00	293	29.3	0.00	—	1,025
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	48.5	0.00	48.5	4.85	0.00	—	170
Total	—	—	—	—	—	—	—	—	—	—	—	48.5	0.00	48.5	4.85	0.00	—	170

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.05	5.05
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.05	5.05
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.05	5.05
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.05	5.05

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.84	0.84
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.84	0.84

4.6.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.05	5.05
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.05	5.05
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.05	5.05
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.05	5.05
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.84	0.84
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.84	0.84

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Apartments Mid Rise	3,998	3,609	3,006	1,387,365	43,437	39,205	32,657	15,071,676

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Apartments Mid Rise	3,998	3,609	3,006	1,387,365	43,437	39,205	32,657	15,071,676

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Apartments Mid Rise	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	735
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.1.2. Mitigated

Hearth Type	Unmitigated (number)
Apartments Mid Rise	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0

Electric Fireplaces	0
No Fireplaces	735
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
1428840	476,280	0.00	0.00	—

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)

Apartments Mid Rise	3,638,555	223	0.0129	0.0017	9,825,458

5.11.2. Mitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Apartments Mid Rise	3,640,556	223	0.0129	0.0017	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Apartments Mid Rise	25,915,365	3,169,087

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Apartments Mid Rise	25,915,365	3,169,087

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Apartments Mid Rise	544	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Apartments Mid Rise	544	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Apartments Mid Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Mid Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Apartments Mid Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Mid Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.15.2. Mitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	21.8	annual days of extreme heat
Extreme Precipitation	6.35	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	2	0	0	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	2	1	1	3
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A

Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	58.2
AQ-PM	37.4
AQ-DPM	27.5
Drinking Water	61.1
Lead Risk Housing	92.2
Pesticides	7.24
Toxic Releases	21.8
Traffic	47.0
Effect Indicators	—
CleanUp Sites	80.9
Groundwater	99.2
Haz Waste Facilities/Generators	61.6
Impaired Water Bodies	0.00
Solid Waste	52.9

Sensitive Population	—
Asthma	93.4
Cardio-vascular	69.2
Low Birth Weights	79.4
Socioeconomic Factor Indicators	—
Education	62.9
Housing	73.4
Linguistic	39.2
Poverty	91.6
Unemployment	65.6

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	10.16296677
Employed	6.274862056
Median HI	6.672654947
Education	—
Bachelor's or higher	19.73566021
High school enrollment	12.79353266
Preschool enrollment	42.65366354
Transportation	—
Auto Access	24.89413576
Active commuting	74.06646991
Social	—
2-parent households	39.00936738

Voting	13.02450917
Neighborhood	—
Alcohol availability	41.6527653
Park access	47.42717824
Retail density	38.27794174
Supermarket access	72.19299371
Tree canopy	82.34312845
Housing	—
Homeownership	23.13614782
Housing habitability	24.91979982
Low-inc homeowner severe housing cost burden	13.20415758
Low-inc renter severe housing cost burden	43.7957141
Uncrowded housing	25.445913
Health Outcomes	—
Insured adults	37.80315668
Arthritis	0.0
Asthma ER Admissions	5.9
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	5.5
Cognitively Disabled	4.0
Physically Disabled	5.6
Heart Attack ER Admissions	16.8

Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	96.7
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	16.3
Elderly	67.6
English Speaking	43.4
Foreign-born	30.0
Outdoor Workers	48.6
Climate Change Adaptive Capacity	—
Impervious Surface Cover	51.3
Traffic Density	47.2
Traffic Access	66.1
Other Indices	—
Hardship	80.5
Other Decision Support	—
2016 Voting	6.4

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	83.0
Healthy Places Index Score for Project Location (b)	13.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	20% of total lot acreage is landscaped as in GP
Construction: Construction Phases	no demo

Sac Rezone Old Florin operations (rezoned) Detailed Report

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5.13.1. Unmitigated

5.13.2. Mitigated

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

5.14.2. Mitigated

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.15.2. Mitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

5.17. User Defined

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

5.18.1.2. Mitigated

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.1.2. Mitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

5.18.2.2. Mitigated

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

6.2. Initial Climate Risk Scores

6.3. Adjusted Climate Risk Scores

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

7.2. Healthy Places Index Scores

7.3. Overall Health & Equity Scores

7.4. Health & Equity Measures

7.5. Evaluation Scorecard

7.6. Health & Equity Custom Measures

8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Sac Rezone Old Florin operations (rezoned)
Operational Year	2030
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.00
Precipitation (days)	37.8
Location	38.49656099729435, -121.39733654991514
County	Sacramento
City	Unincorporated
Air District	Sacramento Metropolitan AQMD
Air Basin	Sacramento Valley
TAZ	774
EDFZ	13
Electric Utility	Sacramento Municipal Utility District
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.21

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Apartments Mid Rise	777	Dwelling Unit	25.2	745,920	219,717	—	2,176	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Energy	E-15	Require All-Electric Development

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	19.8	36.3	12.7	149	0.25	0.38	21.1	21.5	0.37	5.36	5.73	368	29,637	30,005	32.7	1.16	60.2	31,228
Mit.	19.5	36.1	10.1	148	0.23	0.17	21.1	21.3	0.16	5.36	5.51	368	26,310	26,678	32.4	1.15	60.2	27,891
% Reduced	2%	< 0.5%	21%	1%	7%	56%	—	1%	58%	—	4%	—	11%	11%	1%	1%	—	11%
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	14.3	31.0	13.9	92.5	0.23	0.36	21.1	21.5	0.35	5.36	5.71	368	27,481	27,850	32.8	1.26	6.76	29,051
Mit.	14.0	30.8	11.3	91.4	0.21	0.15	21.1	21.3	0.14	5.36	5.50	368	24,154	24,522	32.5	1.25	6.76	25,714
% Reduced	2%	< 0.5%	19%	1%	7%	59%	—	1%	60%	—	4%	—	12%	12%	1%	< 0.5%	—	11%
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	16.4	33.0	13.0	116	0.22	0.37	19.6	19.9	0.36	4.97	5.33	368	26,888	27,256	32.7	1.16	27.8	28,445
Mit.	16.1	32.8	10.3	115	0.21	0.16	19.6	19.7	0.14	4.97	5.12	368	23,560	23,928	32.4	1.15	27.8	25,108
% Reduced	2%	< 0.5%	20%	1%	7%	58%	—	1%	60%	—	4%	—	12%	12%	1%	1%	—	12%

Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.99	6.02	2.37	21.1	0.04	0.07	3.57	3.64	0.06	0.91	0.97	61.0	4,452	4,513	5.41	0.19	4.61	4,709
Mit.	2.94	5.99	1.89	20.9	0.04	0.03	3.57	3.60	0.03	0.91	0.93	61.0	3,901	3,962	5.36	0.19	4.61	4,157
% Reduced	2%	< 0.5%	20%	1%	7%	58%	—	1%	60%	—	4%	—	12%	12%	1%	1%	—	12%

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	15.5	14.4	9.67	104	0.23	0.15	21.1	21.3	0.14	5.36	5.50	—	23,792	23,792	1.07	1.01	54.8	24,173
Area	4.03	21.7	0.41	44.2	< 0.005	0.02	—	0.02	0.02	—	0.02	0.00	118	118	< 0.005	< 0.005	—	118
Energy	0.31	0.15	2.62	1.12	0.02	0.21	—	0.21	0.21	—	0.21	—	5,679	5,679	0.43	0.02	—	5,697
Water	—	—	—	—	—	—	—	—	—	—	—	58.5	49.0	108	0.20	0.13	—	151
Waste	—	—	—	—	—	—	—	—	—	—	—	310	0.00	310	31.0	0.00	—	1,084
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.34	5.34
Total	19.8	36.3	12.7	149	0.25	0.38	21.1	21.5	0.37	5.36	5.73	368	29,637	30,005	32.7	1.16	60.2	31,228
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	14.0	12.9	11.3	91.4	0.21	0.15	21.1	21.3	0.14	5.36	5.50	—	21,754	21,754	1.23	1.10	1.42	22,115
Area	0.00	17.9	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Energy	0.31	0.15	2.62	1.12	0.02	0.21	—	0.21	0.21	—	0.21	—	5,679	5,679	0.43	0.02	—	5,697
Water	—	—	—	—	—	—	—	—	—	—	—	58.5	49.0	108	0.20	0.13	—	151
Waste	—	—	—	—	—	—	—	—	—	—	—	310	0.00	310	31.0	0.00	—	1,084
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.34	5.34

Total	14.3	31.0	13.9	92.5	0.23	0.36	21.1	21.5	0.35	5.36	5.71	368	27,481	27,850	32.8	1.26	6.76	29,051
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	13.3	12.3	10.1	84.4	0.21	0.14	19.6	19.7	0.13	4.97	5.11	—	21,079	21,079	1.08	1.00	22.5	21,427
Area	2.76	20.5	0.28	30.3	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	80.7	80.7	< 0.005	< 0.005	—	81.0
Energy	0.31	0.15	2.62	1.12	0.02	0.21	—	0.21	0.21	—	0.21	—	5,679	5,679	0.43	0.02	—	5,697
Water	—	—	—	—	—	—	—	—	—	—	—	58.5	49.0	108	0.20	0.13	—	151
Waste	—	—	—	—	—	—	—	—	—	—	—	310	0.00	310	31.0	0.00	—	1,084
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.34	5.34
Total	16.4	33.0	13.0	116	0.22	0.37	19.6	19.9	0.36	4.97	5.33	368	26,888	27,256	32.7	1.16	27.8	28,445
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.43	2.25	1.84	15.4	0.04	0.03	3.57	3.60	0.02	0.91	0.93	—	3,490	3,490	0.18	0.17	3.73	3,548
Area	0.50	3.74	0.05	5.53	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	13.4	13.4	< 0.005	< 0.005	—	13.4
Energy	0.06	0.03	0.48	0.20	< 0.005	0.04	—	0.04	0.04	—	0.04	—	940	940	0.07	< 0.005	—	943
Water	—	—	—	—	—	—	—	—	—	—	—	9.69	8.11	17.8	0.03	0.02	—	25.0
Waste	—	—	—	—	—	—	—	—	—	—	—	51.3	0.00	51.3	5.12	0.00	—	179
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.88	0.88
Total	2.99	6.02	2.37	21.1	0.04	0.07	3.57	3.64	0.06	0.91	0.97	61.0	4,452	4,513	5.41	0.19	4.61	4,709

2.6. Operations Emissions by Sector, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	15.5	14.4	9.67	104	0.23	0.15	21.1	21.3	0.14	5.36	5.50	—	23,792	23,792	1.07	1.01	54.8	24,173
Area	4.03	21.7	0.41	44.2	< 0.005	0.02	—	0.02	0.02	—	0.02	0.00	118	118	< 0.005	< 0.005	—	118
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	2,351	2,351	0.14	0.02	—	2,360

Water	—	—	—	—	—	—	—	—	—	—	—	58.5	49.0	108	0.20	0.13	—	151
Waste	—	—	—	—	—	—	—	—	—	—	—	310	0.00	310	31.0	0.00	—	1,084
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.34	5.34
Total	19.5	36.1	10.1	148	0.23	0.17	21.1	21.3	0.16	5.36	5.51	368	26,310	26,678	32.4	1.15	60.2	27,891
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	14.0	12.9	11.3	91.4	0.21	0.15	21.1	21.3	0.14	5.36	5.50	—	21,754	21,754	1.23	1.10	1.42	22,115
Area	0.00	17.9	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	2,351	2,351	0.14	0.02	—	2,360
Water	—	—	—	—	—	—	—	—	—	—	—	58.5	49.0	108	0.20	0.13	—	151
Waste	—	—	—	—	—	—	—	—	—	—	—	310	0.00	310	31.0	0.00	—	1,084
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.34	5.34
Total	14.0	30.8	11.3	91.4	0.21	0.15	21.1	21.3	0.14	5.36	5.50	368	24,154	24,522	32.5	1.25	6.76	25,714
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	13.3	12.3	10.1	84.4	0.21	0.14	19.6	19.7	0.13	4.97	5.11	—	21,079	21,079	1.08	1.00	22.5	21,427
Area	2.76	20.5	0.28	30.3	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	80.7	80.7	< 0.005	< 0.005	—	81.0
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	2,351	2,351	0.14	0.02	—	2,360
Water	—	—	—	—	—	—	—	—	—	—	—	58.5	49.0	108	0.20	0.13	—	151
Waste	—	—	—	—	—	—	—	—	—	—	—	310	0.00	310	31.0	0.00	—	1,084
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.34	5.34
Total	16.1	32.8	10.3	115	0.21	0.16	19.6	19.7	0.14	4.97	5.12	368	23,560	23,928	32.4	1.15	27.8	25,108
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.43	2.25	1.84	15.4	0.04	0.03	3.57	3.60	0.02	0.91	0.93	—	3,490	3,490	0.18	0.17	3.73	3,548
Area	0.50	3.74	0.05	5.53	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	13.4	13.4	< 0.005	< 0.005	—	13.4
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	389	389	0.02	< 0.005	—	391
Water	—	—	—	—	—	—	—	—	—	—	—	9.69	8.11	17.8	0.03	0.02	—	25.0
Waste	—	—	—	—	—	—	—	—	—	—	—	51.3	0.00	51.3	5.12	0.00	—	179

Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.88	0.88
Total	2.94	5.99	1.89	20.9	0.04	0.03	3.57	3.60	0.03	0.91	0.93	61.0	3,901	3,962	5.36	0.19	4.61	4,157

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	15.5	14.4	9.67	104	0.23	0.15	21.1	21.3	0.14	5.36	5.50	—	23,792	23,792	1.07	1.01	54.8	24,173
Total	15.5	14.4	9.67	104	0.23	0.15	21.1	21.3	0.14	5.36	5.50	—	23,792	23,792	1.07	1.01	54.8	24,173
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	14.0	12.9	11.3	91.4	0.21	0.15	21.1	21.3	0.14	5.36	5.50	—	21,754	21,754	1.23	1.10	1.42	22,115
Total	14.0	12.9	11.3	91.4	0.21	0.15	21.1	21.3	0.14	5.36	5.50	—	21,754	21,754	1.23	1.10	1.42	22,115
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	2.43	2.25	1.84	15.4	0.04	0.03	3.57	3.60	0.02	0.91	0.93	—	3,490	3,490	0.18	0.17	3.73	3,548
Total	2.43	2.25	1.84	15.4	0.04	0.03	3.57	3.60	0.02	0.91	0.93	—	3,490	3,490	0.18	0.17	3.73	3,548

4.1.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	15.5	14.4	9.67	104	0.23	0.15	21.1	21.3	0.14	5.36	5.50	—	23,792	23,792	1.07	1.01	54.8	24,173
Total	15.5	14.4	9.67	104	0.23	0.15	21.1	21.3	0.14	5.36	5.50	—	23,792	23,792	1.07	1.01	54.8	24,173
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	14.0	12.9	11.3	91.4	0.21	0.15	21.1	21.3	0.14	5.36	5.50	—	21,754	21,754	1.23	1.10	1.42	22,115
Total	14.0	12.9	11.3	91.4	0.21	0.15	21.1	21.3	0.14	5.36	5.50	—	21,754	21,754	1.23	1.10	1.42	22,115
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	2.43	2.25	1.84	15.4	0.04	0.03	3.57	3.60	0.02	0.91	0.93	—	3,490	3,490	0.18	0.17	3.73	3,548
Total	2.43	2.25	1.84	15.4	0.04	0.03	3.57	3.60	0.02	0.91	0.93	—	3,490	3,490	0.18	0.17	3.73	3,548

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	2,350	2,350	0.14	0.02	—	2,359
Total	—	—	—	—	—	—	—	—	—	—	—	—	2,350	2,350	0.14	0.02	—	2,359
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	2,350	2,350	0.14	0.02	—	2,359
Total	—	—	—	—	—	—	—	—	—	—	—	—	2,350	2,350	0.14	0.02	—	2,359
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	389	389	0.02	< 0.005	—	391
Total	—	—	—	—	—	—	—	—	—	—	—	—	389	389	0.02	< 0.005	—	391

4.2.2. Electricity Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	2,351	2,351	0.14	0.02	—	2,360
Total	—	—	—	—	—	—	—	—	—	—	—	—	2,351	2,351	0.14	0.02	—	2,360
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Apartme Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	2,351	2,351	0.14	0.02	—	2,360
Total	—	—	—	—	—	—	—	—	—	—	—	—	2,351	2,351	0.14	0.02	—	2,360
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartme nts Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	389	389	0.02	< 0.005	—	391
Total	—	—	—	—	—	—	—	—	—	—	—	—	389	389	0.02	< 0.005	—	391

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartme nts Mid Rise	0.31	0.15	2.62	1.12	0.02	0.21	—	0.21	0.21	—	0.21	—	3,329	3,329	0.29	0.01	—	3,338
Total	0.31	0.15	2.62	1.12	0.02	0.21	—	0.21	0.21	—	0.21	—	3,329	3,329	0.29	0.01	—	3,338
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartme nts Mid Rise	0.31	0.15	2.62	1.12	0.02	0.21	—	0.21	0.21	—	0.21	—	3,329	3,329	0.29	0.01	—	3,338
Total	0.31	0.15	2.62	1.12	0.02	0.21	—	0.21	0.21	—	0.21	—	3,329	3,329	0.29	0.01	—	3,338
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartme nts Mid Rise	0.06	0.03	0.48	0.20	< 0.005	0.04	—	0.04	0.04	—	0.04	—	551	551	0.05	< 0.005	—	553
Total	0.06	0.03	0.48	0.20	< 0.005	0.04	—	0.04	0.04	—	0.04	—	551	551	0.05	< 0.005	—	553

4.2.4. Natural Gas Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	16.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	1.92	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	4.03	3.81	0.41	44.2	< 0.005	0.02	—	0.02	0.02	—	0.02	—	118	118	< 0.005	< 0.005	—	118
Total	4.03	21.7	0.41	44.2	< 0.005	0.02	—	0.02	0.02	—	0.02	0.00	118	118	< 0.005	< 0.005	—	118
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	16.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	1.92	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00	17.9	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	2.91	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.35	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.50	0.48	0.05	5.53	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	13.4	13.4	< 0.005	< 0.005	—	13.4

Total	0.50	3.74	0.05	5.53	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	13.4	13.4	< 0.005	< 0.005	—	13.4

4.3.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	16.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	1.92	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	4.03	3.81	0.41	44.2	< 0.005	0.02	—	0.02	0.02	—	0.02	—	118	118	< 0.005	< 0.005	—	118
Total	4.03	21.7	0.41	44.2	< 0.005	0.02	—	0.02	0.02	—	0.02	0.00	118	118	< 0.005	< 0.005	—	118
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	16.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	1.92	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00	17.9	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00

Consum Products	—	2.91	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.35	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.50	0.48	0.05	5.53	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	13.4	13.4	< 0.005	< 0.005	—	13.4
Total	0.50	3.74	0.05	5.53	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	13.4	13.4	< 0.005	< 0.005	—	13.4

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	58.5	49.0	108	0.20	0.13	—	151
Total	—	—	—	—	—	—	—	—	—	—	—	58.5	49.0	108	0.20	0.13	—	151
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	58.5	49.0	108	0.20	0.13	—	151
Total	—	—	—	—	—	—	—	—	—	—	—	58.5	49.0	108	0.20	0.13	—	151
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Apartments	—	—	—	—	—	—	—	—	—	—	—	9.69	8.11	17.8	0.03	0.02	—	25.0
Total	—	—	—	—	—	—	—	—	—	—	—	9.69	8.11	17.8	0.03	0.02	—	25.0

4.4.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	58.5	49.0	108	0.20	0.13	—	151
Total	—	—	—	—	—	—	—	—	—	—	—	58.5	49.0	108	0.20	0.13	—	151
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	58.5	49.0	108	0.20	0.13	—	151
Total	—	—	—	—	—	—	—	—	—	—	—	58.5	49.0	108	0.20	0.13	—	151
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	9.69	8.11	17.8	0.03	0.02	—	25.0
Total	—	—	—	—	—	—	—	—	—	—	—	9.69	8.11	17.8	0.03	0.02	—	25.0

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	310	0.00	310	31.0	0.00	—	1,084
Total	—	—	—	—	—	—	—	—	—	—	—	310	0.00	310	31.0	0.00	—	1,084
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	310	0.00	310	31.0	0.00	—	1,084
Total	—	—	—	—	—	—	—	—	—	—	—	310	0.00	310	31.0	0.00	—	1,084
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	51.3	0.00	51.3	5.12	0.00	—	179
Total	—	—	—	—	—	—	—	—	—	—	—	51.3	0.00	51.3	5.12	0.00	—	179

4.5.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	310	0.00	310	31.0	0.00	—	1,084
Total	—	—	—	—	—	—	—	—	—	—	—	310	0.00	310	31.0	0.00	—	1,084

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	310	0.00	310	31.0	0.00	—	1,084
Total	—	—	—	—	—	—	—	—	—	—	—	310	0.00	310	31.0	0.00	—	1,084
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	51.3	0.00	51.3	5.12	0.00	—	179
Total	—	—	—	—	—	—	—	—	—	—	—	51.3	0.00	51.3	5.12	0.00	—	179

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.34	5.34
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.34	5.34
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.34	5.34
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.34	5.34

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.88	0.88
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.88	0.88

4.6.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.34	5.34
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.34	5.34
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.34	5.34
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.34	5.34
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.88	0.88
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.88	0.88

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Apartments Mid Rise	4,227	3,815	3,178	1,466,643	29,768	26,868	22,381	10,328,814

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Apartments Mid Rise	4,227	3,815	3,178	1,466,643	29,768	26,868	22,381	10,328,814

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Apartments Mid Rise	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	777
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.1.2. Mitigated

Hearth Type	Unmitigated (number)
Apartments Mid Rise	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0

Electric Fireplaces	0
No Fireplaces	777
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
1510488	503,496	0.00	0.00	—

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)

Apartments Mid Rise	3,846,472	223	0.0129	0.0017	10,386,912

5.11.2. Mitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Apartments Mid Rise	3,848,473	223	0.0129	0.0017	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Apartments Mid Rise	27,396,243	3,750,558

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Apartments Mid Rise	27,396,243	3,750,558

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Apartments Mid Rise	575	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Apartments Mid Rise	575	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Apartments Mid Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Mid Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Apartments Mid Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Mid Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.15.2. Mitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	19.3	annual days of extreme heat
Extreme Precipitation	5.70	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	2	0	0	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	2	1	1	3
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A

Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	48.6
AQ-PM	23.7
AQ-DPM	22.3
Drinking Water	78.8
Lead Risk Housing	41.2
Pesticides	73.8
Toxic Releases	30.3
Traffic	28.5
Effect Indicators	—
CleanUp Sites	86.5
Groundwater	88.9
Haz Waste Facilities/Generators	99.8
Impaired Water Bodies	51.2
Solid Waste	99.9

Sensitive Population	—
Asthma	50.2
Cardio-vascular	53.9
Low Birth Weights	36.4
Socioeconomic Factor Indicators	—
Education	47.5
Housing	61.9
Linguistic	43.9
Poverty	58.5
Unemployment	62.4

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	36.84075452
Employed	20.45425382
Median HI	23.26446811
Education	—
Bachelor's or higher	39.34300013
High school enrollment	100
Preschool enrollment	18.64493776
Transportation	—
Auto Access	37.4566919
Active commuting	70.79430258
Social	—
2-parent households	14.75683306

Voting	58.51405107
Neighborhood	—
Alcohol availability	64.62209675
Park access	12.70370846
Retail density	22.81534711
Supermarket access	13.65327858
Tree canopy	2.065956628
Housing	—
Homeownership	60.60567176
Housing habitability	41.69126139
Low-inc homeowner severe housing cost burden	38.58591043
Low-inc renter severe housing cost burden	7.737713332
Uncrowded housing	46.38778391
Health Outcomes	—
Insured adults	43.96253048
Arthritis	0.0
Asthma ER Admissions	49.9
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	16.0
Cognitively Disabled	21.0
Physically Disabled	7.2
Heart Attack ER Admissions	53.7

Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	98.4
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	59.5
Elderly	21.1
English Speaking	31.0
Foreign-born	59.3
Outdoor Workers	28.8
Climate Change Adaptive Capacity	—
Impervious Surface Cover	91.1
Traffic Density	37.8
Traffic Access	23.0
Other Indices	—
Hardship	62.5
Other Decision Support	—
2016 Voting	63.7

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	70.0
Healthy Places Index Score for Project Location (b)	29.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	South Florin

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	No demo
Land Use	landscape area = 20% of total lot acreage

Sac Rezone before (2025) Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Sac Rezone before (2025)
Construction Start Date	1/1/2025
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.00
Precipitation (days)	36.4
Location	38.496993247768415, -121.41035190855798
County	Sacramento
City	Unincorporated
Air District	Sacramento Metropolitan AQMD
Air Basin	Sacramento Valley
TAZ	731
EDFZ	13
Electric Utility	Sacramento Municipal Utility District
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.21

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Apartments Low Rise	461	Dwelling Unit	37.5	488,660	327,122	—	1,291	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.03	2.59	14.0	34.0	0.03	0.45	3.73	4.18	0.42	0.89	1.30	—	7,591	7,591	0.25	0.36	18.2	7,724
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.01	328	31.7	31.0	0.06	1.37	7.84	9.21	1.26	3.98	5.24	—	7,167	7,167	0.27	0.36	0.47	7,283
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.98	14.2	10.6	19.2	0.02	0.36	2.44	2.81	0.34	0.65	0.99	—	4,668	4,668	0.17	0.21	4.51	4,740
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.36	2.60	1.94	3.50	< 0.005	0.07	0.45	0.51	0.06	0.12	0.18	—	773	773	0.03	0.04	0.75	785

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2025	3.03	2.59	14.0	34.0	0.03	0.45	3.73	4.18	0.42	0.89	1.30	—	7,591	7,591	0.25	0.36	18.2	7,724
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	4.01	328	31.7	31.0	0.06	1.37	7.84	9.21	1.26	3.98	5.24	—	7,167	7,167	0.27	0.36	0.47	7,283
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	1.98	14.2	10.6	19.2	0.02	0.36	2.44	2.81	0.34	0.65	0.99	—	4,668	4,668	0.17	0.21	4.51	4,740
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.36	2.60	1.94	3.50	< 0.005	0.07	0.45	0.51	0.06	0.12	0.18	—	773	773	0.03	0.04	0.75	785

3. Construction Emissions Details

3.1. Site Preparation (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.94	3.31	31.6	30.2	0.05	1.37	—	1.37	1.26	—	1.26	—	5,295	5,295	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	7.67	7.67	—	3.94	3.94	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.06	0.61	0.58	< 0.005	0.03	—	0.03	0.02	—	0.02	—	102	102	< 0.005	< 0.005	—	102
Dust From Material Movement	—	—	—	—	—	—	0.15	0.15	—	0.08	0.08	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.11	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	16.8	16.8	< 0.005	< 0.005	—	16.9
Dust From Material Movement	—	—	—	—	—	—	0.03	0.03	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.06	0.78	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	176	176	< 0.005	0.01	0.02	179
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.47	3.47	< 0.005	< 0.005	0.01	3.52
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.57	0.57	< 0.005	< 0.005	< 0.005	0.58
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Grading (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.80	3.20	29.7	28.3	0.06	1.23	—	1.23	1.14	—	1.14	—	6,599	6,599	0.27	0.05	—	6,622
Dust From Material Movement	—	—	—	—	—	—	3.59	3.59	—	1.42	1.42	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.21	0.18	1.63	1.55	< 0.005	0.07	—	0.07	0.06	—	0.06	—	362	362	0.01	< 0.005	—	363
Dust From Material Movement	—	—	—	—	—	—	0.20	0.20	—	0.08	0.08	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.30	0.28	< 0.005	0.01	—	0.01	0.01	—	0.01	—	59.9	59.9	< 0.005	< 0.005	—	60.1
Dust From Material Movement	—	—	—	—	—	—	0.04	0.04	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.07	0.89	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	202	202	< 0.005	0.01	0.02	204
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.3	11.3	< 0.005	< 0.005	0.02	11.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.88	1.88	< 0.005	< 0.005	< 0.005	1.90
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Building Construction (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.76	0.64	5.89	7.36	0.01	0.24	—	0.24	0.22	—	0.22	—	1,353	1,353	0.05	0.01	—	1,358
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.12	1.08	1.34	< 0.005	0.04	—	0.04	0.04	—	0.04	—	224	224	0.01	< 0.005	—	225
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.53	1.40	0.97	20.0	0.00	0.00	3.35	3.35	0.00	0.79	0.79	—	3,768	3,768	0.06	0.13	14.5	3,824
Vendor	0.16	0.06	2.58	0.96	0.01	0.02	0.37	0.39	0.02	0.10	0.12	—	1,425	1,425	0.09	0.21	3.71	1,494
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.40	1.25	1.23	14.7	0.00	0.00	3.35	3.35	0.00	0.79	0.79	—	3,345	3,345	0.08	0.13	0.38	3,387
Vendor	0.15	0.05	2.76	0.98	0.01	0.02	0.37	0.39	0.02	0.10	0.12	—	1,425	1,425	0.09	0.21	0.10	1,490
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.78	0.71	0.62	8.49	0.00	0.00	1.85	1.85	0.00	0.43	0.43	—	1,937	1,937	0.04	0.08	3.52	1,964
Vendor	0.09	0.03	1.53	0.54	0.01	0.01	0.21	0.22	0.01	0.06	0.07	—	804	804	0.05	0.12	0.90	842
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.13	0.11	1.55	0.00	0.00	0.34	0.34	0.00	0.08	0.08	—	321	321	0.01	0.01	0.58	325
Vendor	0.02	0.01	0.28	0.10	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	133	133	0.01	0.02	0.15	139
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Paving (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.95	0.80	7.45	9.98	0.01	0.35	—	0.35	0.32	—	0.32	—	1,511	1,511	0.06	0.01	—	1,517
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.29	0.38	< 0.005	0.01	—	0.01	0.01	—	0.01	—	58.0	58.0	< 0.005	< 0.005	—	58.2
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	9.60	9.60	< 0.005	< 0.005	—	9.63
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.06	0.67	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	151	151	< 0.005	0.01	0.02	153
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.95	5.95	< 0.005	< 0.005	0.01	6.03
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.99	0.99	< 0.005	< 0.005	< 0.005	1.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Architectural Coating (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.13	0.88	1.14	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	328	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	< 0.005	0.03	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.12	5.12	< 0.005	< 0.005	—	5.14
Architectural Coatings	—	12.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.85	0.85	< 0.005	< 0.005	—	0.85
Architectural Coatings	—	2.29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.28	0.25	0.25	2.95	0.00	0.00	0.67	0.67	0.00	0.16	0.16	—	669	669	0.02	0.03	0.08	677
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.12	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	26.3	26.3	< 0.005	< 0.005	0.05	26.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.36	4.36	< 0.005	< 0.005	0.01	4.42
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	1/1/2025	1/9/2025	5.00	7.00	—
Grading	Grading	1/10/2025	2/6/2025	5.00	20.0	—
Building Construction	Building Construction	2/7/2025	11/21/2025	5.00	206	—
Paving	Paving	11/22/2025	12/11/2025	5.00	14.0	—
Architectural Coating	Architectural Coating	12/12/2025	12/31/2025	5.00	14.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37

Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	14.3	LDA,LDT1,LDT2
Site Preparation	Vendor	—	8.80	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	14.3	LDA,LDT1,LDT2

Grading	Vendor	—	8.80	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	332	14.3	LDA,LDT1,LDT2
Building Construction	Vendor	49.3	8.80	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	14.3	LDA,LDT1,LDT2
Paving	Vendor	—	8.80	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	66.4	14.3	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	8.80	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	989,537	329,846	0.00	0.00	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	—	—	10.5	0.00	—
Grading	—	—	60.0	0.00	—
Paving	0.00	0.00	0.00	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Apartments Low Rise	—	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2025	0.00	375	0.01	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	19.3	annual days of extreme heat
Extreme Precipitation	5.70	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	2	0	0	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	2	1	1	3
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A

Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	42.6
AQ-PM	34.0
AQ-DPM	24.2
Drinking Water	87.7
Lead Risk Housing	46.5
Pesticides	0.00
Toxic Releases	22.0
Traffic	61.2
Effect Indicators	—
CleanUp Sites	40.8
Groundwater	55.3
Haz Waste Facilities/Generators	30.2
Impaired Water Bodies	43.8
Solid Waste	39.0

Sensitive Population	—
Asthma	91.3
Cardio-vascular	90.3
Low Birth Weights	79.8
Socioeconomic Factor Indicators	—
Education	75.7
Housing	77.6
Linguistic	77.4
Poverty	89.5
Unemployment	95.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	9.072244322
Employed	15.56525087
Median HI	12.4085718
Education	—
Bachelor's or higher	17.50288721
High school enrollment	14.67984088
Preschool enrollment	74.27178237
Transportation	—
Auto Access	16.95110997
Active commuting	49.83959964
Social	—
2-parent households	10.38111125

Voting	30.89952521
Neighborhood	—
Alcohol availability	49.8652637
Park access	57.48748877
Retail density	47.01655332
Supermarket access	29.53933017
Tree canopy	84.60156551
Housing	—
Homeownership	30.16809958
Housing habitability	28.23046324
Low-inc homeowner severe housing cost burden	26.71628384
Low-inc renter severe housing cost burden	30.95085333
Uncrowded housing	20.03079687
Health Outcomes	—
Insured adults	19.91530861
Arthritis	12.5
Asthma ER Admissions	10.3
High Blood Pressure	6.0
Cancer (excluding skin)	49.7
Asthma	8.7
Coronary Heart Disease	15.5
Chronic Obstructive Pulmonary Disease	5.0
Diagnosed Diabetes	10.1
Life Expectancy at Birth	9.0
Cognitively Disabled	18.3
Physically Disabled	43.7
Heart Attack ER Admissions	11.0

Mental Health Not Good	15.9
Chronic Kidney Disease	10.6
Obesity	23.4
Pedestrian Injuries	55.0
Physical Health Not Good	14.4
Stroke	6.5
Health Risk Behaviors	—
Binge Drinking	94.4
Current Smoker	5.6
No Leisure Time for Physical Activity	13.6
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	41.8
Elderly	68.4
English Speaking	12.5
Foreign-born	70.1
Outdoor Workers	4.6
Climate Change Adaptive Capacity	—
Impervious Surface Cover	47.0
Traffic Density	45.1
Traffic Access	59.8
Other Indices	—
Hardship	90.6
Other Decision Support	—
2016 Voting	14.1

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	80.0
Healthy Places Index Score for Project Location (b)	13.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	South Florin

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	20 percent of total before rezone
Construction: Construction Phases	1/5 of total project

Sac Rezone before (2026) Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Sac Rezone before (2026)
Construction Start Date	1/1/2026
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.00
Precipitation (days)	36.4
Location	38.496993247768415, -121.41035190855798
County	Sacramento
City	Unincorporated
Air District	Sacramento Metropolitan AQMD
Air Basin	Sacramento Valley
TAZ	731
EDFZ	13
Electric Utility	Sacramento Municipal Utility District
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.21

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Apartments Low Rise	461	Dwelling Unit	37.5	488,660	327,122	—	1,291	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.89	2.45	13.1	32.6	0.03	0.40	3.73	4.12	0.37	0.89	1.25	—	7,488	7,488	0.24	0.36	16.6	7,617
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.81	328	29.2	29.5	0.06	1.24	7.84	9.09	1.14	3.98	5.12	—	7,074	7,074	0.27	0.36	0.43	7,189
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.82	14.2	9.92	18.4	0.02	0.32	2.44	2.77	0.30	0.65	0.95	—	4,613	4,613	0.17	0.21	4.11	4,685
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.33	2.58	1.81	3.37	< 0.005	0.06	0.45	0.51	0.05	0.12	0.17	—	764	764	0.03	0.03	0.68	776

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2026	2.89	2.45	13.1	32.6	0.03	0.40	3.73	4.12	0.37	0.89	1.25	—	7,488	7,488	0.24	0.36	16.6	7,617
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	3.81	328	29.2	29.5	0.06	1.24	7.84	9.09	1.14	3.98	5.12	—	7,074	7,074	0.27	0.36	0.43	7,189
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.82	14.2	9.92	18.4	0.02	0.32	2.44	2.77	0.30	0.65	0.95	—	4,613	4,613	0.17	0.21	4.11	4,685
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.33	2.58	1.81	3.37	< 0.005	0.06	0.45	0.51	0.05	0.12	0.17	—	764	764	0.03	0.03	0.68	776

3. Construction Emissions Details

3.1. Site Preparation (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.74	3.14	29.2	28.8	0.05	1.24	—	1.24	1.14	—	1.14	—	5,298	5,298	0.21	0.04	—	5,316
Dust From Material Movement	—	—	—	—	—	—	7.67	7.67	—	3.94	3.94	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.56	0.55	< 0.005	0.02	—	0.02	0.02	—	0.02	—	102	102	< 0.005	< 0.005	—	102
Dust From Material Movement	—	—	—	—	—	—	0.15	0.15	—	0.08	0.08	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.10	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	16.8	16.8	< 0.005	< 0.005	—	16.9
Dust From Material Movement	—	—	—	—	—	—	0.03	0.03	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.06	0.73	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	173	173	< 0.005	0.01	0.02	175
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.40	3.40	< 0.005	< 0.005	0.01	3.45
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.56	0.56	< 0.005	< 0.005	< 0.005	0.57
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Grading (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.62	3.04	27.2	27.6	0.06	1.12	—	1.12	1.03	—	1.03	—	6,599	6,599	0.27	0.05	—	6,621
Dust From Material Movement	—	—	—	—	—	—	3.59	3.59	—	1.42	1.42	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.20	0.17	1.49	1.51	< 0.005	0.06	—	0.06	0.06	—	0.06	—	362	362	0.01	< 0.005	—	363
Dust From Material Movement	—	—	—	—	—	—	0.20	0.20	—	0.08	0.08	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.27	0.28	< 0.005	0.01	—	0.01	0.01	—	0.01	—	59.9	59.9	< 0.005	< 0.005	—	60.1
Dust From Material Movement	—	—	—	—	—	—	0.04	0.04	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.07	0.83	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	198	198	< 0.005	0.01	0.02	200
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.1	11.1	< 0.005	< 0.005	0.02	11.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.84	1.84	< 0.005	< 0.005	< 0.005	1.87
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Building Construction (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.72	0.60	5.56	7.32	0.01	0.21	—	0.21	0.20	—	0.20	—	1,353	1,353	0.05	0.01	—	1,358
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	1.01	1.34	< 0.005	0.04	—	0.04	0.04	—	0.04	—	224	224	0.01	< 0.005	—	225
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.46	1.33	0.85	18.7	0.00	0.00	3.35	3.35	0.00	0.79	0.79	—	3,694	3,694	0.05	0.13	13.2	3,746
Vendor	0.15	0.05	2.42	0.92	0.01	0.02	0.37	0.39	0.02	0.10	0.12	—	1,397	1,397	0.09	0.21	3.36	1,465
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.24	1.20	1.11	13.8	0.00	0.00	3.35	3.35	0.00	0.79	0.79	—	3,281	3,281	0.07	0.13	0.34	3,323
Vendor	0.14	0.05	2.59	0.94	0.01	0.02	0.37	0.39	0.02	0.10	0.12	—	1,396	1,396	0.09	0.21	0.09	1,461
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.69	0.68	0.55	7.91	0.00	0.00	1.85	1.85	0.00	0.43	0.43	—	1,900	1,900	0.04	0.08	3.22	1,927
Vendor	0.08	0.03	1.44	0.53	0.01	0.01	0.21	0.22	0.01	0.06	0.07	—	788	788	0.05	0.12	0.82	826
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.12	0.10	1.44	0.00	0.00	0.34	0.34	0.00	0.08	0.08	—	315	315	0.01	0.01	0.53	319
Vendor	0.01	0.01	0.26	0.10	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	130	130	0.01	0.02	0.14	137
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Paving (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.91	0.76	7.12	9.94	0.01	0.32	—	0.32	0.29	—	0.29	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.27	0.38	< 0.005	0.01	—	0.01	0.01	—	0.01	—	57.9	57.9	< 0.005	< 0.005	—	58.1
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	9.59	9.59	< 0.005	< 0.005	—	9.63
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.05	0.62	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	148	148	< 0.005	0.01	0.02	150
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.84	5.84	< 0.005	< 0.005	0.01	5.92
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.97	0.97	< 0.005	< 0.005	< 0.005	0.98
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Architectural Coating (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	0.86	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	328	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	< 0.005	0.03	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.12	5.12	< 0.005	< 0.005	—	5.14
Architectural Coatings	—	12.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.85	0.85	< 0.005	< 0.005	—	0.85
Architectural Coatings	—	2.29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.25	0.24	0.22	2.75	0.00	0.00	0.67	0.67	0.00	0.16	0.16	—	656	656	0.01	0.03	0.07	665
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	25.8	25.8	< 0.005	< 0.005	0.04	26.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.28	4.28	< 0.005	< 0.005	0.01	4.34
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	1/1/2026	1/9/2026	5.00	7.00	—
Grading	Grading	1/10/2026	2/6/2026	5.00	20.0	—
Building Construction	Building Construction	2/7/2026	11/23/2026	5.00	206	—
Paving	Paving	11/24/2026	12/11/2026	5.00	14.0	—
Architectural Coating	Architectural Coating	12/12/2026	12/31/2026	5.00	14.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37

Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	14.3	LDA,LDT1,LDT2
Site Preparation	Vendor	—	8.80	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	14.3	LDA,LDT1,LDT2

Grading	Vendor	—	8.80	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	332	14.3	LDA,LDT1,LDT2
Building Construction	Vendor	49.3	8.80	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	14.3	LDA,LDT1,LDT2
Paving	Vendor	—	8.80	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	66.4	14.3	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	8.80	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	989,537	329,846	0.00	0.00	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	—	—	10.5	0.00	—
Grading	—	—	60.0	0.00	—
Paving	0.00	0.00	0.00	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Apartments Low Rise	—	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2026	0.00	375	0.01	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	19.3	annual days of extreme heat
Extreme Precipitation	5.70	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	2	0	0	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	2	1	1	3
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A

Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	42.6
AQ-PM	34.0
AQ-DPM	24.2
Drinking Water	87.7
Lead Risk Housing	46.5
Pesticides	0.00
Toxic Releases	22.0
Traffic	61.2
Effect Indicators	—
CleanUp Sites	40.8
Groundwater	55.3
Haz Waste Facilities/Generators	30.2
Impaired Water Bodies	43.8
Solid Waste	39.0

Sensitive Population	—
Asthma	91.3
Cardio-vascular	90.3
Low Birth Weights	79.8
Socioeconomic Factor Indicators	—
Education	75.7
Housing	77.6
Linguistic	77.4
Poverty	89.5
Unemployment	95.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	9.072244322
Employed	15.56525087
Median HI	12.4085718
Education	—
Bachelor's or higher	17.50288721
High school enrollment	14.67984088
Preschool enrollment	74.27178237
Transportation	—
Auto Access	16.95110997
Active commuting	49.83959964
Social	—
2-parent households	10.38111125

Voting	30.89952521
Neighborhood	—
Alcohol availability	49.8652637
Park access	57.48748877
Retail density	47.01655332
Supermarket access	29.53933017
Tree canopy	84.60156551
Housing	—
Homeownership	30.16809958
Housing habitability	28.23046324
Low-inc homeowner severe housing cost burden	26.71628384
Low-inc renter severe housing cost burden	30.95085333
Uncrowded housing	20.03079687
Health Outcomes	—
Insured adults	19.91530861
Arthritis	12.5
Asthma ER Admissions	10.3
High Blood Pressure	6.0
Cancer (excluding skin)	49.7
Asthma	8.7
Coronary Heart Disease	15.5
Chronic Obstructive Pulmonary Disease	5.0
Diagnosed Diabetes	10.1
Life Expectancy at Birth	9.0
Cognitively Disabled	18.3
Physically Disabled	43.7
Heart Attack ER Admissions	11.0

Mental Health Not Good	15.9
Chronic Kidney Disease	10.6
Obesity	23.4
Pedestrian Injuries	55.0
Physical Health Not Good	14.4
Stroke	6.5
Health Risk Behaviors	—
Binge Drinking	94.4
Current Smoker	5.6
No Leisure Time for Physical Activity	13.6
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	41.8
Elderly	68.4
English Speaking	12.5
Foreign-born	70.1
Outdoor Workers	4.6
Climate Change Adaptive Capacity	—
Impervious Surface Cover	47.0
Traffic Density	45.1
Traffic Access	59.8
Other Indices	—
Hardship	90.6
Other Decision Support	—
2016 Voting	14.1

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	80.0
Healthy Places Index Score for Project Location (b)	13.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	South Florin

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	one fifth of total project
Construction: Construction Phases	1/5 of total project

Sac Rezone before (2027) Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Sac Rezone before (2027)
Construction Start Date	1/1/2027
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.00
Precipitation (days)	36.4
Location	38.496993247768415, -121.41035190855798
County	Sacramento
City	Unincorporated
Air District	Sacramento Metropolitan AQMD
Air Basin	Sacramento Valley
TAZ	731
EDFZ	13
Electric Utility	Sacramento Municipal Utility District
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.21

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Apartments Low Rise	461	Dwelling Unit	37.5	488,660	327,122	—	1,291	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.68	2.37	12.5	31.4	0.03	0.36	3.73	4.08	0.33	0.89	1.22	—	7,390	7,390	0.23	0.35	15.0	7,514
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.69	328	28.0	29.0	0.06	1.17	7.84	9.01	1.08	3.98	5.06	—	6,984	6,984	0.27	0.35	0.39	7,096
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.76	14.0	9.43	17.9	0.02	0.29	2.44	2.74	0.27	0.65	0.92	—	4,561	4,561	0.16	0.20	3.73	4,629
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.32	2.56	1.72	3.27	< 0.005	0.05	0.45	0.50	0.05	0.12	0.17	—	755	755	0.03	0.03	0.62	766

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2027	2.68	2.37	12.5	31.4	0.03	0.36	3.73	4.08	0.33	0.89	1.22	—	7,390	7,390	0.23	0.35	15.0	7,514
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	3.69	328	28.0	29.0	0.06	1.17	7.84	9.01	1.08	3.98	5.06	—	6,984	6,984	0.27	0.35	0.39	7,096
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	1.76	14.0	9.43	17.9	0.02	0.29	2.44	2.74	0.27	0.65	0.92	—	4,561	4,561	0.16	0.20	3.73	4,629
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.32	2.56	1.72	3.27	< 0.005	0.05	0.45	0.50	0.05	0.12	0.17	—	755	755	0.03	0.03	0.62	766

3. Construction Emissions Details

3.1. Site Preparation (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.63	3.05	28.0	28.3	0.05	1.17	—	1.17	1.08	—	1.08	—	5,298	5,298	0.21	0.04	—	5,316
Dust From Material Movement	—	—	—	—	—	—	7.67	7.67	—	3.94	3.94	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.54	0.54	< 0.005	0.02	—	0.02	0.02	—	0.02	—	102	102	< 0.005	< 0.005	—	102
Dust From Material Movement	—	—	—	—	—	—	0.15	0.15	—	0.08	0.08	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.10	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	16.8	16.8	< 0.005	< 0.005	—	16.9
Dust From Material Movement	—	—	—	—	—	—	0.03	0.03	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.06	0.68	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	170	170	< 0.005	0.01	0.02	172
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.34	3.34	< 0.005	< 0.005	0.01	3.39
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.55	0.55	< 0.005	< 0.005	< 0.005	0.56
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Grading (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.51	2.95	25.6	27.3	0.06	1.04	—	1.04	0.96	—	0.96	—	6,598	6,598	0.27	0.05	—	6,621
Dust From Material Movement	—	—	—	—	—	—	3.59	3.59	—	1.42	1.42	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	0.16	1.40	1.49	< 0.005	0.06	—	0.06	0.05	—	0.05	—	362	362	0.01	< 0.005	—	363
Dust From Material Movement	—	—	—	—	—	—	0.20	0.20	—	0.08	0.08	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.26	0.27	< 0.005	0.01	—	0.01	0.01	—	0.01	—	59.9	59.9	< 0.005	< 0.005	—	60.1
Dust From Material Movement	—	—	—	—	—	—	0.04	0.04	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.07	0.78	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	194	194	< 0.005	0.01	0.02	197
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.9	10.9	< 0.005	< 0.005	0.02	11.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.81	1.81	< 0.005	< 0.005	< 0.005	1.83
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Building Construction (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.23	1.03	9.39	12.9	0.02	0.34	—	0.34	0.31	—	0.31	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.23	1.03	9.39	12.9	0.02	0.34	—	0.34	0.31	—	0.31	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.69	0.58	5.30	7.30	0.01	0.19	—	0.19	0.17	—	0.17	—	1,353	1,353	0.05	0.01	—	1,358
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	0.97	1.33	< 0.005	0.03	—	0.03	0.03	—	0.03	—	224	224	0.01	< 0.005	—	225
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.31	1.28	0.84	17.6	0.00	0.00	3.35	3.35	0.00	0.79	0.79	—	3,628	3,628	0.05	0.13	12.0	3,679
Vendor	0.15	0.05	2.27	0.89	0.01	0.02	0.37	0.39	0.02	0.10	0.12	—	1,365	1,365	0.08	0.20	3.02	1,430
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.19	1.05	1.09	12.9	0.00	0.00	3.35	3.35	0.00	0.79	0.79	—	3,223	3,223	0.07	0.13	0.31	3,265
Vendor	0.14	0.05	2.42	0.91	0.01	0.02	0.37	0.39	0.02	0.10	0.12	—	1,365	1,365	0.08	0.20	0.08	1,426
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.67	0.59	0.54	7.46	0.00	0.00	1.85	1.85	0.00	0.43	0.43	—	1,866	1,866	0.03	0.07	2.92	1,891
Vendor	0.08	0.03	1.34	0.50	0.01	0.01	0.21	0.22	0.01	0.06	0.07	—	770	770	0.05	0.11	0.74	806
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.11	0.10	1.36	0.00	0.00	0.34	0.34	0.00	0.08	0.08	—	309	309	0.01	0.01	0.48	313
Vendor	0.01	0.01	0.25	0.09	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	128	128	0.01	0.02	0.12	133
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Paving (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.88	0.74	6.94	9.95	0.01	0.30	—	0.30	0.27	—	0.27	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.27	0.38	< 0.005	0.01	—	0.01	0.01	—	0.01	—	58.0	58.0	< 0.005	< 0.005	—	58.2
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	9.60	9.60	< 0.005	< 0.005	—	9.63
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.05	0.58	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	146	146	< 0.005	0.01	0.01	148
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.73	5.73	< 0.005	< 0.005	0.01	5.81
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.95	0.95	< 0.005	< 0.005	< 0.005	0.96
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Architectural Coating (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.11	0.83	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	328	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	< 0.005	0.03	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.12	5.12	< 0.005	< 0.005	—	5.14
Architectural Coatings	—	12.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.85	0.85	< 0.005	< 0.005	—	0.85
Architectural Coatings	—	2.29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.24	0.21	0.22	2.58	0.00	0.00	0.67	0.67	0.00	0.16	0.16	—	645	645	0.01	0.03	0.06	653
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.10	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	25.4	25.4	< 0.005	< 0.005	0.04	25.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.20	4.20	< 0.005	< 0.005	0.01	4.26
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	1/1/2027	1/11/2027	5.00	7.00	—
Grading	Grading	1/12/2027	2/8/2027	5.00	20.0	—
Building Construction	Building Construction	2/9/2027	11/23/2027	5.00	206	—
Paving	Paving	11/24/2027	12/13/2027	5.00	14.0	—
Architectural Coating	Architectural Coating	12/14/2027	12/31/2027	5.00	14.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37

Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	14.3	LDA,LDT1,LDT2
Site Preparation	Vendor	—	8.80	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	14.3	LDA,LDT1,LDT2

Grading	Vendor	—	8.80	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	332	14.3	LDA,LDT1,LDT2
Building Construction	Vendor	49.3	8.80	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	14.3	LDA,LDT1,LDT2
Paving	Vendor	—	8.80	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	66.4	14.3	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	8.80	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	989,537	329,846	0.00	0.00	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	—	—	10.5	0.00	—
Grading	—	—	60.0	0.00	—
Paving	0.00	0.00	0.00	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Apartments Low Rise	—	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2027	0.00	375	0.01	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	19.3	annual days of extreme heat
Extreme Precipitation	5.70	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	2	0	0	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	2	1	1	3
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A

Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	42.6
AQ-PM	34.0
AQ-DPM	24.2
Drinking Water	87.7
Lead Risk Housing	46.5
Pesticides	0.00
Toxic Releases	22.0
Traffic	61.2
Effect Indicators	—
CleanUp Sites	40.8
Groundwater	55.3
Haz Waste Facilities/Generators	30.2
Impaired Water Bodies	43.8
Solid Waste	39.0

Sensitive Population	—
Asthma	91.3
Cardio-vascular	90.3
Low Birth Weights	79.8
Socioeconomic Factor Indicators	—
Education	75.7
Housing	77.6
Linguistic	77.4
Poverty	89.5
Unemployment	95.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	9.072244322
Employed	15.56525087
Median HI	12.4085718
Education	—
Bachelor's or higher	17.50288721
High school enrollment	14.67984088
Preschool enrollment	74.27178237
Transportation	—
Auto Access	16.95110997
Active commuting	49.83959964
Social	—
2-parent households	10.38111125

Voting	30.89952521
Neighborhood	—
Alcohol availability	49.8652637
Park access	57.48748877
Retail density	47.01655332
Supermarket access	29.53933017
Tree canopy	84.60156551
Housing	—
Homeownership	30.16809958
Housing habitability	28.23046324
Low-inc homeowner severe housing cost burden	26.71628384
Low-inc renter severe housing cost burden	30.95085333
Uncrowded housing	20.03079687
Health Outcomes	—
Insured adults	19.91530861
Arthritis	12.5
Asthma ER Admissions	10.3
High Blood Pressure	6.0
Cancer (excluding skin)	49.7
Asthma	8.7
Coronary Heart Disease	15.5
Chronic Obstructive Pulmonary Disease	5.0
Diagnosed Diabetes	10.1
Life Expectancy at Birth	9.0
Cognitively Disabled	18.3
Physically Disabled	43.7
Heart Attack ER Admissions	11.0

Mental Health Not Good	15.9
Chronic Kidney Disease	10.6
Obesity	23.4
Pedestrian Injuries	55.0
Physical Health Not Good	14.4
Stroke	6.5
Health Risk Behaviors	—
Binge Drinking	94.4
Current Smoker	5.6
No Leisure Time for Physical Activity	13.6
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	41.8
Elderly	68.4
English Speaking	12.5
Foreign-born	70.1
Outdoor Workers	4.6
Climate Change Adaptive Capacity	—
Impervious Surface Cover	47.0
Traffic Density	45.1
Traffic Access	59.8
Other Indices	—
Hardship	90.6
Other Decision Support	—
2016 Voting	14.1

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	80.0
Healthy Places Index Score for Project Location (b)	13.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	South Florin

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	fifth of total project
Construction: Construction Phases	1/5 of total project

Sac Rezone before (2028) Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Sac Rezone before (2028)
Construction Start Date	1/1/2028
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.00
Precipitation (days)	36.4
Location	38.496993247768415, -121.41035190855798
County	Sacramento
City	Unincorporated
Air District	Sacramento Metropolitan AQMD
Air Basin	Sacramento Valley
TAZ	731
EDFZ	13
Electric Utility	Sacramento Municipal Utility District
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.21

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Apartments Low Rise	461	Dwelling Unit	37.5	488,660	327,122	—	1,291	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.58	2.18	11.8	30.3	0.03	0.32	3.73	4.05	0.30	0.89	1.18	—	7,279	7,279	0.22	0.24	13.5	7,370
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.67	353	27.5	29.0	0.06	1.14	7.84	8.99	1.05	3.98	5.03	—	6,882	6,882	0.27	0.35	0.35	6,994
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.70	14.0	8.93	17.4	0.02	0.27	2.44	2.71	0.25	0.65	0.90	—	4,500	4,500	0.16	0.20	3.36	4,567
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.31	2.55	1.63	3.18	< 0.005	0.05	0.45	0.49	0.04	0.12	0.16	—	745	745	0.03	0.03	0.56	756

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2028	2.58	2.18	11.8	30.3	0.03	0.32	3.73	4.05	0.30	0.89	1.18	—	7,279	7,279	0.22	0.24	13.5	7,370
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2028	3.67	353	27.5	29.0	0.06	1.14	7.84	8.99	1.05	3.98	5.03	—	6,882	6,882	0.27	0.35	0.35	6,994
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2028	1.70	14.0	8.93	17.4	0.02	0.27	2.44	2.71	0.25	0.65	0.90	—	4,500	4,500	0.16	0.20	3.36	4,567
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2028	0.31	2.55	1.63	3.18	< 0.005	0.05	0.45	0.49	0.04	0.12	0.16	—	745	745	0.03	0.03	0.56	756

3. Construction Emissions Details

3.1. Site Preparation (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.61	3.04	27.5	28.4	0.05	1.14	—	1.14	1.05	—	1.05	—	5,300	5,300	0.21	0.04	—	5,318
Dust From Material Movement	—	—	—	—	—	—	7.67	7.67	—	3.94	3.94	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.53	0.54	< 0.005	0.02	—	0.02	0.02	—	0.02	—	102	102	< 0.005	< 0.005	—	102
Dust From Material Movement	—	—	—	—	—	—	0.15	0.15	—	0.08	0.08	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.10	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	16.8	16.8	< 0.005	< 0.005	—	16.9
Dust From Material Movement	—	—	—	—	—	—	0.03	0.03	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.05	0.64	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	166	166	< 0.005	0.01	0.01	169
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.28	3.28	< 0.005	< 0.005	< 0.005	3.32
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.54	0.54	< 0.005	< 0.005	< 0.005	0.55
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Grading (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.43	2.88	24.3	27.2	0.06	0.99	—	0.99	0.91	—	0.91	—	6,598	6,598	0.27	0.05	—	6,621
Dust From Material Movement	—	—	—	—	—	—	3.59	3.59	—	1.42	1.42	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	0.16	1.33	1.49	< 0.005	0.05	—	0.05	0.05	—	0.05	—	362	362	0.01	< 0.005	—	363
Dust From Material Movement	—	—	—	—	—	—	0.20	0.20	—	0.08	0.08	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.24	0.27	< 0.005	0.01	—	0.01	0.01	—	0.01	—	59.9	59.9	< 0.005	< 0.005	—	60.1
Dust From Material Movement	—	—	—	—	—	—	0.04	0.04	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.06	0.73	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	190	190	< 0.005	0.01	0.02	193
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.7	10.7	< 0.005	< 0.005	0.02	10.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.77	1.77	< 0.005	< 0.005	< 0.005	1.79
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Building Construction (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.18	0.99	8.92	12.9	0.02	0.30	—	0.30	0.28	—	0.28	—	2,397	2,397	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.18	0.99	8.92	12.9	0.02	0.30	—	0.30	0.28	—	0.28	—	2,397	2,397	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.67	0.56	5.04	7.30	0.01	0.17	—	0.17	0.16	—	0.16	—	1,353	1,353	0.05	0.01	—	1,358
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.92	1.33	< 0.005	0.03	—	0.03	0.03	—	0.03	—	224	224	0.01	< 0.005	—	225
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.26	1.14	0.73	16.5	0.00	0.00	3.35	3.35	0.00	0.79	0.79	—	3,553	3,553	0.04	0.02	10.8	3,572
Vendor	0.13	0.05	2.12	0.85	0.01	0.02	0.37	0.39	0.02	0.10	0.12	—	1,329	1,329	0.08	0.20	2.68	1,393
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.15	1.02	0.97	12.2	0.00	0.00	3.35	3.35	0.00	0.79	0.79	—	3,157	3,157	0.07	0.13	0.28	3,198
Vendor	0.13	0.05	2.27	0.88	0.01	0.02	0.37	0.39	0.02	0.10	0.12	—	1,328	1,328	0.08	0.20	0.07	1,390
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.65	0.58	0.48	7.01	0.00	0.00	1.85	1.85	0.00	0.43	0.43	—	1,828	1,828	0.03	0.07	2.64	1,853
Vendor	0.08	0.03	1.26	0.49	0.01	0.01	0.21	0.22	0.01	0.06	0.07	—	750	750	0.05	0.11	0.65	785
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.10	0.09	1.28	0.00	0.00	0.34	0.34	0.00	0.08	0.08	—	303	303	0.01	0.01	0.44	307
Vendor	0.01	0.01	0.23	0.09	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	124	124	0.01	0.02	0.11	130
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Paving (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.82	0.69	6.63	9.91	0.01	0.26	—	0.26	0.24	—	0.24	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.25	0.38	< 0.005	0.01	—	0.01	0.01	—	0.01	—	58.0	58.0	< 0.005	< 0.005	—	58.2
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	< 0.005	0.05	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	9.60	9.60	< 0.005	< 0.005	—	9.63
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.04	0.55	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	143	143	< 0.005	0.01	0.01	145
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.61	5.61	< 0.005	< 0.005	0.01	5.69
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.93	0.93	< 0.005	< 0.005	< 0.005	0.94
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Architectural Coating (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	0.81	1.12	< 0.005	0.02	—	0.02	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	353	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.76	4.76	< 0.005	< 0.005	—	4.77
Architectural Coatings	—	12.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.79	0.79	< 0.005	< 0.005	—	0.79
Architectural Coatings	—	2.29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.23	0.20	0.19	2.43	0.00	0.00	0.67	0.67	0.00	0.16	0.16	—	631	631	0.01	0.03	0.06	640
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	23.1	23.1	< 0.005	< 0.005	0.03	23.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.82	3.82	< 0.005	< 0.005	0.01	3.87
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	1/1/2028	1/11/2028	5.00	7.00	—
Grading	Grading	1/12/2028	2/8/2028	5.00	20.0	—
Building Construction	Building Construction	2/9/2028	11/22/2028	5.00	206	—
Paving	Paving	11/23/2028	12/12/2028	5.00	14.0	—
Architectural Coating	Architectural Coating	12/13/2028	12/31/2028	5.00	13.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37

Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	14.3	LDA,LDT1,LDT2
Site Preparation	Vendor	—	8.80	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	14.3	LDA,LDT1,LDT2

Grading	Vendor	—	8.80	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	332	14.3	LDA,LDT1,LDT2
Building Construction	Vendor	49.3	8.80	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	14.3	LDA,LDT1,LDT2
Paving	Vendor	—	8.80	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	66.4	14.3	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	8.80	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	989,537	329,846	0.00	0.00	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	—	—	10.5	0.00	—
Grading	—	—	60.0	0.00	—
Paving	0.00	0.00	0.00	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Apartments Low Rise	—	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2028	0.00	375	0.01	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	19.3	annual days of extreme heat
Extreme Precipitation	5.70	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	2	0	0	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	2	1	1	3
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A

Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	42.6
AQ-PM	34.0
AQ-DPM	24.2
Drinking Water	87.7
Lead Risk Housing	46.5
Pesticides	0.00
Toxic Releases	22.0
Traffic	61.2
Effect Indicators	—
CleanUp Sites	40.8
Groundwater	55.3
Haz Waste Facilities/Generators	30.2
Impaired Water Bodies	43.8
Solid Waste	39.0

Sensitive Population	—
Asthma	91.3
Cardio-vascular	90.3
Low Birth Weights	79.8
Socioeconomic Factor Indicators	—
Education	75.7
Housing	77.6
Linguistic	77.4
Poverty	89.5
Unemployment	95.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	9.072244322
Employed	15.56525087
Median HI	12.4085718
Education	—
Bachelor's or higher	17.50288721
High school enrollment	14.67984088
Preschool enrollment	74.27178237
Transportation	—
Auto Access	16.95110997
Active commuting	49.83959964
Social	—
2-parent households	10.38111125

Voting	30.89952521
Neighborhood	—
Alcohol availability	49.8652637
Park access	57.48748877
Retail density	47.01655332
Supermarket access	29.53933017
Tree canopy	84.60156551
Housing	—
Homeownership	30.16809958
Housing habitability	28.23046324
Low-inc homeowner severe housing cost burden	26.71628384
Low-inc renter severe housing cost burden	30.95085333
Uncrowded housing	20.03079687
Health Outcomes	—
Insured adults	19.91530861
Arthritis	12.5
Asthma ER Admissions	10.3
High Blood Pressure	6.0
Cancer (excluding skin)	49.7
Asthma	8.7
Coronary Heart Disease	15.5
Chronic Obstructive Pulmonary Disease	5.0
Diagnosed Diabetes	10.1
Life Expectancy at Birth	9.0
Cognitively Disabled	18.3
Physically Disabled	43.7
Heart Attack ER Admissions	11.0

Mental Health Not Good	15.9
Chronic Kidney Disease	10.6
Obesity	23.4
Pedestrian Injuries	55.0
Physical Health Not Good	14.4
Stroke	6.5
Health Risk Behaviors	—
Binge Drinking	94.4
Current Smoker	5.6
No Leisure Time for Physical Activity	13.6
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	41.8
Elderly	68.4
English Speaking	12.5
Foreign-born	70.1
Outdoor Workers	4.6
Climate Change Adaptive Capacity	—
Impervious Surface Cover	47.0
Traffic Density	45.1
Traffic Access	59.8
Other Indices	—
Hardship	90.6
Other Decision Support	—
2016 Voting	14.1

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	80.0
Healthy Places Index Score for Project Location (b)	13.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	South Florin

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	fifth of total project
Construction: Construction Phases	1/5 of total project

Sac Rezone before (2029) Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Sac Rezone before (2029)
Construction Start Date	1/1/2029
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.00
Precipitation (days)	36.4
Location	38.496993247768415, -121.41035190855798
County	Sacramento
City	Unincorporated
Air District	Sacramento Metropolitan AQMD
Air Basin	Sacramento Valley
TAZ	731
EDFZ	13
Electric Utility	Sacramento Municipal Utility District
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.21

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Apartments Low Rise	461	Dwelling Unit	37.5	488,660	327,122	—	1,291	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.49	2.09	11.3	29.3	0.03	0.29	3.73	4.02	0.27	0.89	1.16	—	7,175	7,175	0.22	0.23	12.1	7,262
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.59	328	26.0	28.7	0.06	1.09	7.84	8.93	1.00	3.98	4.98	—	6,786	6,786	0.27	0.34	0.31	6,895
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.65	13.9	8.46	17.0	0.02	0.25	2.44	2.69	0.23	0.65	0.88	—	4,446	4,446	0.15	0.20	2.99	4,511
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.30	2.54	1.54	3.10	< 0.005	0.05	0.45	0.49	0.04	0.12	0.16	—	736	736	0.03	0.03	0.50	747

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2029	2.49	2.09	11.3	29.3	0.03	0.29	3.73	4.02	0.27	0.89	1.16	—	7,175	7,175	0.22	0.23	12.1	7,262
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2029	3.59	328	26.0	28.7	0.06	1.09	7.84	8.93	1.00	3.98	4.98	—	6,786	6,786	0.27	0.34	0.31	6,895
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2029	1.65	13.9	8.46	17.0	0.02	0.25	2.44	2.69	0.23	0.65	0.88	—	4,446	4,446	0.15	0.20	2.99	4,511
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2029	0.30	2.54	1.54	3.10	< 0.005	0.05	0.45	0.49	0.04	0.12	0.16	—	736	736	0.03	0.03	0.50	747

3. Construction Emissions Details

3.1. Site Preparation (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.53	2.97	25.9	28.1	0.05	1.09	—	1.09	1.00	—	1.00	—	5,296	5,296	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	7.67	7.67	—	3.94	3.94	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.50	0.54	< 0.005	0.02	—	0.02	0.02	—	0.02	—	102	102	< 0.005	< 0.005	—	102
Dust From Material Movement	—	—	—	—	—	—	0.15	0.15	—	0.08	0.08	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.09	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	16.8	16.8	< 0.005	< 0.005	—	16.9
Dust From Material Movement	—	—	—	—	—	—	0.03	0.03	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.05	0.60	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	163	163	< 0.005	0.01	0.01	166
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.22	3.22	< 0.005	< 0.005	< 0.005	3.26
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.53	0.53	< 0.005	< 0.005	< 0.005	0.54
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Grading (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.32	2.79	22.7	26.9	0.06	0.92	—	0.92	0.84	—	0.84	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	3.59	3.59	—	1.42	1.42	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	0.15	1.25	1.47	< 0.005	0.05	—	0.05	0.05	—	0.05	—	361	361	0.01	< 0.005	—	363
Dust From Material Movement	—	—	—	—	—	—	0.20	0.20	—	0.08	0.08	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.23	0.27	< 0.005	0.01	—	0.01	0.01	—	0.01	—	59.8	59.8	< 0.005	< 0.005	—	60.0
Dust From Material Movement	—	—	—	—	—	—	0.04	0.04	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.05	0.69	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	187	187	< 0.005	0.01	0.02	189
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.5	10.5	< 0.005	< 0.005	0.01	10.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.74	1.74	< 0.005	< 0.005	< 0.005	1.76
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Building Construction (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.15	0.97	8.58	12.9	0.02	0.28	—	0.28	0.25	—	0.25	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.15	0.97	8.58	12.9	0.02	0.28	—	0.28	0.25	—	0.25	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.65	0.54	4.84	7.28	0.01	0.16	—	0.16	0.14	—	0.14	—	1,353	1,353	0.05	0.01	—	1,357
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.88	1.33	< 0.005	0.03	—	0.03	0.03	—	0.03	—	224	224	0.01	< 0.005	—	225
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.21	1.09	0.71	15.6	0.00	0.00	3.35	3.35	0.00	0.79	0.79	—	3,489	3,489	0.04	0.02	9.73	3,507
Vendor	0.13	0.04	1.98	0.82	0.01	0.02	0.37	0.39	0.02	0.10	0.12	—	1,289	1,289	0.08	0.19	2.34	1,350
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.10	0.97	0.86	11.4	0.00	0.00	3.35	3.35	0.00	0.79	0.79	—	3,101	3,101	0.07	0.13	0.25	3,142
Vendor	0.12	0.04	2.12	0.84	0.01	0.02	0.37	0.39	0.02	0.10	0.12	—	1,289	1,289	0.08	0.19	0.06	1,348
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.63	0.55	0.41	6.63	0.00	0.00	1.85	1.85	0.00	0.43	0.43	—	1,796	1,796	0.03	0.07	2.36	1,820
Vendor	0.07	0.02	1.18	0.47	0.01	0.01	0.21	0.22	0.01	0.06	0.07	—	728	728	0.05	0.11	0.57	761
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.07	1.21	0.00	0.00	0.34	0.34	0.00	0.08	0.08	—	297	297	< 0.005	0.01	0.39	301
Vendor	0.01	< 0.005	0.21	0.09	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	120	120	0.01	0.02	0.09	126
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Paving (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.80	0.67	6.46	9.92	0.01	0.24	—	0.24	0.22	—	0.22	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.25	0.38	< 0.005	0.01	—	0.01	0.01	—	0.01	—	57.9	57.9	< 0.005	< 0.005	—	58.1
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	< 0.005	0.05	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	9.59	9.59	< 0.005	< 0.005	—	9.63
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.04	0.52	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	140	140	< 0.005	0.01	0.01	142
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.51	5.51	< 0.005	< 0.005	0.01	5.59
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.91	0.91	< 0.005	< 0.005	< 0.005	0.93
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Architectural Coating (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.79	1.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	328	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.12	5.12	< 0.005	< 0.005	—	5.14
Architectural Coatings	—	12.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.85	0.85	< 0.005	< 0.005	—	0.85
Architectural Coatings	—	2.29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.22	0.19	0.17	2.29	0.00	0.00	0.67	0.67	0.00	0.16	0.16	—	620	620	0.01	0.03	0.05	628
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	24.4	24.4	< 0.005	< 0.005	0.03	24.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.04	4.04	< 0.005	< 0.005	0.01	4.10
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	1/1/2029	1/9/2029	5.00	7.00	—
Grading	Grading	1/10/2029	2/6/2029	5.00	20.0	—
Building Construction	Building Construction	2/7/2029	11/21/2029	5.00	206	—
Paving	Paving	11/22/2029	12/11/2029	5.00	14.0	—
Architectural Coating	Architectural Coating	12/12/2029	12/31/2029	5.00	14.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37

Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	14.3	LDA,LDT1,LDT2
Site Preparation	Vendor	—	8.80	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	14.3	LDA,LDT1,LDT2

Grading	Vendor	—	8.80	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	332	14.3	LDA,LDT1,LDT2
Building Construction	Vendor	49.3	8.80	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	14.3	LDA,LDT1,LDT2
Paving	Vendor	—	8.80	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	66.4	14.3	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	8.80	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	989,537	329,846	0.00	0.00	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	—	—	10.5	0.00	—
Grading	—	—	60.0	0.00	—
Paving	0.00	0.00	0.00	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Apartments Low Rise	—	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2029	0.00	375	0.01	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	19.3	annual days of extreme heat
Extreme Precipitation	5.70	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	2	0	0	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	2	1	1	3
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A

Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	42.6
AQ-PM	34.0
AQ-DPM	24.2
Drinking Water	87.7
Lead Risk Housing	46.5
Pesticides	0.00
Toxic Releases	22.0
Traffic	61.2
Effect Indicators	—
CleanUp Sites	40.8
Groundwater	55.3
Haz Waste Facilities/Generators	30.2
Impaired Water Bodies	43.8
Solid Waste	39.0

Sensitive Population	—
Asthma	91.3
Cardio-vascular	90.3
Low Birth Weights	79.8
Socioeconomic Factor Indicators	—
Education	75.7
Housing	77.6
Linguistic	77.4
Poverty	89.5
Unemployment	95.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	9.072244322
Employed	15.56525087
Median HI	12.4085718
Education	—
Bachelor's or higher	17.50288721
High school enrollment	14.67984088
Preschool enrollment	74.27178237
Transportation	—
Auto Access	16.95110997
Active commuting	49.83959964
Social	—
2-parent households	10.38111125

Voting	30.89952521
Neighborhood	—
Alcohol availability	49.8652637
Park access	57.48748877
Retail density	47.01655332
Supermarket access	29.53933017
Tree canopy	84.60156551
Housing	—
Homeownership	30.16809958
Housing habitability	28.23046324
Low-inc homeowner severe housing cost burden	26.71628384
Low-inc renter severe housing cost burden	30.95085333
Uncrowded housing	20.03079687
Health Outcomes	—
Insured adults	19.91530861
Arthritis	12.5
Asthma ER Admissions	10.3
High Blood Pressure	6.0
Cancer (excluding skin)	49.7
Asthma	8.7
Coronary Heart Disease	15.5
Chronic Obstructive Pulmonary Disease	5.0
Diagnosed Diabetes	10.1
Life Expectancy at Birth	9.0
Cognitively Disabled	18.3
Physically Disabled	43.7
Heart Attack ER Admissions	11.0

Mental Health Not Good	15.9
Chronic Kidney Disease	10.6
Obesity	23.4
Pedestrian Injuries	55.0
Physical Health Not Good	14.4
Stroke	6.5
Health Risk Behaviors	—
Binge Drinking	94.4
Current Smoker	5.6
No Leisure Time for Physical Activity	13.6
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	41.8
Elderly	68.4
English Speaking	12.5
Foreign-born	70.1
Outdoor Workers	4.6
Climate Change Adaptive Capacity	—
Impervious Surface Cover	47.0
Traffic Density	45.1
Traffic Access	59.8
Other Indices	—
Hardship	90.6
Other Decision Support	—
2016 Voting	14.1

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	80.0
Healthy Places Index Score for Project Location (b)	13.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	South Florin

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	fifth of total project before rezone
Construction: Construction Phases	1/5 of total project

Sac Rezone Fair Oaks (before) Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Sac Rezone Fair Oaks (before)
Construction Start Date	1/1/2025
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.50
Precipitation (days)	39.2
Location	38.637469230516956, -121.32836613666706
County	Sacramento
City	Unincorporated
Air District	Sacramento Metropolitan AQMD
Air Basin	Sacramento Valley
TAZ	619
EDFZ	13
Electric Utility	Sacramento Municipal Utility District
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.21

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Apartments Low Rise	25.0	Dwelling Unit	1.25	26,500	10,890	—	70.0	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.37	49.9	9.14	11.2	0.02	0.33	0.20	0.53	0.30	0.05	0.35	—	2,083	2,083	0.08	0.03	0.99	2,096
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.84	1.55	14.1	15.0	0.02	0.64	2.86	3.51	0.59	1.36	1.95	—	2,555	2,555	0.10	0.03	0.03	2,565
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.40	1.01	2.69	3.22	0.01	0.10	0.08	0.18	0.09	0.02	0.11	—	603	603	0.02	0.01	0.12	607
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.07	0.19	0.49	0.59	< 0.005	0.02	0.01	0.03	0.02	< 0.005	0.02	—	99.9	99.9	< 0.005	< 0.005	0.02	100

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2025	1.37	49.9	9.14	11.2	0.02	0.33	0.20	0.53	0.30	0.05	0.35	—	2,083	2,083	0.08	0.03	0.99	2,096
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	1.84	1.55	14.1	15.0	0.02	0.64	2.86	3.51	0.59	1.36	1.95	—	2,555	2,555	0.10	0.03	0.03	2,565
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.40	1.01	2.69	3.22	0.01	0.10	0.08	0.18	0.09	0.02	0.11	—	603	603	0.02	0.01	0.12	607
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.07	0.19	0.49	0.59	< 0.005	0.02	0.01	0.03	0.02	< 0.005	0.02	—	99.9	99.9	< 0.005	< 0.005	0.02	100

3. Construction Emissions Details

3.1. Site Preparation (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.56	1.31	12.1	12.1	0.02	0.56	—	0.56	0.52	—	0.52	—	2,065	2,065	0.08	0.02	—	2,072
Dust From Material Movement	—	—	—	—	—	—	2.44	2.44	—	1.17	1.17	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.66	5.66	< 0.005	< 0.005	—	5.68
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.94	0.94	< 0.005	< 0.005	—	0.94
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.33	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	75.6	75.6	< 0.005	< 0.005	0.01	76.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.21	0.21	< 0.005	< 0.005	< 0.005	0.22
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.04	0.04	< 0.005	< 0.005	< 0.005	0.04
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Grading (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.80	1.51	14.1	14.5	0.02	0.64	—	0.64	0.59	—	0.59	—	2,455	2,455	0.10	0.02	—	2,463
Dust From Material Movement	—	—	—	—	—	—	2.76	2.76	—	1.34	1.34	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.08	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	13.5	13.5	< 0.005	< 0.005	—	13.5
Dust From Material Movement	—	—	—	—	—	—	0.02	0.02	—	0.01	0.01	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.23	2.23	< 0.005	< 0.005	—	2.23
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.04	0.44	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	101	101	< 0.005	< 0.005	0.01	102
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.57	0.57	< 0.005	< 0.005	< 0.005	0.57
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.09	0.09	< 0.005	< 0.005	< 0.005	0.10
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Building Construction (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	8.95	10.0	0.02	0.33	—	0.33	0.30	—	0.30	—	1,801	1,801	0.07	0.01	—	1,807
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	8.95	10.0	0.02	0.33	—	0.33	0.30	—	0.30	—	1,801	1,801	0.07	0.01	—	1,807
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.35	0.29	2.45	2.75	0.01	0.09	—	0.09	0.08	—	0.08	—	493	493	0.02	< 0.005	—	495
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.45	0.50	< 0.005	0.02	—	0.02	0.02	—	0.02	—	81.7	81.7	< 0.005	< 0.005	—	82.0
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.05	1.08	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	204	204	< 0.005	0.01	0.78	207
Vendor	0.01	< 0.005	0.14	0.05	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	77.3	77.3	0.01	0.01	0.20	81.0
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.07	0.80	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	181	181	< 0.005	0.01	0.02	184
Vendor	0.01	< 0.005	0.15	0.05	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	77.3	77.3	0.01	0.01	0.01	80.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.22	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	51.0	51.0	< 0.005	< 0.005	0.09	51.7
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	21.2	21.2	< 0.005	< 0.005	0.02	22.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.44	8.44	< 0.005	< 0.005	0.02	8.56
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.51	3.51	< 0.005	< 0.005	< 0.005	3.67
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Paving (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.59	0.49	4.63	6.50	0.01	0.20	—	0.20	0.19	—	0.19	—	992	992	0.04	0.01	—	995
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	13.6	13.6	< 0.005	< 0.005	—	13.6
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.25	2.25	< 0.005	< 0.005	—	2.26
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.04	0.75	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	142	142	< 0.005	0.01	0.54	144
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.77	1.77	< 0.005	< 0.005	< 0.005	1.80
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.29	0.29	< 0.005	< 0.005	< 0.005	0.30
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Architectural Coating (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.13	0.88	1.14	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	49.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.83	1.83	< 0.005	< 0.005	—	1.84
Architectural Coatings	—	0.68	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.30	0.30	< 0.005	< 0.005	—	0.30
Architectural Coatings	—	0.12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.22	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	40.9	40.9	< 0.005	< 0.005	0.16	41.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.51	0.51	< 0.005	< 0.005	< 0.005	0.52
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.08	0.08	< 0.005	< 0.005	< 0.005	0.09
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	1/1/2025	1/1/2025	5.00	1.00	—
Grading	Grading	1/2/2025	1/3/2025	5.00	2.00	—
Building Construction	Building Construction	1/4/2025	5/23/2025	5.00	100	—
Paving	Paving	5/24/2025	5/30/2025	5.00	5.00	—
Architectural Coating	Architectural Coating	5/31/2025	6/6/2025	5.00	5.00	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Graders	Diesel	Average	1.00	8.00	148	0.41
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37

Site Preparation	Rubber Tired Dozers	Diesel	Average	1.00	7.00	367	0.40
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	7.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	6.00	367	0.29
Building Construction	Forklifts	Diesel	Average	1.00	6.00	82.0	0.20
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	1.00	6.00	84.0	0.37
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Welders	Diesel	Average	3.00	8.00	46.0	0.45
Paving	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Paving	Cement and Mortar Mixers	Diesel	Average	1.00	6.00	10.0	0.56
Paving	Pavers	Diesel	Average	1.00	6.00	81.0	0.42
Paving	Rollers	Diesel	Average	1.00	7.00	36.0	0.38
Paving	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	7.50	14.3	LDA,LDT1,LDT2
Site Preparation	Vendor	—	8.80	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT

Grading	—	—	—	—
Grading	Worker	10.0	14.3	LDA,LDT1,LDT2
Grading	Vendor	—	8.80	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	18.0	14.3	LDA,LDT1,LDT2
Building Construction	Vendor	2.67	8.80	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	12.5	14.3	LDA,LDT1,LDT2
Paving	Vendor	—	8.80	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	3.60	14.3	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	8.80	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	53,663	17,888	0.00	0.00	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	—	—	0.94	0.00	—
Grading	—	—	2.00	0.00	—
Paving	0.00	0.00	0.00	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%
Water Demolished Area	2	36%	36%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Apartments Low Rise	—	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2025	0.00	375	0.01	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	24.1	annual days of extreme heat
Extreme Precipitation	6.45	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.69	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	2	0	0	N/A
Extreme Precipitation	2	0	0	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	2	1	1	3
Extreme Precipitation	2	1	1	3
Sea Level Rise	N/A	N/A	N/A	N/A

Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	59.7
AQ-PM	39.5
AQ-DPM	50.3
Drinking Water	47.8
Lead Risk Housing	54.5
Pesticides	0.00
Toxic Releases	20.9
Traffic	21.4
Effect Indicators	—
CleanUp Sites	18.7

Groundwater	78.3
Haz Waste Facilities/Generators	59.8
Impaired Water Bodies	77.3
Solid Waste	0.00
Sensitive Population	—
Asthma	88.7
Cardio-vascular	62.6
Low Birth Weights	7.38
Socioeconomic Factor Indicators	—
Education	25.1
Housing	70.2
Linguistic	37.0
Poverty	67.4
Unemployment	14.4

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	37.16155524
Employed	15.56525087
Median HI	23.82907738
Education	—
Bachelor's or higher	54.3308097
High school enrollment	26.62645964
Preschool enrollment	15.20595406
Transportation	—

Auto Access	28.94905685
Active commuting	46.06698319
Social	—
2-parent households	11.18952906
Voting	74.93904786
Neighborhood	—
Alcohol availability	37.77749262
Park access	30.25792378
Retail density	94.5977159
Supermarket access	42.71782369
Tree canopy	91.62068523
Housing	—
Homeownership	51.98254844
Housing habitability	41.55010907
Low-inc homeowner severe housing cost burden	37.4566919
Low-inc renter severe housing cost burden	6.73681509
Uncrowded housing	66.9190299
Health Outcomes	—
Insured adults	47.91479533
Arthritis	0.0
Asthma ER Admissions	6.0
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0

Life Expectancy at Birth	11.1
Cognitively Disabled	13.7
Physically Disabled	26.6
Heart Attack ER Admissions	48.8
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	52.9
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	67.0
Elderly	27.8
English Speaking	75.3
Foreign-born	10.6
Outdoor Workers	46.7
Climate Change Adaptive Capacity	—
Impervious Surface Cover	61.1
Traffic Density	59.6
Traffic Access	23.0
Other Indices	—

Hardship	64.4
Other Decision Support	—
2016 Voting	65.5

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	47.0
Healthy Places Index Score for Project Location (b)	30.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	no demo
Land Use	PD

Sac Rezone North Watt (before) Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Sac Rezone North Watt (before)
Construction Start Date	6/7/2025
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.50
Precipitation (days)	39.2
Location	38.66735756395545, -121.38321539651498
County	Sacramento
City	Unincorporated
Air District	Sacramento Metropolitan AQMD
Air Basin	Sacramento Valley
TAZ	657
EDFZ	13
Electric Utility	Sacramento Municipal Utility District
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.21

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Apartments Low Rise	505	Dwelling Unit	21.3	535,300	185,653	—	1,414	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.02	3.38	31.7	36.0	0.06	1.37	7.84	9.21	1.26	3.98	5.24	—	8,086	8,086	0.27	0.40	19.9	8,231
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.05	252	14.8	30.3	0.03	0.45	4.08	4.54	0.42	0.97	1.39	—	7,623	7,623	0.29	0.40	0.52	7,749
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.99	13.9	9.79	21.0	0.02	0.29	2.84	3.13	0.26	0.68	0.94	—	5,439	5,439	0.19	0.28	5.59	5,534
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.36	2.53	1.79	3.83	< 0.005	0.05	0.52	0.57	0.05	0.12	0.17	—	901	901	0.03	0.05	0.93	916

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2025	4.02	3.38	31.7	36.0	0.06	1.37	7.84	9.21	1.26	3.98	5.24	—	8,086	8,086	0.27	0.40	19.9	8,231
2026	3.04	2.58	13.4	34.5	0.03	0.40	4.08	4.48	0.37	0.97	1.34	—	7,974	7,974	0.25	0.39	18.1	8,114
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	3.05	2.55	14.8	30.3	0.03	0.45	4.08	4.54	0.42	0.97	1.39	—	7,623	7,623	0.29	0.40	0.52	7,749
2026	2.80	2.44	13.9	29.1	0.03	0.40	4.08	4.48	0.37	0.97	1.34	—	7,520	7,520	0.28	0.40	0.47	7,646
2027	2.69	252	13.2	28.1	0.03	0.36	4.08	4.44	0.33	0.97	1.30	—	7,422	7,422	0.27	0.39	0.43	7,544
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	1.35	1.14	7.87	12.3	0.02	0.28	1.71	1.99	0.26	0.52	0.78	—	2,993	2,993	0.11	0.12	2.48	3,034
2026	1.99	1.74	9.79	21.0	0.02	0.29	2.84	3.13	0.26	0.68	0.94	—	5,439	5,439	0.19	0.28	5.59	5,534
2027	0.11	13.9	0.64	1.24	< 0.005	0.02	0.11	0.13	0.02	0.03	0.05	—	256	256	0.01	0.01	0.19	259
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.25	0.21	1.44	2.25	< 0.005	0.05	0.31	0.36	0.05	0.09	0.14	—	496	496	0.02	0.02	0.41	502
2026	0.36	0.32	1.79	3.83	< 0.005	0.05	0.52	0.57	0.05	0.12	0.17	—	901	901	0.03	0.05	0.93	916
2027	0.02	2.53	0.12	0.23	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	42.3	42.3	< 0.005	< 0.005	0.03	42.8

3. Construction Emissions Details

3.1. Site Preparation (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.94	3.31	31.6	30.2	0.05	1.37	—	1.37	1.26	—	1.26	—	5,295	5,295	0.21	0.04	—	5,314

Dust From Material Movement	—	—	—	—	—	—	7.67	7.67	—	3.94	3.94	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.87	0.83	< 0.005	0.04	—	0.04	0.03	—	0.03	—	145	145	0.01	< 0.005	—	146
Dust From Material Movement	—	—	—	—	—	—	0.21	0.21	—	0.11	0.11	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.16	0.15	< 0.005	0.01	—	0.01	0.01	—	0.01	—	24.0	24.0	< 0.005	< 0.005	—	24.1
Dust From Material Movement	—	—	—	—	—	—	0.04	0.04	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.05	1.05	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	199	199	< 0.005	0.01	0.76	202
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.96	4.96	< 0.005	< 0.005	0.01	5.03
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.82	0.82	< 0.005	< 0.005	< 0.005	0.83
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Grading (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.80	3.20	29.7	28.3	0.06	1.23	—	1.23	1.14	—	1.14	—	6,599	6,599	0.27	0.05	—	6,622
Dust From Material Movement	—	—	—	—	—	—	3.59	3.59	—	1.42	1.42	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.36	0.31	2.85	2.71	0.01	0.12	—	0.12	0.11	—	0.11	—	633	633	0.03	0.01	—	635
Dust From Material Movement	—	—	—	—	—	—	0.34	0.34	—	0.14	0.14	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.52	0.50	< 0.005	0.02	—	0.02	0.02	—	0.02	—	105	105	< 0.005	< 0.005	—	105
Dust From Material Movement	—	—	—	—	—	—	0.06	0.06	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.06	1.21	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	227	227	< 0.005	0.01	0.87	230
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	19.8	19.8	< 0.005	< 0.005	0.04	20.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.28	3.28	< 0.005	< 0.005	0.01	3.33
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Building Construction (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.38	0.32	2.96	3.70	0.01	0.12	—	0.12	0.11	—	0.11	—	680	680	0.03	0.01	—	683
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.07	0.06	0.54	0.68	< 0.005	0.02	—	0.02	0.02	—	0.02	—	113	113	< 0.005	< 0.005	—	113
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.67	1.54	1.06	21.9	0.00	0.00	3.67	3.67	0.00	0.86	0.86	—	4,127	4,127	0.06	0.15	15.9	4,188
Vendor	0.17	0.07	2.83	1.05	0.01	0.02	0.41	0.43	0.02	0.11	0.13	—	1,561	1,561	0.10	0.23	4.06	1,637
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.53	1.37	1.34	16.1	0.00	0.00	3.67	3.67	0.00	0.86	0.86	—	3,664	3,664	0.09	0.15	0.41	3,711
Vendor	0.17	0.05	3.03	1.07	0.01	0.02	0.41	0.43	0.02	0.11	0.13	—	1,561	1,561	0.10	0.23	0.11	1,632
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.43	0.39	0.34	4.68	0.00	0.00	1.02	1.02	0.00	0.24	0.24	—	1,067	1,067	0.02	0.04	1.94	1,082
Vendor	0.05	0.02	0.85	0.30	< 0.005	0.01	0.11	0.12	0.01	0.03	0.04	—	443	443	0.03	0.07	0.50	464
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.06	0.85	0.00	0.00	0.19	0.19	0.00	0.04	0.04	—	177	177	< 0.005	0.01	0.32	179
Vendor	0.01	< 0.005	0.15	0.05	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	73.3	73.3	< 0.005	0.01	0.08	76.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Building Construction (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.91	0.77	7.04	9.26	0.02	0.27	—	0.27	0.25	—	0.25	—	1,712	1,712	0.07	0.01	—	1,718
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	1.28	1.69	< 0.005	0.05	—	0.05	0.05	—	0.05	—	283	283	0.01	< 0.005	—	284
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.60	1.46	0.94	20.5	0.00	0.00	3.67	3.67	0.00	0.86	0.86	—	4,047	4,047	0.06	0.14	14.5	4,104
Vendor	0.16	0.06	2.65	1.01	0.01	0.02	0.41	0.43	0.02	0.11	0.13	—	1,530	1,530	0.10	0.23	3.68	1,605
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.36	1.32	1.21	15.1	0.00	0.00	3.67	3.67	0.00	0.86	0.86	—	3,594	3,594	0.08	0.15	0.38	3,640
Vendor	0.16	0.05	2.84	1.03	0.01	0.02	0.41	0.43	0.02	0.11	0.13	—	1,529	1,529	0.10	0.23	0.10	1,600
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.96	0.94	0.76	11.0	0.00	0.00	2.56	2.56	0.00	0.60	0.60	—	2,634	2,634	0.05	0.10	4.46	2,671
Vendor	0.11	0.04	1.99	0.73	0.01	0.02	0.29	0.30	0.01	0.08	0.09	—	1,093	1,093	0.07	0.16	1.13	1,144
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.18	0.17	0.14	2.00	0.00	0.00	0.47	0.47	0.00	0.11	0.11	—	436	436	0.01	0.02	0.74	442
Vendor	0.02	0.01	0.36	0.13	< 0.005	< 0.005	0.05	0.06	< 0.005	0.01	0.02	—	181	181	0.01	0.03	0.19	189
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Building Construction (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.23	1.03	9.39	12.9	0.02	0.34	—	0.34	0.31	—	0.31	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.15	0.20	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	37.5	37.5	< 0.005	< 0.005	—	37.7
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.21	6.21	< 0.005	< 0.005	—	6.23
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.30	1.15	1.20	14.1	0.00	0.00	3.67	3.67	0.00	0.86	0.86	—	3,530	3,530	0.08	0.15	0.34	3,576
Vendor	0.16	0.05	2.65	1.00	0.01	0.02	0.41	0.43	0.02	0.11	0.13	—	1,495	1,495	0.09	0.22	0.09	1,562
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.23	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	56.7	56.7	< 0.005	< 0.005	0.09	57.5
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	23.4	23.4	< 0.005	< 0.005	0.02	24.5
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.39	9.39	< 0.005	< 0.005	0.01	9.52
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.87	3.87	< 0.005	< 0.005	< 0.005	4.05
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Paving (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.88	0.74	6.94	9.95	0.01	0.30	—	0.30	0.27	—	0.27	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.38	0.55	< 0.005	0.02	—	0.02	0.02	—	0.02	—	82.8	82.8	< 0.005	< 0.005	—	83.1
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.07	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	13.7	13.7	< 0.005	< 0.005	—	13.8
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.05	0.58	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	146	146	< 0.005	0.01	0.01	148
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.19	8.19	< 0.005	< 0.005	0.01	8.30
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.36	1.36	< 0.005	< 0.005	< 0.005	1.37
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Architectural Coating (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.11	0.83	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	251	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.32	7.32	< 0.005	< 0.005	—	7.34
Architectural Coatings	—	13.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.21	1.21	< 0.005	< 0.005	—	1.22
Architectural Coatings	—	2.51	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.26	0.23	0.24	2.83	0.00	0.00	0.73	0.73	0.00	0.17	0.17	—	706	706	0.02	0.03	0.07	715
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.16	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	39.7	39.7	< 0.005	< 0.005	0.06	40.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.57	6.57	< 0.005	< 0.005	0.01	6.66
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequest	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	6/7/2025	6/20/2025	5.00	10.0	—
Grading	Grading	6/21/2025	8/8/2025	5.00	35.0	—
Building Construction	Building Construction	8/9/2025	1/8/2027	5.00	370	—
Paving	Paving	1/9/2027	2/5/2027	5.00	20.0	—
Architectural Coating	Architectural Coating	2/6/2027	3/5/2027	5.00	20.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	14.3	LDA,LDT1,LDT2

Site Preparation	Vendor	—	8.80	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	14.3	LDA,LDT1,LDT2
Grading	Vendor	—	8.80	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	364	14.3	LDA,LDT1,LDT2
Building Construction	Vendor	54.0	8.80	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	14.3	LDA,LDT1,LDT2
Paving	Vendor	—	8.80	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	72.7	14.3	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	8.80	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	1,083,983	361,328	0.00	0.00	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	—	—	15.0	0.00	—
Grading	—	—	105	0.00	—
Paving	0.00	0.00	0.00	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Apartments Low Rise	—	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2025	0.00	375	0.01	< 0.005
2026	0.00	375	0.01	< 0.005

2027	0.00	375	0.01	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	21.8	annual days of extreme heat
Extreme Precipitation	6.35	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth

Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	2	0	0	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2

Extreme Precipitation	2	1	1	3
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	58.2
AQ-PM	37.4
AQ-DPM	27.5
Drinking Water	61.1
Lead Risk Housing	92.2
Pesticides	7.24
Toxic Releases	21.8
Traffic	47.0

Effect Indicators	—
CleanUp Sites	80.9
Groundwater	99.2
Haz Waste Facilities/Generators	61.6
Impaired Water Bodies	0.00
Solid Waste	52.9
Sensitive Population	—
Asthma	93.4
Cardio-vascular	69.2
Low Birth Weights	79.4
Socioeconomic Factor Indicators	—
Education	62.9
Housing	73.4
Linguistic	39.2
Poverty	91.6
Unemployment	65.6

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	10.16296677
Employed	6.274862056
Median HI	6.672654947
Education	—
Bachelor's or higher	19.73566021
High school enrollment	12.79353266

Preschool enrollment	42.65366354
Transportation	—
Auto Access	24.89413576
Active commuting	74.06646991
Social	—
2-parent households	39.00936738
Voting	13.02450917
Neighborhood	—
Alcohol availability	41.6527653
Park access	47.42717824
Retail density	38.27794174
Supermarket access	72.19299371
Tree canopy	82.34312845
Housing	—
Homeownership	23.13614782
Housing habitability	24.91979982
Low-inc homeowner severe housing cost burden	13.20415758
Low-inc renter severe housing cost burden	43.7957141
Uncrowded housing	25.445913
Health Outcomes	—
Insured adults	37.80315668
Arthritis	0.0
Asthma ER Admissions	5.9
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0

Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	5.5
Cognitively Disabled	4.0
Physically Disabled	5.6
Heart Attack ER Admissions	16.8
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	96.7
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	16.3
Elderly	67.6
English Speaking	43.4
Foreign-born	30.0
Outdoor Workers	48.6
Climate Change Adaptive Capacity	—
Impervious Surface Cover	51.3
Traffic Density	47.2

Traffic Access	66.1
Other Indices	—
Hardship	80.5
Other Decision Support	—
2016 Voting	6.4

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	83.0
Healthy Places Index Score for Project Location (b)	13.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	20% of total lot acreage is landscaped as in GP
Construction: Construction Phases	no demo

Sac Rezone Old Florin (before) Detailed Report

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1.3. User-Selected Emission Reduction Measures by Emissions Sector

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

2.2. Construction Emissions by Year, Unmitigated

3. Construction Emissions Details

3.1. Site Preparation (2027) - Unmitigated

3.3. Grading (2027) - Unmitigated

3.5. Building Construction (2027) - Unmitigated

3.7. Building Construction (2028) - Unmitigated

3.9. Paving (2028) - Unmitigated

3.11. Architectural Coating (2028) - Unmitigated

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

5. Activity Data

5.1. Construction Schedule

5.2. Off-Road Equipment

5.2.1. Unmitigated

5.3. Construction Vehicles

5.3.1. Unmitigated

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

5.5. Architectural Coatings

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

5.6.2. Construction Earthmoving Control Strategies

5.7. Construction Paving

5.8. Construction Electricity Consumption and Emissions Factors

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

6.2. Initial Climate Risk Scores

6.3. Adjusted Climate Risk Scores

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

7.2. Healthy Places Index Scores

7.3. Overall Health & Equity Scores

7.4. Health & Equity Measures

7.5. Evaluation Scorecard

7.6. Health & Equity Custom Measures

8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Sac Rezone Old Florin (before)
Construction Start Date	3/6/2027
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.00
Precipitation (days)	37.8
Location	38.49656099729435, -121.39733654991514
County	Sacramento
City	Unincorporated
Air District	Sacramento Metropolitan AQMD
Air Basin	Sacramento Valley
TAZ	774
EDFZ	13
Electric Utility	Sacramento Municipal Utility District
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.21

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Apartments Low Rise	503	Dwelling Unit	25.2	533,180	219,717	—	1,408	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.58	3.02	25.6	33.1	0.06	1.04	4.07	4.83	0.96	1.47	2.43	—	7,845	7,845	0.27	0.38	16.4	7,979
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.69	251	28.0	29.0	0.06	1.17	7.84	9.01	1.08	3.98	5.06	—	7,402	7,402	0.27	0.38	0.43	7,524
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.69	15.0	9.30	16.7	0.02	0.30	2.43	2.73	0.28	0.69	0.96	—	4,292	4,292	0.15	0.21	3.56	4,354
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.31	2.73	1.70	3.04	< 0.005	0.05	0.44	0.50	0.05	0.13	0.18	—	711	711	0.02	0.03	0.59	721

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2027	3.58	3.02	25.6	33.1	0.06	1.04	4.07	4.83	0.96	1.47	2.43	—	7,845	7,845	0.27	0.38	16.4	7,979
2028	2.71	2.29	12.0	31.9	0.03	0.32	4.07	4.39	0.30	0.97	1.26	—	7,724	7,724	0.24	0.26	14.7	7,823
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	3.69	3.11	28.0	29.0	0.06	1.17	7.84	9.01	1.08	3.98	5.06	—	7,402	7,402	0.27	0.38	0.43	7,524
2028	2.59	251	12.5	27.2	0.03	0.32	4.07	4.39	0.30	0.97	1.26	—	7,291	7,291	0.26	0.38	0.38	7,412
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	1.69	1.41	9.30	16.7	0.02	0.30	2.43	2.73	0.28	0.69	0.96	—	4,292	4,292	0.15	0.18	3.33	4,354
2028	1.48	15.0	7.15	15.8	0.02	0.19	2.22	2.41	0.18	0.53	0.70	—	4,181	4,181	0.14	0.21	3.56	4,251
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.31	0.26	1.70	3.04	< 0.005	0.05	0.44	0.50	0.05	0.13	0.18	—	711	711	0.02	0.03	0.55	721
2028	0.27	2.73	1.30	2.89	< 0.005	0.03	0.41	0.44	0.03	0.10	0.13	—	692	692	0.02	0.03	0.59	704

3. Construction Emissions Details

3.1. Site Preparation (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.63	3.05	28.0	28.3	0.05	1.17	—	1.17	1.08	—	1.08	—	5,298	5,298	0.21	0.04	—	5,316

Dust From Material Movement	—	—	—	—	—	—	7.67	7.67	—	3.94	3.94	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.08	0.77	0.77	< 0.005	0.03	—	0.03	0.03	—	0.03	—	145	145	0.01	< 0.005	—	146
Dust From Material Movement	—	—	—	—	—	—	0.21	0.21	—	0.11	0.11	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.14	0.14	< 0.005	0.01	—	0.01	0.01	—	0.01	—	24.0	24.0	< 0.005	< 0.005	—	24.1
Dust From Material Movement	—	—	—	—	—	—	0.04	0.04	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.06	0.68	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	170	170	< 0.005	0.01	0.02	172
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.78	4.78	< 0.005	< 0.005	0.01	4.84
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.79	0.79	< 0.005	< 0.005	< 0.005	0.80
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Grading (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.51	2.95	25.6	27.3	0.06	1.04	—	1.04	0.96	—	0.96	—	6,598	6,598	0.27	0.05	—	6,621
Dust From Material Movement	—	—	—	—	—	—	3.59	3.59	—	1.42	1.42	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.51	2.95	25.6	27.3	0.06	1.04	—	1.04	0.96	—	0.96	—	6,598	6,598	0.27	0.05	—	6,621

Dust From Material Movement	—	—	—	—	—	—	3.59	3.59	—	1.42	1.42	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.34	0.28	2.45	2.62	0.01	0.10	—	0.10	0.09	—	0.09	—	633	633	0.03	0.01	—	635
Dust From Material Movement	—	—	—	—	—	—	0.34	0.34	—	0.14	0.14	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.45	0.48	< 0.005	0.02	—	0.02	0.02	—	0.02	—	105	105	< 0.005	< 0.005	—	105
Dust From Material Movement	—	—	—	—	—	—	0.06	0.06	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.05	1.06	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	219	219	< 0.005	0.01	0.72	222
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.07	0.06	0.07	0.78	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	194	194	< 0.005	0.01	0.02	197
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.08	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	19.1	19.1	< 0.005	< 0.005	0.03	19.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.16	3.16	< 0.005	< 0.005	< 0.005	3.21
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Building Construction (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.23	1.03	9.39	12.9	0.02	0.34	—	0.34	0.31	—	0.31	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.23	1.03	9.39	12.9	0.02	0.34	—	0.34	0.31	—	0.31	—	2,397	2,397	0.10	0.02	—	2,405

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.57	0.48	4.37	6.03	0.01	0.16	—	0.16	0.14	—	0.14	—	1,116	1,116	0.05	0.01	—	1,120
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.09	0.80	1.10	< 0.005	0.03	—	0.03	0.03	—	0.03	—	185	185	0.01	< 0.005	—	185
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.43	1.40	0.92	19.2	0.00	0.00	3.66	3.66	0.00	0.86	0.86	—	3,959	3,959	0.06	0.14	13.1	4,014
Vendor	0.16	0.06	2.48	0.97	0.01	0.02	0.41	0.43	0.02	0.11	0.13	—	1,489	1,489	0.09	0.22	3.30	1,560
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.30	1.14	1.19	14.1	0.00	0.00	3.66	3.66	0.00	0.86	0.86	—	3,516	3,516	0.08	0.15	0.34	3,562
Vendor	0.16	0.05	2.64	0.99	0.01	0.02	0.41	0.43	0.02	0.11	0.13	—	1,489	1,489	0.09	0.22	0.09	1,556
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.60	0.53	0.49	6.71	0.00	0.00	1.66	1.66	0.00	0.39	0.39	—	1,680	1,680	0.03	0.06	2.63	1,703
Vendor	0.07	0.03	1.21	0.45	< 0.005	0.01	0.19	0.20	0.01	0.05	0.06	—	694	694	0.04	0.10	0.66	726
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.11	0.10	0.09	1.23	0.00	0.00	0.30	0.30	0.00	0.07	0.07	—	278	278	< 0.005	0.01	0.44	282
Vendor	0.01	< 0.005	0.22	0.08	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	115	115	0.01	0.02	0.11	120
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Building Construction (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.18	0.99	8.92	12.9	0.02	0.30	—	0.30	0.28	—	0.28	—	2,397	2,397	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.18	0.99	8.92	12.9	0.02	0.30	—	0.30	0.28	—	0.28	—	2,397	2,397	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.65	0.54	4.89	7.09	0.01	0.16	—	0.16	0.15	—	0.15	—	1,314	1,314	0.05	0.01	—	1,318
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.89	1.29	< 0.005	0.03	—	0.03	0.03	—	0.03	—	217	217	0.01	< 0.005	—	218

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.38	1.24	0.79	18.0	0.00	0.00	3.66	3.66	0.00	0.86	0.86	—	3,877	3,877	0.05	0.02	11.8	3,897
Vendor	0.15	0.06	2.31	0.93	0.01	0.02	0.41	0.43	0.02	0.11	0.13	—	1,450	1,450	0.09	0.22	2.92	1,520
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.26	1.11	1.06	13.3	0.00	0.00	3.66	3.66	0.00	0.86	0.86	—	3,444	3,444	0.07	0.15	0.31	3,490
Vendor	0.14	0.05	2.47	0.96	0.01	0.02	0.41	0.43	0.02	0.11	0.13	—	1,449	1,449	0.09	0.22	0.08	1,517
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.69	0.61	0.51	7.43	0.00	0.00	1.96	1.96	0.00	0.46	0.46	—	1,937	1,937	0.03	0.08	2.80	1,963
Vendor	0.08	0.03	1.33	0.52	0.01	0.01	0.22	0.23	0.01	0.06	0.07	—	794	794	0.05	0.12	0.69	832
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.11	0.09	1.36	0.00	0.00	0.36	0.36	0.00	0.08	0.08	—	321	321	0.01	0.01	0.46	325
Vendor	0.01	0.01	0.24	0.09	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	131	131	0.01	0.02	0.11	138
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Paving (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.82	0.69	6.63	9.91	0.01	0.26	—	0.26	0.24	—	0.24	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.36	0.54	< 0.005	0.01	—	0.01	0.01	—	0.01	—	82.8	82.8	< 0.005	< 0.005	—	83.1
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.07	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	13.7	13.7	< 0.005	< 0.005	—	13.8
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.04	0.55	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	143	143	< 0.005	0.01	0.01	145
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.02	8.02	< 0.005	< 0.005	0.01	8.13
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.33	1.33	< 0.005	< 0.005	< 0.005	1.35
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Architectural Coating (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	0.81	1.12	< 0.005	0.02	—	0.02	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	250	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.01	0.01	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.32	7.32	< 0.005	< 0.005	—	7.34
Architectural Coatings	—	13.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.21	1.21	< 0.005	< 0.005	—	1.22
Architectural Coatings	—	2.50	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.25	0.22	0.21	2.66	0.00	0.00	0.73	0.73	0.00	0.17	0.17	—	689	689	0.01	0.03	0.06	698
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.15	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	38.7	38.7	< 0.005	< 0.005	0.06	39.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.41	6.41	< 0.005	< 0.005	0.01	6.50

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	3/6/2027	3/19/2027	5.00	10.0	—
Grading	Grading	3/20/2027	5/7/2027	5.00	35.0	—
Building Construction	Building Construction	5/8/2027	10/6/2028	5.00	370	—
Paving	Paving	10/7/2028	11/3/2028	5.00	20.0	—
Architectural Coating	Architectural Coating	11/4/2028	12/1/2028	5.00	20.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	14.3	LDA,LDT1,LDT2
Site Preparation	Vendor	—	8.80	HHDT,MHDT

Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	14.3	LDA,LDT1,LDT2
Grading	Vendor	—	8.80	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	362	14.3	LDA,LDT1,LDT2
Building Construction	Vendor	53.8	8.80	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	14.3	LDA,LDT1,LDT2
Paving	Vendor	—	8.80	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	72.4	14.3	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	8.80	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	1,079,690	359,897	0.00	0.00	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	—	—	15.0	0.00	—
Grading	—	—	105	0.00	—
Paving	0.00	0.00	0.00	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Apartments Low Rise	—	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2027	0.00	375	0.01	< 0.005
2028	0.00	375	0.01	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	19.3	annual days of extreme heat
Extreme Precipitation	5.70	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	2	0	0	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	2	1	1	3
Sea Level Rise	N/A	N/A	N/A	N/A

Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	48.6
AQ-PM	23.7
AQ-DPM	22.3
Drinking Water	78.8
Lead Risk Housing	41.2
Pesticides	73.8
Toxic Releases	30.3
Traffic	28.5
Effect Indicators	—
CleanUp Sites	86.5

Groundwater	88.9
Haz Waste Facilities/Generators	99.8
Impaired Water Bodies	51.2
Solid Waste	99.9
Sensitive Population	—
Asthma	50.2
Cardio-vascular	53.9
Low Birth Weights	36.4
Socioeconomic Factor Indicators	—
Education	47.5
Housing	61.9
Linguistic	43.9
Poverty	58.5
Unemployment	62.4

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	36.84075452
Employed	20.45425382
Median HI	23.26446811
Education	—
Bachelor's or higher	39.34300013
High school enrollment	100
Preschool enrollment	18.64493776
Transportation	—

Auto Access	37.4566919
Active commuting	70.79430258
Social	—
2-parent households	14.75683306
Voting	58.51405107
Neighborhood	—
Alcohol availability	64.62209675
Park access	12.70370846
Retail density	22.81534711
Supermarket access	13.65327858
Tree canopy	2.065956628
Housing	—
Homeownership	60.60567176
Housing habitability	41.69126139
Low-inc homeowner severe housing cost burden	38.58591043
Low-inc renter severe housing cost burden	7.737713332
Uncrowded housing	46.38778391
Health Outcomes	—
Insured adults	43.96253048
Arthritis	0.0
Asthma ER Admissions	49.9
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0

Life Expectancy at Birth	16.0
Cognitively Disabled	21.0
Physically Disabled	7.2
Heart Attack ER Admissions	53.7
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	98.4
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	59.5
Elderly	21.1
English Speaking	31.0
Foreign-born	59.3
Outdoor Workers	28.8
Climate Change Adaptive Capacity	—
Impervious Surface Cover	91.1
Traffic Density	37.8
Traffic Access	23.0
Other Indices	—

Hardship	62.5
Other Decision Support	—
2016 Voting	63.7

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	70.0
Healthy Places Index Score for Project Location (b)	29.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	South Florin

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	No demo
Land Use	landscape area = 20% of total lot acreage

Sac Rezone Main Operations (before) Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Sac Rezone Main Operations (before)
Operational Year	2030
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.70
Precipitation (days)	37.8
Location	38.550592607076084, -121.39691856340349
County	Sacramento
City	Sacramento
Air District	Sacramento Metropolitan AQMD
Air Basin	Sacramento Valley
TAZ	765
EDFZ	13
Electric Utility	Sacramento Municipal Utility District
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.21

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Apartments Low Rise	3,338	Dwelling Unit	236	2,112,942	2,112,942	—	9,346	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Energy	E-15	Require All-Electric Development

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	124	164	97.7	969	1.95	3.29	162	165	3.20	41.1	44.3	1,582	237,925	239,507	146	8.17	435	246,018
Mit.	121	163	72.0	958	1.78	1.21	162	163	1.12	41.1	42.2	1,582	205,246	206,828	143	8.11	435	213,249
% Reduced	2%	1%	26%	1%	8%	63%	—	1%	65%	—	5%	—	14%	14%	2%	1%	—	13%
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	97.0	138	108	672	1.79	3.21	162	165	3.14	41.1	44.2	1,582	221,776	223,358	147	8.87	26.0	229,694
Mit.	94.0	137	82.4	661	1.62	1.13	162	163	1.06	41.1	42.1	1,582	189,097	190,679	144	8.81	26.0	196,924
% Reduced	3%	1%	24%	2%	9%	65%	—	1%	66%	—	5%	—	15%	15%	2%	1%	—	14%
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	99.1	141	95.9	722	1.65	3.15	141	144	3.07	35.9	39.0	1,582	207,676	209,258	145	7.71	178	215,365
Mit.	96.1	139	70.1	711	1.49	1.07	141	142	0.99	35.9	36.9	1,582	174,997	176,579	142	7.65	178	182,596
% Reduced	3%	1%	27%	2%	10%	66%	—	1%	68%	—	5%	—	16%	16%	2%	1%	—	15%

Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	18.1	25.7	17.5	132	0.30	0.57	25.8	26.4	0.56	6.55	7.11	262	34,383	34,645	24.1	1.28	29.4	35,656
Mit.	17.5	25.4	12.8	130	0.27	0.19	25.8	26.0	0.18	6.55	6.73	262	28,973	29,235	23.6	1.27	29.4	30,231
% Reduced	3%	1%	27%	2%	10%	66%	—	1%	68%	—	5%	—	16%	16%	2%	1%	—	15%

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	103	95.8	70.2	768	1.78	1.13	162	163	1.06	41.1	42.1	—	181,438	181,438	7.57	7.38	420	184,246
Area	17.3	67.0	1.77	190	0.01	0.09	—	0.09	0.07	—	0.07	0.00	506	506	0.02	< 0.005	—	508
Energy	3.01	1.51	25.7	11.0	0.16	2.08	—	2.08	2.08	—	2.08	—	55,751	55,751	4.23	0.24	—	55,927
Water	—	—	—	—	—	—	—	—	—	—	—	252	230	481	0.88	0.55	—	668
Waste	—	—	—	—	—	—	—	—	—	—	—	1,330	0.00	1,330	133	0.00	—	4,654
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.1	15.1
Total	124	164	97.7	969	1.95	3.29	162	165	3.20	41.1	44.3	1,582	237,925	239,507	146	8.17	435	246,018
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	94.0	86.1	82.4	661	1.62	1.13	162	163	1.06	41.1	42.1	—	165,795	165,795	8.61	8.08	10.9	168,430
Area	0.00	50.7	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Energy	3.01	1.51	25.7	11.0	0.16	2.08	—	2.08	2.08	—	2.08	—	55,751	55,751	4.23	0.24	—	55,927
Water	—	—	—	—	—	—	—	—	—	—	—	252	230	481	0.88	0.55	—	668
Waste	—	—	—	—	—	—	—	—	—	—	—	1,330	0.00	1,330	133	0.00	—	4,654
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.1	15.1

Total	97.0	138	108	672	1.79	3.21	162	165	3.14	41.1	44.2	1,582	221,776	223,358	147	8.87	26.0	229,694
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	84.2	77.4	68.9	581	1.48	1.01	141	142	0.95	35.9	36.8	—	151,348	151,348	7.19	6.92	162	153,753
Area	11.9	61.9	1.21	130	0.01	0.06	—	0.06	0.04	—	0.04	0.00	347	347	0.01	< 0.005	—	348
Energy	3.01	1.51	25.7	11.0	0.16	2.08	—	2.08	2.08	—	2.08	—	55,751	55,751	4.23	0.24	—	55,927
Water	—	—	—	—	—	—	—	—	—	—	—	252	230	481	0.88	0.55	—	668
Waste	—	—	—	—	—	—	—	—	—	—	—	1,330	0.00	1,330	133	0.00	—	4,654
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.1	15.1
Total	99.1	141	95.9	722	1.65	3.15	141	144	3.07	35.9	39.0	1,582	207,676	209,258	145	7.71	178	215,365
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	15.4	14.1	12.6	106	0.27	0.18	25.8	26.0	0.17	6.55	6.72	—	25,057	25,057	1.19	1.15	26.9	25,456
Area	2.16	11.3	0.22	23.8	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	57.4	57.4	< 0.005	< 0.005	—	57.6
Energy	0.55	0.27	4.70	2.00	0.03	0.38	—	0.38	0.38	—	0.38	—	9,230	9,230	0.70	0.04	—	9,259
Water	—	—	—	—	—	—	—	—	—	—	—	41.6	38.1	79.7	0.15	0.09	—	111
Waste	—	—	—	—	—	—	—	—	—	—	—	220	0.00	220	22.0	0.00	—	771
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.51	2.51
Total	18.1	25.7	17.5	132	0.30	0.57	25.8	26.4	0.56	6.55	7.11	262	34,383	34,645	24.1	1.28	29.4	35,656

2.6. Operations Emissions by Sector, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	103	95.8	70.2	768	1.78	1.13	162	163	1.06	41.1	42.1	—	181,438	181,438	7.57	7.38	420	184,246
Area	17.3	67.0	1.77	190	0.01	0.09	—	0.09	0.07	—	0.07	0.00	506	506	0.02	< 0.005	—	508
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	23,072	23,072	1.33	0.18	—	23,158

Water	—	—	—	—	—	—	—	—	—	—	—	252	230	481	0.88	0.55	—	668
Waste	—	—	—	—	—	—	—	—	—	—	—	1,330	0.00	1,330	133	0.00	—	4,654
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.1	15.1
Total	121	163	72.0	958	1.78	1.21	162	163	1.12	41.1	42.2	1,582	205,246	206,828	143	8.11	435	213,249
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	94.0	86.1	82.4	661	1.62	1.13	162	163	1.06	41.1	42.1	—	165,795	165,795	8.61	8.08	10.9	168,430
Area	0.00	50.7	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	23,072	23,072	1.33	0.18	—	23,158
Water	—	—	—	—	—	—	—	—	—	—	—	252	230	481	0.88	0.55	—	668
Waste	—	—	—	—	—	—	—	—	—	—	—	1,330	0.00	1,330	133	0.00	—	4,654
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.1	15.1
Total	94.0	137	82.4	661	1.62	1.13	162	163	1.06	41.1	42.1	1,582	189,097	190,679	144	8.81	26.0	196,924
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	84.2	77.4	68.9	581	1.48	1.01	141	142	0.95	35.9	36.8	—	151,348	151,348	7.19	6.92	162	153,753
Area	11.9	61.9	1.21	130	0.01	0.06	—	0.06	0.04	—	0.04	0.00	347	347	0.01	< 0.005	—	348
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	23,072	23,072	1.33	0.18	—	23,158
Water	—	—	—	—	—	—	—	—	—	—	—	252	230	481	0.88	0.55	—	668
Waste	—	—	—	—	—	—	—	—	—	—	—	1,330	0.00	1,330	133	0.00	—	4,654
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.1	15.1
Total	96.1	139	70.1	711	1.49	1.07	141	142	0.99	35.9	36.9	1,582	174,997	176,579	142	7.65	178	182,596
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	15.4	14.1	12.6	106	0.27	0.18	25.8	26.0	0.17	6.55	6.72	—	25,057	25,057	1.19	1.15	26.9	25,456
Area	2.16	11.3	0.22	23.8	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	57.4	57.4	< 0.005	< 0.005	—	57.6
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	3,820	3,820	0.22	0.03	—	3,834
Water	—	—	—	—	—	—	—	—	—	—	—	41.6	38.1	79.7	0.15	0.09	—	111
Waste	—	—	—	—	—	—	—	—	—	—	—	220	0.00	220	22.0	0.00	—	771

Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.51	2.51
Total	17.5	25.4	12.8	130	0.27	0.19	25.8	26.0	0.18	6.55	6.73	262	28,973	29,235	23.6	1.27	29.4	30,231

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	103	95.8	70.2	768	1.78	1.13	162	163	1.06	41.1	42.1	—	181,438	181,438	7.57	7.38	420	184,246
Total	103	95.8	70.2	768	1.78	1.13	162	163	1.06	41.1	42.1	—	181,438	181,438	7.57	7.38	420	184,246
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	94.0	86.1	82.4	661	1.62	1.13	162	163	1.06	41.1	42.1	—	165,795	165,795	8.61	8.08	10.9	168,430
Total	94.0	86.1	82.4	661	1.62	1.13	162	163	1.06	41.1	42.1	—	165,795	165,795	8.61	8.08	10.9	168,430
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	15.4	14.1	12.6	106	0.27	0.18	25.8	26.0	0.17	6.55	6.72	—	25,057	25,057	1.19	1.15	26.9	25,456
Total	15.4	14.1	12.6	106	0.27	0.18	25.8	26.0	0.17	6.55	6.72	—	25,057	25,057	1.19	1.15	26.9	25,456

4.1.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	103	95.8	70.2	768	1.78	1.13	162	163	1.06	41.1	42.1	—	181,438	181,438	7.57	7.38	420	184,246
Total	103	95.8	70.2	768	1.78	1.13	162	163	1.06	41.1	42.1	—	181,438	181,438	7.57	7.38	420	184,246
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	94.0	86.1	82.4	661	1.62	1.13	162	163	1.06	41.1	42.1	—	165,795	165,795	8.61	8.08	10.9	168,430
Total	94.0	86.1	82.4	661	1.62	1.13	162	163	1.06	41.1	42.1	—	165,795	165,795	8.61	8.08	10.9	168,430
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	15.4	14.1	12.6	106	0.27	0.18	25.8	26.0	0.17	6.55	6.72	—	25,057	25,057	1.19	1.15	26.9	25,456
Total	15.4	14.1	12.6	106	0.27	0.18	25.8	26.0	0.17	6.55	6.72	—	25,057	25,057	1.19	1.15	26.9	25,456

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	23,071	23,071	1.33	0.18	—	23,157
Total	—	—	—	—	—	—	—	—	—	—	—	—	23,071	23,071	1.33	0.18	—	23,157
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	23,071	23,071	1.33	0.18	—	23,157
Total	—	—	—	—	—	—	—	—	—	—	—	—	23,071	23,071	1.33	0.18	—	23,157
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	3,820	3,820	0.22	0.03	—	3,834
Total	—	—	—	—	—	—	—	—	—	—	—	—	3,820	3,820	0.22	0.03	—	3,834

4.2.2. Electricity Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	23,072	23,072	1.33	0.18	—	23,158
Total	—	—	—	—	—	—	—	—	—	—	—	—	23,072	23,072	1.33	0.18	—	23,158
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Apartme Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	23,072	23,072	1.33	0.18	—	23,158
Total	—	—	—	—	—	—	—	—	—	—	—	—	23,072	23,072	1.33	0.18	—	23,158
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartme nts Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	3,820	3,820	0.22	0.03	—	3,834
Total	—	—	—	—	—	—	—	—	—	—	—	—	3,820	3,820	0.22	0.03	—	3,834

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartme nts Low Rise	3.01	1.51	25.7	11.0	0.16	2.08	—	2.08	2.08	—	2.08	—	32,680	32,680	2.89	0.06	—	32,771
Total	3.01	1.51	25.7	11.0	0.16	2.08	—	2.08	2.08	—	2.08	—	32,680	32,680	2.89	0.06	—	32,771
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartme nts Low Rise	3.01	1.51	25.7	11.0	0.16	2.08	—	2.08	2.08	—	2.08	—	32,680	32,680	2.89	0.06	—	32,771
Total	3.01	1.51	25.7	11.0	0.16	2.08	—	2.08	2.08	—	2.08	—	32,680	32,680	2.89	0.06	—	32,771
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartme nts Low Rise	0.55	0.27	4.70	2.00	0.03	0.38	—	0.38	0.38	—	0.38	—	5,411	5,411	0.48	0.01	—	5,426
Total	0.55	0.27	4.70	2.00	0.03	0.38	—	0.38	0.38	—	0.38	—	5,411	5,411	0.48	0.01	—	5,426

4.2.4. Natural Gas Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	45.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	5.43	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	17.3	16.4	1.77	190	0.01	0.09	—	0.09	0.07	—	0.07	—	506	506	0.02	< 0.005	—	508
Total	17.3	67.0	1.77	190	0.01	0.09	—	0.09	0.07	—	0.07	0.00	506	506	0.02	< 0.005	—	508
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	45.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	5.43	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00	50.7	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	8.25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.99	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	2.16	2.05	0.22	23.8	< 0.005	0.01	—	0.01	0.01	—	0.01	—	57.4	57.4	< 0.005	< 0.005	—	57.6

Total	2.16	11.3	0.22	23.8	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	57.4	57.4	< 0.005	< 0.005	—	57.6

4.3.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	45.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	5.43	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	17.3	16.4	1.77	190	0.01	0.09	—	0.09	0.07	—	0.07	—	506	506	0.02	< 0.005	—	508
Total	17.3	67.0	1.77	190	0.01	0.09	—	0.09	0.07	—	0.07	0.00	506	506	0.02	< 0.005	—	508
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	45.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	5.43	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00	50.7	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00

Consum Products	—	8.25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.99	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	2.16	2.05	0.22	23.8	< 0.005	0.01	—	0.01	0.01	—	0.01	—	57.4	57.4	< 0.005	< 0.005	—	57.6
Total	2.16	11.3	0.22	23.8	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	57.4	57.4	< 0.005	< 0.005	—	57.6

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	252	230	481	0.88	0.55	—	668
Total	—	—	—	—	—	—	—	—	—	—	—	252	230	481	0.88	0.55	—	668
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	252	230	481	0.88	0.55	—	668
Total	—	—	—	—	—	—	—	—	—	—	—	252	230	481	0.88	0.55	—	668
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Apartments	—	—	—	—	—	—	—	—	—	—	—	41.6	38.1	79.7	0.15	0.09	—	111
Total	—	—	—	—	—	—	—	—	—	—	—	41.6	38.1	79.7	0.15	0.09	—	111

4.4.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	252	230	481	0.88	0.55	—	668
Total	—	—	—	—	—	—	—	—	—	—	—	252	230	481	0.88	0.55	—	668
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	252	230	481	0.88	0.55	—	668
Total	—	—	—	—	—	—	—	—	—	—	—	252	230	481	0.88	0.55	—	668
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	41.6	38.1	79.7	0.15	0.09	—	111
Total	—	—	—	—	—	—	—	—	—	—	—	41.6	38.1	79.7	0.15	0.09	—	111

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	1,330	0.00	1,330	133	0.00	—	4,654
Total	—	—	—	—	—	—	—	—	—	—	—	1,330	0.00	1,330	133	0.00	—	4,654
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	1,330	0.00	1,330	133	0.00	—	4,654
Total	—	—	—	—	—	—	—	—	—	—	—	1,330	0.00	1,330	133	0.00	—	4,654
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	220	0.00	220	22.0	0.00	—	771
Total	—	—	—	—	—	—	—	—	—	—	—	220	0.00	220	22.0	0.00	—	771

4.5.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	1,330	0.00	1,330	133	0.00	—	4,654
Total	—	—	—	—	—	—	—	—	—	—	—	1,330	0.00	1,330	133	0.00	—	4,654

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	1,330	0.00	1,330	133	0.00	—	4,654
Total	—	—	—	—	—	—	—	—	—	—	—	1,330	0.00	1,330	133	0.00	—	4,654
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	220	0.00	220	22.0	0.00	—	771
Total	—	—	—	—	—	—	—	—	—	—	—	220	0.00	220	22.0	0.00	—	771

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.1	15.1
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.1	15.1
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.1	15.1
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.1	15.1

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.51	2.51
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.51	2.51

4.6.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.1	15.1
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.1	15.1
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.1	15.1
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.1	15.1
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.51	2.51
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.51	2.51

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year

Apartments Low Rise	24,434	27,171	20,963	8,880,177	205,150	228,131	176,003	74,558,290

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Apartments Low Rise	24,434	27,171	20,963	8,880,177	205,150	228,131	176,003	74,558,290

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Apartments Low Rise	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	3338
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.1.2. Mitigated

Hearth Type	Unmitigated (number)
Apartments Low Rise	—

Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	3338
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
4278706.74	1,426,236	0.00	0.00	—

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Apartments Low Rise	37,761,761	223	0.0129	0.0017	101,970,872

5.11.2. Mitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Apartments Low Rise	37,763,883	223	0.0129	0.0017	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Apartments Low Rise	117,694,542	36,067,862

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Apartments Low Rise	117,694,542	36,067,862

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Apartments Low Rise	2,468	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Apartments Low Rise	2,468	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Apartments Low Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Low Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Apartments Low Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Low Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.15.2. Mitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	18.8	annual days of extreme heat
Extreme Precipitation	6.20	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	2	0	0	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	2	1	1	3
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2

Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	48.5
AQ-PM	37.5
AQ-DPM	65.4
Drinking Water	56.6
Lead Risk Housing	38.1
Pesticides	29.5
Toxic Releases	41.1
Traffic	78.6
Effect Indicators	—
CleanUp Sites	0.00
Groundwater	28.3
Haz Waste Facilities/Generators	40.9
Impaired Water Bodies	51.2

Solid Waste	73.0
Sensitive Population	—
Asthma	87.9
Cardio-vascular	72.0
Low Birth Weights	9.08
Socioeconomic Factor Indicators	—
Education	20.9
Housing	22.7
Linguistic	21.4
Poverty	43.5
Unemployment	40.6

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	65.76414731
Employed	89.43924034
Median HI	66.04645194
Education	—
Bachelor's or higher	71.14076736
High school enrollment	100
Preschool enrollment	54.90825099
Transportation	—
Auto Access	28.53843193
Active commuting	72.93725138
Social	—

2-parent households	56.35827024
Voting	87.62992429
Neighborhood	—
Alcohol availability	60.41319133
Park access	81.35506224
Retail density	56.73039908
Supermarket access	55.37020403
Tree canopy	89.60605672
Housing	—
Homeownership	69.85756448
Housing habitability	79.08379315
Low-inc homeowner severe housing cost burden	69.62658796
Low-inc renter severe housing cost burden	61.37559348
Uncrowded housing	59.34813294
Health Outcomes	—
Insured adults	68.56152958
Arthritis	8.6
Asthma ER Admissions	25.7
High Blood Pressure	9.1
Cancer (excluding skin)	7.2
Asthma	46.1
Coronary Heart Disease	12.2
Chronic Obstructive Pulmonary Disease	31.1
Diagnosed Diabetes	50.0
Life Expectancy at Birth	28.4
Cognitively Disabled	72.6
Physically Disabled	62.2

Heart Attack ER Admissions	23.7
Mental Health Not Good	69.9
Chronic Kidney Disease	27.1
Obesity	53.5
Pedestrian Injuries	75.4
Physical Health Not Good	59.3
Stroke	26.0
Health Risk Behaviors	—
Binge Drinking	54.2
Current Smoker	63.8
No Leisure Time for Physical Activity	73.6
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	41.8
Elderly	9.0
English Speaking	62.3
Foreign-born	12.8
Outdoor Workers	27.9
Climate Change Adaptive Capacity	—
Impervious Surface Cover	54.8
Traffic Density	83.9
Traffic Access	60.7
Other Indices	—
Hardship	33.4
Other Decision Support	—
2016 Voting	77.1

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	49.0
Healthy Places Index Score for Project Location (b)	77.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Operations: Energy Use	...
Land Use	3338 units on 236 acres

Sac Rezone Fair Oaks operations (before) Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Sac Rezone Fair Oaks operations (before)
Operational Year	2030
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.50
Precipitation (days)	39.2
Location	38.637469230516956, -121.32836613666706
County	Sacramento
City	Unincorporated
Air District	Sacramento Metropolitan AQMD
Air Basin	Sacramento Valley
TAZ	619
EDFZ	13
Electric Utility	Sacramento Municipal Utility District
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.21

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Apartments Low Rise	25.0	Dwelling Unit	1.25	26,500	10,890	—	70.0	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Energy	E-15	Require All-Electric Development

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.00	1.55	0.80	9.54	0.02	0.02	1.81	1.83	0.02	0.46	0.48	11.8	2,195	2,207	1.09	0.08	4.89	2,264
Mit.	0.99	1.54	0.72	9.51	0.02	0.01	1.81	1.82	0.01	0.46	0.47	11.8	2,095	2,107	1.08	0.08	4.89	2,163
% Reduced	1%	< 0.5%	10%	< 0.5%	—	34%	—	< 0.5%	35%	—	1%	—	5%	5%	1%	—	—	4%
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.80	1.35	0.92	6.68	0.02	0.02	1.81	1.83	0.02	0.46	0.48	11.8	2,016	2,028	1.10	0.09	0.31	2,082
Mit.	0.79	1.35	0.84	6.64	0.02	0.01	1.81	1.82	0.01	0.46	0.47	11.8	1,915	1,927	1.09	0.09	0.31	1,981
% Reduced	1%	< 0.5%	9%	1%	—	35%	—	< 0.5%	36%	—	1%	—	5%	5%	1%	—	—	5%
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.81	1.36	0.79	6.96	0.02	0.02	1.58	1.60	0.02	0.40	0.42	11.8	1,859	1,871	1.08	0.08	2.01	1,923
Mit.	0.80	1.36	0.71	6.92	0.02	0.01	1.58	1.59	0.01	0.40	0.41	11.8	1,759	1,770	1.08	0.08	2.01	1,822
% Reduced	1%	< 0.5%	10%	< 0.5%	—	36%	—	< 0.5%	38%	—	2%	—	5%	5%	1%	—	—	5%

Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.15	0.25	0.14	1.27	< 0.005	< 0.005	0.29	0.29	< 0.005	0.07	0.08	1.96	308	310	0.18	0.01	0.33	318
Mit.	0.15	0.25	0.13	1.26	< 0.005	< 0.005	0.29	0.29	< 0.005	0.07	0.08	1.96	291	293	0.18	0.01	0.33	302
% Reduced	1%	< 0.5%	10%	< 0.5%	3%	36%	—	< 0.5%	38%	—	2%	—	5%	5%	1%	< 0.5%	—	5%

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.86	0.79	0.71	8.08	0.02	0.01	1.81	1.82	0.01	0.46	0.47	—	2,012	2,012	0.07	0.08	4.70	2,042
Area	0.13	0.76	0.01	1.42	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	3.79	3.79	< 0.005	< 0.005	—	3.81
Energy	0.01	< 0.005	0.08	0.03	< 0.005	0.01	—	0.01	0.01	—	0.01	—	178	178	0.01	< 0.005	—	178
Water	—	—	—	—	—	—	—	—	—	—	—	1.88	1.64	3.52	0.01	< 0.005	—	4.92
Waste	—	—	—	—	—	—	—	—	—	—	—	9.96	0.00	9.96	1.00	0.00	—	34.9
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.19	0.19
Total	1.00	1.55	0.80	9.54	0.02	0.02	1.81	1.83	0.02	0.46	0.48	11.8	2,195	2,207	1.09	0.08	4.89	2,264
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.79	0.71	0.84	6.64	0.02	0.01	1.81	1.82	0.01	0.46	0.47	—	1,837	1,837	0.08	0.08	0.12	1,864
Area	0.00	0.64	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Energy	0.01	< 0.005	0.08	0.03	< 0.005	0.01	—	0.01	0.01	—	0.01	—	178	178	0.01	< 0.005	—	178
Water	—	—	—	—	—	—	—	—	—	—	—	1.88	1.64	3.52	0.01	< 0.005	—	4.92
Waste	—	—	—	—	—	—	—	—	—	—	—	9.96	0.00	9.96	1.00	0.00	—	34.9
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.19	0.19

Total	0.80	1.35	0.92	6.68	0.02	0.02	1.81	1.83	0.02	0.46	0.48	11.8	2,016	2,028	1.10	0.09	0.31	2,082
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.71	0.64	0.70	5.95	0.02	0.01	1.58	1.59	0.01	0.40	0.41	—	1,677	1,677	0.07	0.07	1.82	1,702
Area	0.09	0.72	0.01	0.97	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	2.60	2.60	< 0.005	< 0.005	—	2.61
Energy	0.01	< 0.005	0.08	0.03	< 0.005	0.01	—	0.01	0.01	—	0.01	—	178	178	0.01	< 0.005	—	178
Water	—	—	—	—	—	—	—	—	—	—	—	1.88	1.64	3.52	0.01	< 0.005	—	4.92
Waste	—	—	—	—	—	—	—	—	—	—	—	9.96	0.00	9.96	1.00	0.00	—	34.9
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.19	0.19
Total	0.81	1.36	0.79	6.96	0.02	0.02	1.58	1.60	0.02	0.40	0.42	11.8	1,859	1,871	1.08	0.08	2.01	1,923
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.13	0.12	0.13	1.09	< 0.005	< 0.005	0.29	0.29	< 0.005	0.07	0.08	—	278	278	0.01	0.01	0.30	282
Area	0.02	0.13	< 0.005	0.18	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	0.43	0.43	< 0.005	< 0.005	—	0.43
Energy	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	29.4	29.4	< 0.005	< 0.005	—	29.5
Water	—	—	—	—	—	—	—	—	—	—	—	0.31	0.27	0.58	< 0.005	< 0.005	—	0.81
Waste	—	—	—	—	—	—	—	—	—	—	—	1.65	0.00	1.65	0.16	0.00	—	5.77
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Total	0.15	0.25	0.14	1.27	< 0.005	< 0.005	0.29	0.29	< 0.005	0.07	0.08	1.96	308	310	0.18	0.01	0.33	318

2.6. Operations Emissions by Sector, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.86	0.79	0.71	8.08	0.02	0.01	1.81	1.82	0.01	0.46	0.47	—	2,012	2,012	0.07	0.08	4.70	2,042
Area	0.13	0.76	0.01	1.42	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	3.79	3.79	< 0.005	< 0.005	—	3.81
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	76.9	76.9	< 0.005	< 0.005	—	77.2

Water	—	—	—	—	—	—	—	—	—	—	—	1.88	1.64	3.52	0.01	< 0.005	—	4.92
Waste	—	—	—	—	—	—	—	—	—	—	—	9.96	0.00	9.96	1.00	0.00	—	34.9
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.19	0.19
Total	0.99	1.54	0.72	9.51	0.02	0.01	1.81	1.82	0.01	0.46	0.47	11.8	2,095	2,107	1.08	0.08	4.89	2,163
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.79	0.71	0.84	6.64	0.02	0.01	1.81	1.82	0.01	0.46	0.47	—	1,837	1,837	0.08	0.08	0.12	1,864
Area	0.00	0.64	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	76.9	76.9	< 0.005	< 0.005	—	77.2
Water	—	—	—	—	—	—	—	—	—	—	—	1.88	1.64	3.52	0.01	< 0.005	—	4.92
Waste	—	—	—	—	—	—	—	—	—	—	—	9.96	0.00	9.96	1.00	0.00	—	34.9
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.19	0.19
Total	0.79	1.35	0.84	6.64	0.02	0.01	1.81	1.82	0.01	0.46	0.47	11.8	1,915	1,927	1.09	0.09	0.31	1,981
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.71	0.64	0.70	5.95	0.02	0.01	1.58	1.59	0.01	0.40	0.41	—	1,677	1,677	0.07	0.07	1.82	1,702
Area	0.09	0.72	0.01	0.97	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	2.60	2.60	< 0.005	< 0.005	—	2.61
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	76.9	76.9	< 0.005	< 0.005	—	77.2
Water	—	—	—	—	—	—	—	—	—	—	—	1.88	1.64	3.52	0.01	< 0.005	—	4.92
Waste	—	—	—	—	—	—	—	—	—	—	—	9.96	0.00	9.96	1.00	0.00	—	34.9
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.19	0.19
Total	0.80	1.36	0.71	6.92	0.02	0.01	1.58	1.59	0.01	0.40	0.41	11.8	1,759	1,770	1.08	0.08	2.01	1,822
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.13	0.12	0.13	1.09	< 0.005	< 0.005	0.29	0.29	< 0.005	0.07	0.08	—	278	278	0.01	0.01	0.30	282
Area	0.02	0.13	< 0.005	0.18	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	0.43	0.43	< 0.005	< 0.005	—	0.43
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	12.7	12.7	< 0.005	< 0.005	—	12.8
Water	—	—	—	—	—	—	—	—	—	—	—	0.31	0.27	0.58	< 0.005	< 0.005	—	0.81
Waste	—	—	—	—	—	—	—	—	—	—	—	1.65	0.00	1.65	0.16	0.00	—	5.77

Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Total	0.15	0.25	0.13	1.26	< 0.005	< 0.005	0.29	0.29	< 0.005	0.07	0.08	1.96	291	293	0.18	0.01	0.33	302

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	0.86	0.79	0.71	8.08	0.02	0.01	1.81	1.82	0.01	0.46	0.47	—	2,012	2,012	0.07	0.08	4.70	2,042
Total	0.86	0.79	0.71	8.08	0.02	0.01	1.81	1.82	0.01	0.46	0.47	—	2,012	2,012	0.07	0.08	4.70	2,042
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	0.79	0.71	0.84	6.64	0.02	0.01	1.81	1.82	0.01	0.46	0.47	—	1,837	1,837	0.08	0.08	0.12	1,864
Total	0.79	0.71	0.84	6.64	0.02	0.01	1.81	1.82	0.01	0.46	0.47	—	1,837	1,837	0.08	0.08	0.12	1,864
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	0.13	0.12	0.13	1.09	< 0.005	< 0.005	0.29	0.29	< 0.005	0.07	0.08	—	278	278	0.01	0.01	0.30	282
Total	0.13	0.12	0.13	1.09	< 0.005	< 0.005	0.29	0.29	< 0.005	0.07	0.08	—	278	278	0.01	0.01	0.30	282

4.1.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	0.86	0.79	0.71	8.08	0.02	0.01	1.81	1.82	0.01	0.46	0.47	—	2,012	2,012	0.07	0.08	4.70	2,042
Total	0.86	0.79	0.71	8.08	0.02	0.01	1.81	1.82	0.01	0.46	0.47	—	2,012	2,012	0.07	0.08	4.70	2,042
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	0.79	0.71	0.84	6.64	0.02	0.01	1.81	1.82	0.01	0.46	0.47	—	1,837	1,837	0.08	0.08	0.12	1,864
Total	0.79	0.71	0.84	6.64	0.02	0.01	1.81	1.82	0.01	0.46	0.47	—	1,837	1,837	0.08	0.08	0.12	1,864
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	0.13	0.12	0.13	1.09	< 0.005	< 0.005	0.29	0.29	< 0.005	0.07	0.08	—	278	278	0.01	0.01	0.30	282
Total	0.13	0.12	0.13	1.09	< 0.005	< 0.005	0.29	0.29	< 0.005	0.07	0.08	—	278	278	0.01	0.01	0.30	282

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	75.6	75.6	< 0.005	< 0.005	—	75.9
Total	—	—	—	—	—	—	—	—	—	—	—	—	75.6	75.6	< 0.005	< 0.005	—	75.9
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	75.6	75.6	< 0.005	< 0.005	—	75.9
Total	—	—	—	—	—	—	—	—	—	—	—	—	75.6	75.6	< 0.005	< 0.005	—	75.9
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	12.5	12.5	< 0.005	< 0.005	—	12.6
Total	—	—	—	—	—	—	—	—	—	—	—	—	12.5	12.5	< 0.005	< 0.005	—	12.6

4.2.2. Electricity Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	76.9	76.9	< 0.005	< 0.005	—	77.2
Total	—	—	—	—	—	—	—	—	—	—	—	—	76.9	76.9	< 0.005	< 0.005	—	77.2
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Apartme Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	76.9	76.9	< 0.005	< 0.005	—	77.2
Total	—	—	—	—	—	—	—	—	—	—	—	—	76.9	76.9	< 0.005	< 0.005	—	77.2
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartme nts Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	12.7	12.7	< 0.005	< 0.005	—	12.8
Total	—	—	—	—	—	—	—	—	—	—	—	—	12.7	12.7	< 0.005	< 0.005	—	12.8

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartme nts Low Rise	0.01	< 0.005	0.08	0.03	< 0.005	0.01	—	0.01	0.01	—	0.01	—	102	102	0.01	< 0.005	—	102
Total	0.01	< 0.005	0.08	0.03	< 0.005	0.01	—	0.01	0.01	—	0.01	—	102	102	0.01	< 0.005	—	102
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartme nts Low Rise	0.01	< 0.005	0.08	0.03	< 0.005	0.01	—	0.01	0.01	—	0.01	—	102	102	0.01	< 0.005	—	102
Total	0.01	< 0.005	0.08	0.03	< 0.005	0.01	—	0.01	0.01	—	0.01	—	102	102	0.01	< 0.005	—	102
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartme nts Low Rise	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	16.9	16.9	< 0.005	< 0.005	—	16.9
Total	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	16.9	16.9	< 0.005	< 0.005	—	16.9

4.2.4. Natural Gas Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	0.57	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.07	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.13	0.12	0.01	1.42	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.79	3.79	< 0.005	< 0.005	—	3.81
Total	0.13	0.76	0.01	1.42	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	3.79	3.79	< 0.005	< 0.005	—	3.81
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	0.57	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.07	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00	0.64	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	0.10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.02	0.02	< 0.005	0.18	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.43	0.43	< 0.005	< 0.005	—	0.43

Total	0.02	0.13	< 0.005	0.18	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	0.43	0.43	< 0.005	< 0.005	—	0.43

4.3.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	0.57	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.07	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.13	0.12	0.01	1.42	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.79	3.79	< 0.005	< 0.005	—	3.81
Total	0.13	0.76	0.01	1.42	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	3.79	3.79	< 0.005	< 0.005	—	3.81
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	0.57	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.07	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00	0.64	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00

Consum Products	—	0.10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.02	0.02	< 0.005	0.18	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.43	0.43	< 0.005	< 0.005	—	0.43
Total	0.02	0.13	< 0.005	0.18	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	0.43	0.43	< 0.005	< 0.005	—	0.43

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	1.88	1.64	3.52	0.01	< 0.005	—	4.92
Total	—	—	—	—	—	—	—	—	—	—	—	1.88	1.64	3.52	0.01	< 0.005	—	4.92
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	1.88	1.64	3.52	0.01	< 0.005	—	4.92
Total	—	—	—	—	—	—	—	—	—	—	—	1.88	1.64	3.52	0.01	< 0.005	—	4.92
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Apartments	—	—	—	—	—	—	—	—	—	—	—	0.31	0.27	0.58	< 0.005	< 0.005	—	0.81
Total	—	—	—	—	—	—	—	—	—	—	—	0.31	0.27	0.58	< 0.005	< 0.005	—	0.81

4.4.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	1.88	1.64	3.52	0.01	< 0.005	—	4.92
Total	—	—	—	—	—	—	—	—	—	—	—	1.88	1.64	3.52	0.01	< 0.005	—	4.92
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	1.88	1.64	3.52	0.01	< 0.005	—	4.92
Total	—	—	—	—	—	—	—	—	—	—	—	1.88	1.64	3.52	0.01	< 0.005	—	4.92
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	0.31	0.27	0.58	< 0.005	< 0.005	—	0.81
Total	—	—	—	—	—	—	—	—	—	—	—	0.31	0.27	0.58	< 0.005	< 0.005	—	0.81

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	9.96	0.00	9.96	1.00	0.00	—	34.9
Total	—	—	—	—	—	—	—	—	—	—	—	9.96	0.00	9.96	1.00	0.00	—	34.9
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	9.96	0.00	9.96	1.00	0.00	—	34.9
Total	—	—	—	—	—	—	—	—	—	—	—	9.96	0.00	9.96	1.00	0.00	—	34.9
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	1.65	0.00	1.65	0.16	0.00	—	5.77
Total	—	—	—	—	—	—	—	—	—	—	—	1.65	0.00	1.65	0.16	0.00	—	5.77

4.5.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	9.96	0.00	9.96	1.00	0.00	—	34.9
Total	—	—	—	—	—	—	—	—	—	—	—	9.96	0.00	9.96	1.00	0.00	—	34.9

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	9.96	0.00	9.96	1.00	0.00	—	34.9
Total	—	—	—	—	—	—	—	—	—	—	—	9.96	0.00	9.96	1.00	0.00	—	34.9
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	1.65	0.00	1.65	0.16	0.00	—	5.77
Total	—	—	—	—	—	—	—	—	—	—	—	1.65	0.00	1.65	0.16	0.00	—	5.77

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.19	0.19
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.19	0.19
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.19	0.19
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.19	0.19

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03

4.6.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.19	0.19
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.19	0.19
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.19	0.19
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.19	0.19
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year

Apartments Low Rise	183	204	157	66,508	2,295	2,552	1,969	834,025

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Apartments Low Rise	183	204	157	66,508	2,295	2,552	1,969	834,025

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Apartments Low Rise	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	25
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.1.2. Mitigated

Hearth Type	Unmitigated (number)
Apartments Low Rise	—

Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	25
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
53662.5	17,888	0.00	0.00	—

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Apartments Low Rise	123,709	223	0.0129	0.0017	318,402

5.11.2. Mitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Apartments Low Rise	125,832	223	0.0129	0.0017	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Apartments Low Rise	881,475	185,892

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Apartments Low Rise	881,475	185,892

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Apartments Low Rise	18.5	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Apartments Low Rise	18.5	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Apartments Low Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Low Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Apartments Low Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Low Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.15.2. Mitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	24.1	annual days of extreme heat
Extreme Precipitation	6.45	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.69	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	2	0	0	N/A
Extreme Precipitation	2	0	0	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	2	1	1	3
Extreme Precipitation	2	1	1	3
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2

Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	59.7
AQ-PM	39.5
AQ-DPM	50.3
Drinking Water	47.8
Lead Risk Housing	54.5
Pesticides	0.00
Toxic Releases	20.9
Traffic	21.4
Effect Indicators	—
CleanUp Sites	18.7
Groundwater	78.3
Haz Waste Facilities/Generators	59.8
Impaired Water Bodies	77.3

Solid Waste	0.00
Sensitive Population	—
Asthma	88.7
Cardio-vascular	62.6
Low Birth Weights	7.38
Socioeconomic Factor Indicators	—
Education	25.1
Housing	70.2
Linguistic	37.0
Poverty	67.4
Unemployment	14.4

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	37.16155524
Employed	15.56525087
Median HI	23.82907738
Education	—
Bachelor's or higher	54.3308097
High school enrollment	26.62645964
Preschool enrollment	15.20595406
Transportation	—
Auto Access	28.94905685
Active commuting	46.06698319
Social	—

2-parent households	11.18952906
Voting	74.93904786
Neighborhood	—
Alcohol availability	37.77749262
Park access	30.25792378
Retail density	94.5977159
Supermarket access	42.71782369
Tree canopy	91.62068523
Housing	—
Homeownership	51.98254844
Housing habitability	41.55010907
Low-inc homeowner severe housing cost burden	37.4566919
Low-inc renter severe housing cost burden	6.73681509
Uncrowded housing	66.9190299
Health Outcomes	—
Insured adults	47.91479533
Arthritis	0.0
Asthma ER Admissions	6.0
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	11.1
Cognitively Disabled	13.7
Physically Disabled	26.6

Heart Attack ER Admissions	48.8
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	52.9
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	67.0
Elderly	27.8
English Speaking	75.3
Foreign-born	10.6
Outdoor Workers	46.7
Climate Change Adaptive Capacity	—
Impervious Surface Cover	61.1
Traffic Density	59.6
Traffic Access	23.0
Other Indices	—
Hardship	64.4
Other Decision Support	—
2016 Voting	65.5

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	47.0
Healthy Places Index Score for Project Location (b)	30.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

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Screen	Justification
Construction: Construction Phases	no demo
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Sac Rezone North Watt operations (before) Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Sac Rezone North Watt operations (before)
Operational Year	2030
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.50
Precipitation (days)	39.2
Location	38.66735756395545, -121.38321539651498
County	Sacramento
City	Unincorporated
Air District	Sacramento Metropolitan AQMD
Air Basin	Sacramento Valley
TAZ	657
EDFZ	13
Electric Utility	Sacramento Municipal Utility District
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.21

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Apartments Low Rise	505	Dwelling Unit	21.3	535,300	185,653	—	1,414	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Energy	E-15	Require All-Electric Development

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	19.5	30.7	14.7	174	0.36	0.36	31.7	32.0	0.34	8.04	8.38	239	39,007	39,246	21.9	1.47	86.1	40,316
Mit.	19.3	30.6	13.1	173	0.35	0.23	31.7	31.9	0.21	8.04	8.25	239	36,947	37,186	21.7	1.46	86.1	38,250
% Reduced	1%	< 0.5%	11%	< 0.5%	3%	36%	—	< 0.5%	38%	—	2%	—	5%	5%	1%	< 0.5%	—	5%
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	15.5	26.8	16.7	121	0.33	0.35	31.7	32.0	0.33	8.04	8.37	239	35,862	36,102	22.0	1.59	5.97	37,133
Mit.	15.3	26.7	15.1	120	0.32	0.22	31.7	31.9	0.20	8.04	8.24	239	33,802	34,042	21.8	1.59	5.97	35,067
% Reduced	1%	< 0.5%	10%	1%	3%	38%	—	< 0.5%	39%	—	2%	—	6%	6%	1%	< 0.5%	—	6%
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	15.7	27.1	14.5	127	0.30	0.33	27.6	28.0	0.32	7.02	7.34	239	33,112	33,351	21.8	1.38	35.6	34,343
Mit.	15.5	27.0	12.8	127	0.29	0.20	27.6	27.8	0.19	7.02	7.21	239	31,052	31,291	21.6	1.38	35.6	32,278
% Reduced	1%	< 0.5%	11%	1%	3%	39%	—	< 0.5%	41%	—	2%	—	6%	6%	1%	< 0.5%	—	6%

Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.86	4.94	2.64	23.3	0.05	0.06	5.04	5.10	0.06	1.28	1.34	39.6	5,482	5,522	3.61	0.23	5.90	5,686
Mit.	2.83	4.92	2.34	23.1	0.05	0.04	5.04	5.08	0.03	1.28	1.32	39.6	5,141	5,181	3.58	0.23	5.90	5,344
% Reduced	1%	< 0.5%	11%	1%	3%	39%	—	< 0.5%	41%	—	2%	—	6%	6%	1%	< 0.5%	—	6%

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	16.7	15.3	12.8	144	0.35	0.22	31.7	31.9	0.20	8.04	8.24	—	35,310	35,310	1.34	1.37	82.3	35,833
Area	2.62	15.3	0.27	28.7	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	76.6	76.6	< 0.005	< 0.005	—	76.9
Energy	0.19	0.10	1.62	0.69	0.01	0.13	—	0.13	0.13	—	0.13	—	3,588	3,588	0.27	0.02	—	3,599
Water	—	—	—	—	—	—	—	—	—	—	—	38.1	32.5	70.6	0.13	0.08	—	98.8
Waste	—	—	—	—	—	—	—	—	—	—	—	201	0.00	201	20.1	0.00	—	704
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.83	3.83
Total	19.5	30.7	14.7	174	0.36	0.36	31.7	32.0	0.34	8.04	8.38	239	39,007	39,246	21.9	1.47	86.1	40,316
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	15.3	13.9	15.1	120	0.32	0.22	31.7	31.9	0.20	8.04	8.24	—	32,242	32,242	1.49	1.49	2.13	32,727
Area	0.00	12.8	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Energy	0.19	0.10	1.62	0.69	0.01	0.13	—	0.13	0.13	—	0.13	—	3,588	3,588	0.27	0.02	—	3,599
Water	—	—	—	—	—	—	—	—	—	—	—	38.1	32.5	70.6	0.13	0.08	—	98.8
Waste	—	—	—	—	—	—	—	—	—	—	—	201	0.00	201	20.1	0.00	—	704
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.83	3.83

Total	15.5	26.8	16.7	121	0.33	0.35	31.7	32.0	0.33	8.04	8.37	239	35,862	36,102	22.0	1.59	5.97	37,133
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	13.7	12.4	12.6	107	0.29	0.19	27.6	27.8	0.18	7.02	7.20	—	29,439	29,439	1.26	1.28	31.8	29,885
Area	1.79	14.5	0.18	19.7	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	52.5	52.5	< 0.005	< 0.005	—	52.7
Energy	0.19	0.10	1.62	0.69	0.01	0.13	—	0.13	0.13	—	0.13	—	3,588	3,588	0.27	0.02	—	3,599
Water	—	—	—	—	—	—	—	—	—	—	—	38.1	32.5	70.6	0.13	0.08	—	98.8
Waste	—	—	—	—	—	—	—	—	—	—	—	201	0.00	201	20.1	0.00	—	704
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.83	3.83
Total	15.7	27.1	14.5	127	0.30	0.33	27.6	28.0	0.32	7.02	7.34	239	33,112	33,351	21.8	1.38	35.6	34,343
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.50	2.27	2.31	19.5	0.05	0.04	5.04	5.08	0.03	1.28	1.31	—	4,874	4,874	0.21	0.21	5.27	4,948
Area	0.33	2.65	0.03	3.59	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	8.69	8.69	< 0.005	< 0.005	—	8.72
Energy	0.03	0.02	0.30	0.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	594	594	0.04	< 0.005	—	596
Water	—	—	—	—	—	—	—	—	—	—	—	6.30	5.39	11.7	0.02	0.01	—	16.3
Waste	—	—	—	—	—	—	—	—	—	—	—	33.3	0.00	33.3	3.33	0.00	—	117
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.63	0.63
Total	2.86	4.94	2.64	23.3	0.05	0.06	5.04	5.10	0.06	1.28	1.34	39.6	5,482	5,522	3.61	0.23	5.90	5,686

2.6. Operations Emissions by Sector, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	16.7	15.3	12.8	144	0.35	0.22	31.7	31.9	0.20	8.04	8.24	—	35,310	35,310	1.34	1.37	82.3	35,833
Area	2.62	15.3	0.27	28.7	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	76.6	76.6	< 0.005	< 0.005	—	76.9
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	1,528	1,528	0.09	0.01	—	1,534

Water	—	—	—	—	—	—	—	—	—	—	—	38.1	32.5	70.6	0.13	0.08	—	98.8
Waste	—	—	—	—	—	—	—	—	—	—	—	201	0.00	201	20.1	0.00	—	704
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.83	3.83
Total	19.3	30.6	13.1	173	0.35	0.23	31.7	31.9	0.21	8.04	8.25	239	36,947	37,186	21.7	1.46	86.1	38,250
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	15.3	13.9	15.1	120	0.32	0.22	31.7	31.9	0.20	8.04	8.24	—	32,242	32,242	1.49	1.49	2.13	32,727
Area	0.00	12.8	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	1,528	1,528	0.09	0.01	—	1,534
Water	—	—	—	—	—	—	—	—	—	—	—	38.1	32.5	70.6	0.13	0.08	—	98.8
Waste	—	—	—	—	—	—	—	—	—	—	—	201	0.00	201	20.1	0.00	—	704
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.83	3.83
Total	15.3	26.7	15.1	120	0.32	0.22	31.7	31.9	0.20	8.04	8.24	239	33,802	34,042	21.8	1.59	5.97	35,067
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	13.7	12.4	12.6	107	0.29	0.19	27.6	27.8	0.18	7.02	7.20	—	29,439	29,439	1.26	1.28	31.8	29,885
Area	1.79	14.5	0.18	19.7	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	52.5	52.5	< 0.005	< 0.005	—	52.7
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	1,528	1,528	0.09	0.01	—	1,534
Water	—	—	—	—	—	—	—	—	—	—	—	38.1	32.5	70.6	0.13	0.08	—	98.8
Waste	—	—	—	—	—	—	—	—	—	—	—	201	0.00	201	20.1	0.00	—	704
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.83	3.83
Total	15.5	27.0	12.8	127	0.29	0.20	27.6	27.8	0.19	7.02	7.21	239	31,052	31,291	21.6	1.38	35.6	32,278
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.50	2.27	2.31	19.5	0.05	0.04	5.04	5.08	0.03	1.28	1.31	—	4,874	4,874	0.21	0.21	5.27	4,948
Area	0.33	2.65	0.03	3.59	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	8.69	8.69	< 0.005	< 0.005	—	8.72
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	253	253	0.01	< 0.005	—	254
Water	—	—	—	—	—	—	—	—	—	—	—	6.30	5.39	11.7	0.02	0.01	—	16.3
Waste	—	—	—	—	—	—	—	—	—	—	—	33.3	0.00	33.3	3.33	0.00	—	117

Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.63	0.63
Total	2.83	4.92	2.34	23.1	0.05	0.04	5.04	5.08	0.03	1.28	1.32	39.6	5,141	5,181	3.58	0.23	5.90	5,344

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	16.7	15.3	12.8	144	0.35	0.22	31.7	31.9	0.20	8.04	8.24	—	35,310	35,310	1.34	1.37	82.3	35,833
Total	16.7	15.3	12.8	144	0.35	0.22	31.7	31.9	0.20	8.04	8.24	—	35,310	35,310	1.34	1.37	82.3	35,833
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	15.3	13.9	15.1	120	0.32	0.22	31.7	31.9	0.20	8.04	8.24	—	32,242	32,242	1.49	1.49	2.13	32,727
Total	15.3	13.9	15.1	120	0.32	0.22	31.7	31.9	0.20	8.04	8.24	—	32,242	32,242	1.49	1.49	2.13	32,727
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	2.50	2.27	2.31	19.5	0.05	0.04	5.04	5.08	0.03	1.28	1.31	—	4,874	4,874	0.21	0.21	5.27	4,948
Total	2.50	2.27	2.31	19.5	0.05	0.04	5.04	5.08	0.03	1.28	1.31	—	4,874	4,874	0.21	0.21	5.27	4,948

4.1.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	16.7	15.3	12.8	144	0.35	0.22	31.7	31.9	0.20	8.04	8.24	—	35,310	35,310	1.34	1.37	82.3	35,833
Total	16.7	15.3	12.8	144	0.35	0.22	31.7	31.9	0.20	8.04	8.24	—	35,310	35,310	1.34	1.37	82.3	35,833
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	15.3	13.9	15.1	120	0.32	0.22	31.7	31.9	0.20	8.04	8.24	—	32,242	32,242	1.49	1.49	2.13	32,727
Total	15.3	13.9	15.1	120	0.32	0.22	31.7	31.9	0.20	8.04	8.24	—	32,242	32,242	1.49	1.49	2.13	32,727
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	2.50	2.27	2.31	19.5	0.05	0.04	5.04	5.08	0.03	1.28	1.31	—	4,874	4,874	0.21	0.21	5.27	4,948
Total	2.50	2.27	2.31	19.5	0.05	0.04	5.04	5.08	0.03	1.28	1.31	—	4,874	4,874	0.21	0.21	5.27	4,948

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	1,527	1,527	0.09	0.01	—	1,532
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,527	1,527	0.09	0.01	—	1,532
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	1,527	1,527	0.09	0.01	—	1,532
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,527	1,527	0.09	0.01	—	1,532
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	253	253	0.01	< 0.005	—	254
Total	—	—	—	—	—	—	—	—	—	—	—	—	253	253	0.01	< 0.005	—	254

4.2.2. Electricity Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	1,528	1,528	0.09	0.01	—	1,534
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,528	1,528	0.09	0.01	—	1,534
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Apartme Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	1,528	1,528	0.09	0.01	—	1,534
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,528	1,528	0.09	0.01	—	1,534
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartme nts Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	253	253	0.01	< 0.005	—	254
Total	—	—	—	—	—	—	—	—	—	—	—	—	253	253	0.01	< 0.005	—	254

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartme nts Low Rise	0.19	0.10	1.62	0.69	0.01	0.13	—	0.13	0.13	—	0.13	—	2,061	2,061	0.18	< 0.005	—	2,067
Total	0.19	0.10	1.62	0.69	0.01	0.13	—	0.13	0.13	—	0.13	—	2,061	2,061	0.18	< 0.005	—	2,067
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartme nts Low Rise	0.19	0.10	1.62	0.69	0.01	0.13	—	0.13	0.13	—	0.13	—	2,061	2,061	0.18	< 0.005	—	2,067
Total	0.19	0.10	1.62	0.69	0.01	0.13	—	0.13	0.13	—	0.13	—	2,061	2,061	0.18	< 0.005	—	2,067
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartme nts Low Rise	0.03	0.02	0.30	0.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	341	341	0.03	< 0.005	—	342
Total	0.03	0.02	0.30	0.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	341	341	0.03	< 0.005	—	342

4.2.4. Natural Gas Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	11.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	1.38	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	2.62	2.48	0.27	28.7	< 0.005	0.01	—	0.01	0.01	—	0.01	—	76.6	76.6	< 0.005	< 0.005	—	76.9
Total	2.62	15.3	0.27	28.7	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	76.6	76.6	< 0.005	< 0.005	—	76.9
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	11.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	1.38	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00	12.8	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	2.09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.33	0.31	0.03	3.59	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.69	8.69	< 0.005	< 0.005	—	8.72

Total	0.33	2.65	0.03	3.59	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	8.69	8.69	< 0.005	< 0.005	—	8.72

4.3.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	11.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	1.38	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	2.62	2.48	0.27	28.7	< 0.005	0.01	—	0.01	0.01	—	0.01	—	76.6	76.6	< 0.005	< 0.005	—	76.9
Total	2.62	15.3	0.27	28.7	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	76.6	76.6	< 0.005	< 0.005	—	76.9
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	11.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	1.38	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00	12.8	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00

Consum Products	—	2.09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.33	0.31	0.03	3.59	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.69	8.69	< 0.005	< 0.005	—	8.72
Total	0.33	2.65	0.03	3.59	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	8.69	8.69	< 0.005	< 0.005	—	8.72

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	38.1	32.5	70.6	0.13	0.08	—	98.8
Total	—	—	—	—	—	—	—	—	—	—	—	38.1	32.5	70.6	0.13	0.08	—	98.8
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	38.1	32.5	70.6	0.13	0.08	—	98.8
Total	—	—	—	—	—	—	—	—	—	—	—	38.1	32.5	70.6	0.13	0.08	—	98.8
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Apartments	—	—	—	—	—	—	—	—	—	—	—	6.30	5.39	11.7	0.02	0.01	—	16.3
Total	—	—	—	—	—	—	—	—	—	—	—	6.30	5.39	11.7	0.02	0.01	—	16.3

4.4.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	38.1	32.5	70.6	0.13	0.08	—	98.8
Total	—	—	—	—	—	—	—	—	—	—	—	38.1	32.5	70.6	0.13	0.08	—	98.8
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	38.1	32.5	70.6	0.13	0.08	—	98.8
Total	—	—	—	—	—	—	—	—	—	—	—	38.1	32.5	70.6	0.13	0.08	—	98.8
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	6.30	5.39	11.7	0.02	0.01	—	16.3
Total	—	—	—	—	—	—	—	—	—	—	—	6.30	5.39	11.7	0.02	0.01	—	16.3

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	201	0.00	201	20.1	0.00	—	704
Total	—	—	—	—	—	—	—	—	—	—	—	201	0.00	201	20.1	0.00	—	704
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	201	0.00	201	20.1	0.00	—	704
Total	—	—	—	—	—	—	—	—	—	—	—	201	0.00	201	20.1	0.00	—	704
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	33.3	0.00	33.3	3.33	0.00	—	117
Total	—	—	—	—	—	—	—	—	—	—	—	33.3	0.00	33.3	3.33	0.00	—	117

4.5.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	201	0.00	201	20.1	0.00	—	704
Total	—	—	—	—	—	—	—	—	—	—	—	201	0.00	201	20.1	0.00	—	704

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	201	0.00	201	20.1	0.00	—	704
Total	—	—	—	—	—	—	—	—	—	—	—	201	0.00	201	20.1	0.00	—	704
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	33.3	0.00	33.3	3.33	0.00	—	117
Total	—	—	—	—	—	—	—	—	—	—	—	33.3	0.00	33.3	3.33	0.00	—	117

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.83	3.83
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.83	3.83
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.83	3.83
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.83	3.83

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.63	0.63
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.63	0.63

4.6.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.83	3.83
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.83	3.83
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.83	3.83
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.83	3.83
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.63	0.63
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.63	0.63

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year

Apartments Low Rise	3,697	4,111	3,171	1,343,466	40,158	44,657	34,453	14,594,777

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Apartments Low Rise	3,697	4,111	3,171	1,343,466	40,158	44,657	34,453	14,594,777

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Apartments Low Rise	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	505
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.1.2. Mitigated

Hearth Type	Unmitigated (number)
Apartments Low Rise	—

Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	505
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
1083982.5	361,328	0.00	0.00	—

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Apartments Low Rise	2,498,915	223	0.0129	0.0017	6,431,723

5.11.2. Mitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Apartments Low Rise	2,501,038	223	0.0129	0.0017	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Apartments Low Rise	17,805,795	3,169,087

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Apartments Low Rise	17,805,795	3,169,087

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Apartments Low Rise	373	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Apartments Low Rise	373	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Apartments Low Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Low Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Apartments Low Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Low Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.15.2. Mitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	21.8	annual days of extreme heat
Extreme Precipitation	6.35	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	2	0	0	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	2	1	1	3
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2

Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	58.2
AQ-PM	37.4
AQ-DPM	27.5
Drinking Water	61.1
Lead Risk Housing	92.2
Pesticides	7.24
Toxic Releases	21.8
Traffic	47.0
Effect Indicators	—
CleanUp Sites	80.9
Groundwater	99.2
Haz Waste Facilities/Generators	61.6
Impaired Water Bodies	0.00

Solid Waste	52.9
Sensitive Population	—
Asthma	93.4
Cardio-vascular	69.2
Low Birth Weights	79.4
Socioeconomic Factor Indicators	—
Education	62.9
Housing	73.4
Linguistic	39.2
Poverty	91.6
Unemployment	65.6

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	10.16296677
Employed	6.274862056
Median HI	6.672654947
Education	—
Bachelor's or higher	19.73566021
High school enrollment	12.79353266
Preschool enrollment	42.65366354
Transportation	—
Auto Access	24.89413576
Active commuting	74.06646991
Social	—

2-parent households	39.00936738
Voting	13.02450917
Neighborhood	—
Alcohol availability	41.6527653
Park access	47.42717824
Retail density	38.27794174
Supermarket access	72.19299371
Tree canopy	82.34312845
Housing	—
Homeownership	23.13614782
Housing habitability	24.91979982
Low-inc homeowner severe housing cost burden	13.20415758
Low-inc renter severe housing cost burden	43.7957141
Uncrowded housing	25.445913
Health Outcomes	—
Insured adults	37.80315668
Arthritis	0.0
Asthma ER Admissions	5.9
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	5.5
Cognitively Disabled	4.0
Physically Disabled	5.6

Heart Attack ER Admissions	16.8
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	96.7
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	16.3
Elderly	67.6
English Speaking	43.4
Foreign-born	30.0
Outdoor Workers	48.6
Climate Change Adaptive Capacity	—
Impervious Surface Cover	51.3
Traffic Density	47.2
Traffic Access	66.1
Other Indices	—
Hardship	80.5
Other Decision Support	—
2016 Voting	6.4

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	83.0
Healthy Places Index Score for Project Location (b)	13.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	20% of total lot acreage is landscaped as in GP
Construction: Construction Phases	no demo

Sac Rezone Old Florin operations (before) Detailed Report

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1.1. Basic Project Information

Data Field	Value
Project Name	Sac Rezone Old Florin operations (before)
Operational Year	2030
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.00
Precipitation (days)	37.8
Location	38.49656099729435, -121.39733654991514
County	Sacramento
City	Unincorporated
Air District	Sacramento Metropolitan AQMD
Air Basin	Sacramento Valley
TAZ	774
EDFZ	13
Electric Utility	Sacramento Municipal Utility District
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.21

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Apartments Low Rise	503	Dwelling Unit	25.2	533,180	219,717	—	1,408	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Energy	E-15	Require All-Electric Development

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	17.8	29.3	11.2	130	0.24	0.29	20.4	20.7	0.28	5.19	5.47	238	26,729	26,967	21.5	1.07	56.9	27,881
Mit.	17.6	29.2	9.63	129	0.23	0.16	20.4	20.6	0.15	5.19	5.34	238	24,677	24,916	21.3	1.07	56.9	25,824
% Reduced	1%	< 0.5%	14%	1%	4%	45%	—	1%	47%	—	2%	—	8%	8%	1%	< 0.5%	—	7%
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	13.8	25.4	12.6	89.2	0.22	0.28	20.4	20.7	0.27	5.19	5.46	238	24,679	24,917	21.6	1.17	5.20	25,811
Mit.	13.6	25.3	11.0	88.6	0.21	0.15	20.4	20.6	0.14	5.19	5.33	238	22,627	22,865	21.4	1.16	5.20	23,753
% Reduced	1%	< 0.5%	13%	1%	5%	47%	—	1%	49%	—	2%	—	8%	8%	1%	< 0.5%	—	8%
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	14.1	25.8	11.0	97.3	0.20	0.27	17.9	18.1	0.26	4.54	4.80	238	22,891	23,129	21.4	1.01	24.4	23,991
Mit.	14.0	25.7	9.36	96.6	0.19	0.14	17.9	18.0	0.13	4.54	4.67	238	20,839	21,078	21.2	1.01	24.4	21,934
% Reduced	1%	< 0.5%	15%	1%	5%	49%	—	1%	50%	—	3%	—	9%	9%	1%	< 0.5%	—	9%

Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.58	4.71	2.00	17.8	0.04	0.05	3.26	3.31	0.05	0.83	0.88	39.5	3,790	3,829	3.55	0.17	4.03	3,972
Mit.	2.55	4.70	1.71	17.6	0.03	0.03	3.26	3.28	0.02	0.83	0.85	39.5	3,450	3,490	3.52	0.17	4.03	3,631
% Reduced	1%	< 0.5%	15%	1%	5%	49%	—	1%	50%	—	3%	—	9%	9%	1%	< 0.5%	—	9%

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	15.0	14.0	9.36	100	0.23	0.14	20.4	20.6	0.14	5.19	5.33	—	23,046	23,046	1.03	0.98	53.1	23,416
Area	2.61	15.3	0.27	28.6	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	76.3	76.3	< 0.005	< 0.005	—	76.6
Energy	0.19	0.09	1.62	0.69	0.01	0.13	—	0.13	0.13	—	0.13	—	3,574	3,574	0.27	0.02	—	3,585
Water	—	—	—	—	—	—	—	—	—	—	—	37.9	33.0	70.9	0.13	0.08	—	98.9
Waste	—	—	—	—	—	—	—	—	—	—	—	200	0.00	200	20.0	0.00	—	701
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.82	3.82
Total	17.8	29.3	11.2	130	0.24	0.29	20.4	20.7	0.28	5.19	5.47	238	26,729	26,967	21.5	1.07	56.9	27,881
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	13.6	12.5	11.0	88.6	0.21	0.15	20.4	20.6	0.14	5.19	5.33	—	21,072	21,072	1.19	1.07	1.38	21,422
Area	0.00	12.8	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Energy	0.19	0.09	1.62	0.69	0.01	0.13	—	0.13	0.13	—	0.13	—	3,574	3,574	0.27	0.02	—	3,585
Water	—	—	—	—	—	—	—	—	—	—	—	37.9	33.0	70.9	0.13	0.08	—	98.9
Waste	—	—	—	—	—	—	—	—	—	—	—	200	0.00	200	20.0	0.00	—	701
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.82	3.82

Total	13.8	25.4	12.6	89.2	0.22	0.28	20.4	20.7	0.27	5.19	5.46	238	24,679	24,917	21.6	1.17	5.20	25,811
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	12.2	11.3	9.17	77.0	0.19	0.13	17.9	18.0	0.12	4.54	4.66	—	19,232	19,232	0.99	0.91	20.5	19,550
Area	1.79	14.5	0.18	19.6	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	52.3	52.3	< 0.005	< 0.005	—	52.4
Energy	0.19	0.09	1.62	0.69	0.01	0.13	—	0.13	0.13	—	0.13	—	3,574	3,574	0.27	0.02	—	3,585
Water	—	—	—	—	—	—	—	—	—	—	—	37.9	33.0	70.9	0.13	0.08	—	98.9
Waste	—	—	—	—	—	—	—	—	—	—	—	200	0.00	200	20.0	0.00	—	701
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.82	3.82
Total	14.1	25.8	11.0	97.3	0.20	0.27	17.9	18.1	0.26	4.54	4.80	238	22,891	23,129	21.4	1.01	24.4	23,991
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.22	2.05	1.67	14.1	0.03	0.02	3.26	3.28	0.02	0.83	0.85	—	3,184	3,184	0.16	0.15	3.40	3,237
Area	0.33	2.64	0.03	3.58	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	8.65	8.65	< 0.005	< 0.005	—	8.68
Energy	0.03	0.02	0.30	0.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	592	592	0.04	< 0.005	—	594
Water	—	—	—	—	—	—	—	—	—	—	—	6.27	5.46	11.7	0.02	0.01	—	16.4
Waste	—	—	—	—	—	—	—	—	—	—	—	33.2	0.00	33.2	3.32	0.00	—	116
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.63	0.63
Total	2.58	4.71	2.00	17.8	0.04	0.05	3.26	3.31	0.05	0.83	0.88	39.5	3,790	3,829	3.55	0.17	4.03	3,972

2.6. Operations Emissions by Sector, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	15.0	14.0	9.36	100	0.23	0.14	20.4	20.6	0.14	5.19	5.33	—	23,046	23,046	1.03	0.98	53.1	23,416
Area	2.61	15.3	0.27	28.6	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	76.3	76.3	< 0.005	< 0.005	—	76.6
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	1,522	1,522	0.09	0.01	—	1,528

Water	—	—	—	—	—	—	—	—	—	—	—	37.9	33.0	70.9	0.13	0.08	—	98.9
Waste	—	—	—	—	—	—	—	—	—	—	—	200	0.00	200	20.0	0.00	—	701
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.82	3.82
Total	17.6	29.2	9.63	129	0.23	0.16	20.4	20.6	0.15	5.19	5.34	238	24,677	24,916	21.3	1.07	56.9	25,824
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	13.6	12.5	11.0	88.6	0.21	0.15	20.4	20.6	0.14	5.19	5.33	—	21,072	21,072	1.19	1.07	1.38	21,422
Area	0.00	12.8	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	1,522	1,522	0.09	0.01	—	1,528
Water	—	—	—	—	—	—	—	—	—	—	—	37.9	33.0	70.9	0.13	0.08	—	98.9
Waste	—	—	—	—	—	—	—	—	—	—	—	200	0.00	200	20.0	0.00	—	701
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.82	3.82
Total	13.6	25.3	11.0	88.6	0.21	0.15	20.4	20.6	0.14	5.19	5.33	238	22,627	22,865	21.4	1.16	5.20	23,753
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	12.2	11.3	9.17	77.0	0.19	0.13	17.9	18.0	0.12	4.54	4.66	—	19,232	19,232	0.99	0.91	20.5	19,550
Area	1.79	14.5	0.18	19.6	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	52.3	52.3	< 0.005	< 0.005	—	52.4
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	1,522	1,522	0.09	0.01	—	1,528
Water	—	—	—	—	—	—	—	—	—	—	—	37.9	33.0	70.9	0.13	0.08	—	98.9
Waste	—	—	—	—	—	—	—	—	—	—	—	200	0.00	200	20.0	0.00	—	701
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.82	3.82
Total	14.0	25.7	9.36	96.6	0.19	0.14	17.9	18.0	0.13	4.54	4.67	238	20,839	21,078	21.2	1.01	24.4	21,934
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.22	2.05	1.67	14.1	0.03	0.02	3.26	3.28	0.02	0.83	0.85	—	3,184	3,184	0.16	0.15	3.40	3,237
Area	0.33	2.64	0.03	3.58	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	8.65	8.65	< 0.005	< 0.005	—	8.68
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	252	252	0.01	< 0.005	—	253
Water	—	—	—	—	—	—	—	—	—	—	—	6.27	5.46	11.7	0.02	0.01	—	16.4
Waste	—	—	—	—	—	—	—	—	—	—	—	33.2	0.00	33.2	3.32	0.00	—	116

Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.63	0.63
Total	2.55	4.70	1.71	17.6	0.03	0.03	3.26	3.28	0.02	0.83	0.85	39.5	3,450	3,490	3.52	0.17	4.03	3,631

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	15.0	14.0	9.36	100	0.23	0.14	20.4	20.6	0.14	5.19	5.33	—	23,046	23,046	1.03	0.98	53.1	23,416
Total	15.0	14.0	9.36	100	0.23	0.14	20.4	20.6	0.14	5.19	5.33	—	23,046	23,046	1.03	0.98	53.1	23,416
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	13.6	12.5	11.0	88.6	0.21	0.15	20.4	20.6	0.14	5.19	5.33	—	21,072	21,072	1.19	1.07	1.38	21,422
Total	13.6	12.5	11.0	88.6	0.21	0.15	20.4	20.6	0.14	5.19	5.33	—	21,072	21,072	1.19	1.07	1.38	21,422
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	2.22	2.05	1.67	14.1	0.03	0.02	3.26	3.28	0.02	0.83	0.85	—	3,184	3,184	0.16	0.15	3.40	3,237
Total	2.22	2.05	1.67	14.1	0.03	0.02	3.26	3.28	0.02	0.83	0.85	—	3,184	3,184	0.16	0.15	3.40	3,237

4.1.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	15.0	14.0	9.36	100	0.23	0.14	20.4	20.6	0.14	5.19	5.33	—	23,046	23,046	1.03	0.98	53.1	23,416
Total	15.0	14.0	9.36	100	0.23	0.14	20.4	20.6	0.14	5.19	5.33	—	23,046	23,046	1.03	0.98	53.1	23,416
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	13.6	12.5	11.0	88.6	0.21	0.15	20.4	20.6	0.14	5.19	5.33	—	21,072	21,072	1.19	1.07	1.38	21,422
Total	13.6	12.5	11.0	88.6	0.21	0.15	20.4	20.6	0.14	5.19	5.33	—	21,072	21,072	1.19	1.07	1.38	21,422
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	2.22	2.05	1.67	14.1	0.03	0.02	3.26	3.28	0.02	0.83	0.85	—	3,184	3,184	0.16	0.15	3.40	3,237
Total	2.22	2.05	1.67	14.1	0.03	0.02	3.26	3.28	0.02	0.83	0.85	—	3,184	3,184	0.16	0.15	3.40	3,237

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	1,521	1,521	0.09	0.01	—	1,526
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,521	1,521	0.09	0.01	—	1,526
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	1,521	1,521	0.09	0.01	—	1,526
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,521	1,521	0.09	0.01	—	1,526
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	252	252	0.01	< 0.005	—	253
Total	—	—	—	—	—	—	—	—	—	—	—	—	252	252	0.01	< 0.005	—	253

4.2.2. Electricity Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	1,522	1,522	0.09	0.01	—	1,528
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,522	1,522	0.09	0.01	—	1,528
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Apartme Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	1,522	1,522	0.09	0.01	—	1,528
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,522	1,522	0.09	0.01	—	1,528
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartme nts Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	252	252	0.01	< 0.005	—	253
Total	—	—	—	—	—	—	—	—	—	—	—	—	252	252	0.01	< 0.005	—	253

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartme nts Low Rise	0.19	0.09	1.62	0.69	0.01	0.13	—	0.13	0.13	—	0.13	—	2,053	2,053	0.18	< 0.005	—	2,059
Total	0.19	0.09	1.62	0.69	0.01	0.13	—	0.13	0.13	—	0.13	—	2,053	2,053	0.18	< 0.005	—	2,059
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartme nts Low Rise	0.19	0.09	1.62	0.69	0.01	0.13	—	0.13	0.13	—	0.13	—	2,053	2,053	0.18	< 0.005	—	2,059
Total	0.19	0.09	1.62	0.69	0.01	0.13	—	0.13	0.13	—	0.13	—	2,053	2,053	0.18	< 0.005	—	2,059
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartme nts Low Rise	0.03	0.02	0.30	0.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	340	340	0.03	< 0.005	—	341
Total	0.03	0.02	0.30	0.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	340	340	0.03	< 0.005	—	341

4.2.4. Natural Gas Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	11.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	1.37	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	2.61	2.47	0.27	28.6	< 0.005	0.01	—	0.01	0.01	—	0.01	—	76.3	76.3	< 0.005	< 0.005	—	76.6
Total	2.61	15.3	0.27	28.6	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	76.3	76.3	< 0.005	< 0.005	—	76.6
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	11.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	1.37	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00	12.8	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	2.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.33	0.31	0.03	3.58	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.65	8.65	< 0.005	< 0.005	—	8.68

Total	0.33	2.64	0.03	3.58	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	8.65	8.65	< 0.005	< 0.005	—	8.68

4.3.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	11.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	1.37	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	2.61	2.47	0.27	28.6	< 0.005	0.01	—	0.01	0.01	—	0.01	—	76.3	76.3	< 0.005	< 0.005	—	76.6
Total	2.61	15.3	0.27	28.6	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	76.3	76.3	< 0.005	< 0.005	—	76.6
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	11.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	1.37	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00	12.8	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00

Consum Products	—	2.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.33	0.31	0.03	3.58	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.65	8.65	< 0.005	< 0.005	—	8.68
Total	0.33	2.64	0.03	3.58	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	8.65	8.65	< 0.005	< 0.005	—	8.68

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	37.9	33.0	70.9	0.13	0.08	—	98.9
Total	—	—	—	—	—	—	—	—	—	—	—	37.9	33.0	70.9	0.13	0.08	—	98.9
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	37.9	33.0	70.9	0.13	0.08	—	98.9
Total	—	—	—	—	—	—	—	—	—	—	—	37.9	33.0	70.9	0.13	0.08	—	98.9
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Apartments	—	—	—	—	—	—	—	—	—	—	—	6.27	5.46	11.7	0.02	0.01	—	16.4
Total	—	—	—	—	—	—	—	—	—	—	—	6.27	5.46	11.7	0.02	0.01	—	16.4

4.4.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	37.9	33.0	70.9	0.13	0.08	—	98.9
Total	—	—	—	—	—	—	—	—	—	—	—	37.9	33.0	70.9	0.13	0.08	—	98.9
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	37.9	33.0	70.9	0.13	0.08	—	98.9
Total	—	—	—	—	—	—	—	—	—	—	—	37.9	33.0	70.9	0.13	0.08	—	98.9
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	6.27	5.46	11.7	0.02	0.01	—	16.4
Total	—	—	—	—	—	—	—	—	—	—	—	6.27	5.46	11.7	0.02	0.01	—	16.4

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	200	0.00	200	20.0	0.00	—	701
Total	—	—	—	—	—	—	—	—	—	—	—	200	0.00	200	20.0	0.00	—	701
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	200	0.00	200	20.0	0.00	—	701
Total	—	—	—	—	—	—	—	—	—	—	—	200	0.00	200	20.0	0.00	—	701
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	33.2	0.00	33.2	3.32	0.00	—	116
Total	—	—	—	—	—	—	—	—	—	—	—	33.2	0.00	33.2	3.32	0.00	—	116

4.5.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	200	0.00	200	20.0	0.00	—	701
Total	—	—	—	—	—	—	—	—	—	—	—	200	0.00	200	20.0	0.00	—	701

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	200	0.00	200	20.0	0.00	—	701
Total	—	—	—	—	—	—	—	—	—	—	—	200	0.00	200	20.0	0.00	—	701
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	33.2	0.00	33.2	3.32	0.00	—	116
Total	—	—	—	—	—	—	—	—	—	—	—	33.2	0.00	33.2	3.32	0.00	—	116

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.82	3.82
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.82	3.82
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.82	3.82
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.82	3.82

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.63	0.63
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.63	0.63

4.6.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.82	3.82
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.82	3.82
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.82	3.82
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.82	3.82
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.63	0.63
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.63	0.63

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year

Apartments Low Rise	3,682	4,094	3,159	1,338,145	25,930	28,835	22,246	9,423,871

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Apartments Low Rise	3,682	4,094	3,159	1,338,145	25,930	28,835	22,246	9,423,871

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Apartments Low Rise	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	503
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.1.2. Mitigated

Hearth Type	Unmitigated (number)
Apartments Low Rise	—

Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	503
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
1079689.5	359,897	0.00	0.00	—

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Apartments Low Rise	2,489,019	223	0.0129	0.0017	6,406,250

5.11.2. Mitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Apartments Low Rise	2,491,142	223	0.0129	0.0017	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Apartments Low Rise	17,735,277	3,750,558

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Apartments Low Rise	17,735,277	3,750,558

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Apartments Low Rise	372	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Apartments Low Rise	372	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Apartments Low Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Low Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Apartments Low Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Low Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.15.2. Mitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	19.3	annual days of extreme heat
Extreme Precipitation	5.70	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	2	0	0	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	2	1	1	3
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2

Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	48.6
AQ-PM	23.7
AQ-DPM	22.3
Drinking Water	78.8
Lead Risk Housing	41.2
Pesticides	73.8
Toxic Releases	30.3
Traffic	28.5
Effect Indicators	—
CleanUp Sites	86.5
Groundwater	88.9
Haz Waste Facilities/Generators	99.8
Impaired Water Bodies	51.2

Solid Waste	99.9
Sensitive Population	—
Asthma	50.2
Cardio-vascular	53.9
Low Birth Weights	36.4
Socioeconomic Factor Indicators	—
Education	47.5
Housing	61.9
Linguistic	43.9
Poverty	58.5
Unemployment	62.4

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	36.84075452
Employed	20.45425382
Median HI	23.26446811
Education	—
Bachelor's or higher	39.34300013
High school enrollment	100
Preschool enrollment	18.64493776
Transportation	—
Auto Access	37.4566919
Active commuting	70.79430258
Social	—

2-parent households	14.75683306
Voting	58.51405107
Neighborhood	—
Alcohol availability	64.62209675
Park access	12.70370846
Retail density	22.81534711
Supermarket access	13.65327858
Tree canopy	2.065956628
Housing	—
Homeownership	60.60567176
Housing habitability	41.69126139
Low-inc homeowner severe housing cost burden	38.58591043
Low-inc renter severe housing cost burden	7.737713332
Uncrowded housing	46.38778391
Health Outcomes	—
Insured adults	43.96253048
Arthritis	0.0
Asthma ER Admissions	49.9
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	16.0
Cognitively Disabled	21.0
Physically Disabled	7.2

Heart Attack ER Admissions	53.7
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	98.4
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	59.5
Elderly	21.1
English Speaking	31.0
Foreign-born	59.3
Outdoor Workers	28.8
Climate Change Adaptive Capacity	—
Impervious Surface Cover	91.1
Traffic Density	37.8
Traffic Access	23.0
Other Indices	—
Hardship	62.5
Other Decision Support	—
2016 Voting	63.7

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	70.0
Healthy Places Index Score for Project Location (b)	29.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	South Florin

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	No demo
Land Use	landscape area = 20% of total lot acreage

Sac Rezone Largest Site Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Sac Rezone Largest Site
Construction Start Date	1/1/2025
Operational Year	2027
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.70
Precipitation (days)	3.00
Location	9525 Folsom Blvd, Sacramento, CA 95827, USA
County	Sacramento
City	Unincorporated
Air District	Sacramento Metropolitan AQMD
Air Basin	Sacramento Valley
TAZ	751
EDFZ	13
Electric Utility	Sacramento Municipal Utility District
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.22

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description

Apartments Mid Rise	458	Dwelling Unit	11.4	439,680	87,936	—	1,282	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Energy	E-15	Require All-Electric Development
Area Sources	AS-2	Use Low-VOC Paints

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.02	190	14.0	33.9	0.03	0.45	3.70	4.15	0.42	0.88	1.30	—	7,557	7,557	0.25	0.36	18.1	7,689
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.01	3.38	31.7	31.0	0.06	1.37	7.84	9.21	1.26	3.98	5.24	—	7,136	7,136	0.27	0.36	0.47	7,251
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.17	10.9	11.9	20.8	0.03	0.41	2.76	3.17	0.38	0.76	1.14	—	5,078	5,078	0.18	0.23	4.75	5,154
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.40	2.00	2.18	3.79	< 0.005	0.08	0.50	0.58	0.07	0.14	0.21	—	841	841	0.03	0.04	0.79	853

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	3.02	2.58	14.0	33.9	0.03	0.45	3.70	4.15	0.42	0.88	1.30	—	7,557	7,557	0.25	0.36	18.1	7,689
2026	2.88	190	13.1	32.5	0.03	0.40	3.70	4.10	0.37	0.88	1.25	—	7,455	7,455	0.24	0.35	16.5	7,583
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	4.01	3.38	31.7	31.0	0.06	1.37	7.84	9.21	1.26	3.98	5.24	—	7,136	7,136	0.27	0.36	0.47	7,251
2026	2.66	2.32	13.5	27.6	0.03	0.40	3.70	4.10	0.37	0.88	1.25	—	7,044	7,044	0.26	0.36	0.43	7,158
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	2.17	1.83	11.9	20.8	0.03	0.41	2.76	3.17	0.38	0.76	1.14	—	5,078	5,078	0.18	0.23	4.75	5,154
2026	0.65	10.9	3.35	6.84	0.01	0.11	0.85	0.95	0.10	0.20	0.30	—	1,684	1,684	0.06	0.08	1.62	1,711
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.40	0.33	2.18	3.79	< 0.005	0.08	0.50	0.58	0.07	0.14	0.21	—	841	841	0.03	0.04	0.79	853
2026	0.12	2.00	0.61	1.25	< 0.005	0.02	0.15	0.17	0.02	0.04	0.05	—	279	279	0.01	0.01	0.27	283

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	3.02	2.58	14.0	33.9	0.03	0.45	3.70	4.15	0.42	0.88	1.30	—	7,557	7,557	0.25	0.36	18.1	7,689
2026	2.88	190	13.1	32.5	0.03	0.40	3.70	4.10	0.37	0.88	1.25	—	7,455	7,455	0.24	0.35	16.5	7,583
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2025	4.01	3.38	31.7	31.0	0.06	1.37	7.84	9.21	1.26	3.98	5.24	—	7,136	7,136	0.27	0.36	0.47	7,251
2026	2.66	2.32	13.5	27.6	0.03	0.40	3.70	4.10	0.37	0.88	1.25	—	7,044	7,044	0.26	0.36	0.43	7,158
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	2.17	1.83	11.9	20.8	0.03	0.41	2.76	3.17	0.38	0.76	1.14	—	5,078	5,078	0.18	0.23	4.75	5,154
2026	0.65	10.9	3.35	6.84	0.01	0.11	0.85	0.95	0.10	0.20	0.30	—	1,684	1,684	0.06	0.08	1.62	1,711
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.40	0.33	2.18	3.79	< 0.005	0.08	0.50	0.58	0.07	0.14	0.21	—	841	841	0.03	0.04	0.79	853
2026	0.12	2.00	0.61	1.25	< 0.005	0.02	0.15	0.17	0.02	0.04	0.05	—	279	279	0.01	0.01	0.27	283

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	14.7	23.9	12.4	136	0.26	0.31	21.6	21.9	0.30	5.48	5.78	217	29,356	29,573	19.6	1.09	84.3	30,473
Mit.	14.5	23.5	10.9	135	0.25	0.19	21.6	21.8	0.18	5.48	5.65	217	27,396	27,613	19.4	1.09	84.3	28,507
% Reduced	1%	2%	12%	< 0.5%	4%	40%	—	1%	42%	—	2%	—	7%	7%	1%	< 0.5%	—	6%
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	11.3	20.5	14.0	91.2	0.24	0.30	21.6	21.9	0.29	5.48	5.77	217	27,064	27,281	19.7	1.19	5.25	28,133
Mit.	11.1	20.1	12.5	90.6	0.23	0.18	21.6	21.7	0.17	5.48	5.64	217	25,104	25,321	19.5	1.18	5.25	26,167
% Reduced	2%	2%	11%	1%	4%	41%	—	1%	43%	—	2%	—	7%	7%	1%	< 0.5%	—	7%
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unmit.	12.4	21.6	12.8	104	0.23	0.30	20.5	20.8	0.29	5.20	5.49	217	26,394	26,611	19.6	1.09	36.5	27,462
Mit.	12.2	21.2	11.3	104	0.22	0.18	20.5	20.6	0.16	5.20	5.36	217	24,433	24,650	19.4	1.08	36.5	25,496
% Reduced	1%	2%	12%	1%	4%	41%	—	1%	43%	—	2%	—	7%	7%	1%	< 0.5%	—	7%
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.26	3.94	2.34	19.0	0.04	0.06	3.73	3.79	0.05	0.95	1.00	35.9	4,370	4,406	3.25	0.18	6.04	4,547
Mit.	2.22	3.87	2.06	18.9	0.04	0.03	3.73	3.77	0.03	0.95	0.98	35.9	4,045	4,081	3.22	0.18	6.04	4,221
% Reduced	1%	2%	12%	1%	4%	41%	—	1%	43%	—	2%	—	7%	7%	1%	< 0.5%	—	7%

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	12.1	11.0	10.6	109	0.25	0.18	21.6	21.7	0.17	5.48	5.64	—	25,633	25,633	0.99	1.00	81.2	26,036
Area	2.41	12.7	0.25	26.0	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	69.5	69.5	< 0.005	< 0.005	—	69.7
Energy	0.18	0.09	1.55	0.66	0.01	0.12	—	0.12	0.12	—	0.12	—	3,621	3,621	0.25	0.01	—	3,631
Water	—	—	—	—	—	—	—	—	—	—	—	34.5	33.7	68.2	0.12	0.08	—	93.8
Waste	—	—	—	—	—	—	—	—	—	—	—	182	0.00	182	18.2	0.00	—	638
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.15	3.15
Total	14.7	23.9	12.4	136	0.26	0.31	21.6	21.9	0.30	5.48	5.78	217	29,356	29,573	19.6	1.09	84.3	30,473
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	11.1	9.98	12.5	90.6	0.23	0.18	21.6	21.7	0.17	5.48	5.64	—	23,410	23,410	1.10	1.10	2.10	23,766
Area	0.00	10.4	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Energy	0.18	0.09	1.55	0.66	0.01	0.12	—	0.12	0.12	—	0.12	—	3,621	3,621	0.25	0.01	—	3,631

Water	—	—	—	—	—	—	—	—	—	—	—	34.5	33.7	68.2	0.12	0.08	—	93.8
Waste	—	—	—	—	—	—	—	—	—	—	—	182	0.00	182	18.2	0.00	—	638
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.15	3.15
Total	11.3	20.5	14.0	91.2	0.24	0.30	21.6	21.9	0.29	5.48	5.77	217	27,064	27,281	19.7	1.19	5.25	28,133
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	10.5	9.50	11.1	85.7	0.22	0.17	20.5	20.6	0.16	5.20	5.36	—	22,692	22,692	0.99	1.00	33.3	23,048
Area	1.65	12.0	0.17	17.8	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	47.6	47.6	< 0.005	< 0.005	—	47.8
Energy	0.18	0.09	1.55	0.66	0.01	0.12	—	0.12	0.12	—	0.12	—	3,621	3,621	0.25	0.01	—	3,631
Water	—	—	—	—	—	—	—	—	—	—	—	34.5	33.7	68.2	0.12	0.08	—	93.8
Waste	—	—	—	—	—	—	—	—	—	—	—	182	0.00	182	18.2	0.00	—	638
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.15	3.15
Total	12.4	21.6	12.8	104	0.23	0.30	20.5	20.8	0.29	5.20	5.49	217	26,394	26,611	19.6	1.09	36.5	27,462
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.92	1.73	2.03	15.6	0.04	0.03	3.73	3.77	0.03	0.95	0.98	—	3,757	3,757	0.16	0.17	5.52	3,816
Area	0.30	2.19	0.03	3.25	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	7.88	7.88	< 0.005	< 0.005	—	7.91
Energy	0.03	0.02	0.28	0.12	< 0.005	0.02	—	0.02	0.02	—	0.02	—	599	599	0.04	< 0.005	—	601
Water	—	—	—	—	—	—	—	—	—	—	—	5.71	5.58	11.3	0.02	0.01	—	15.5
Waste	—	—	—	—	—	—	—	—	—	—	—	30.2	0.00	30.2	3.02	0.00	—	106
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.52	0.52
Total	2.26	3.94	2.34	19.0	0.04	0.06	3.73	3.79	0.05	0.95	1.00	35.9	4,370	4,406	3.25	0.18	6.04	4,547

2.6. Operations Emissions by Sector, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Mobile	12.1	11.0	10.6	109	0.25	0.18	21.6	21.7	0.17	5.48	5.64	—	25,633	25,633	0.99	1.00	81.2	26,036
Area	2.41	12.4	0.25	26.0	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	69.5	69.5	< 0.005	< 0.005	—	69.7
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	1,660	1,660	0.08	0.01	—	1,665
Water	—	—	—	—	—	—	—	—	—	—	—	34.5	33.7	68.2	0.12	0.08	—	93.8
Waste	—	—	—	—	—	—	—	—	—	—	—	182	0.00	182	18.2	0.00	—	638
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.15	3.15
Total	14.5	23.5	10.9	135	0.25	0.19	21.6	21.8	0.18	5.48	5.65	217	27,396	27,613	19.4	1.09	84.3	28,507
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	11.1	9.98	12.5	90.6	0.23	0.18	21.6	21.7	0.17	5.48	5.64	—	23,410	23,410	1.10	1.10	2.10	23,766
Area	0.00	10.2	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	1,660	1,660	0.08	0.01	—	1,665
Water	—	—	—	—	—	—	—	—	—	—	—	34.5	33.7	68.2	0.12	0.08	—	93.8
Waste	—	—	—	—	—	—	—	—	—	—	—	182	0.00	182	18.2	0.00	—	638
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.15	3.15
Total	11.1	20.1	12.5	90.6	0.23	0.18	21.6	21.7	0.17	5.48	5.64	217	25,104	25,321	19.5	1.18	5.25	26,167
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	10.5	9.50	11.1	85.7	0.22	0.17	20.5	20.6	0.16	5.20	5.36	—	22,692	22,692	0.99	1.00	33.3	23,048
Area	1.65	11.7	0.17	17.8	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	47.6	47.6	< 0.005	< 0.005	—	47.8
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	1,660	1,660	0.08	0.01	—	1,665
Water	—	—	—	—	—	—	—	—	—	—	—	34.5	33.7	68.2	0.12	0.08	—	93.8
Waste	—	—	—	—	—	—	—	—	—	—	—	182	0.00	182	18.2	0.00	—	638
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.15	3.15
Total	12.2	21.2	11.3	104	0.22	0.18	20.5	20.6	0.16	5.20	5.36	217	24,433	24,650	19.4	1.08	36.5	25,496
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.92	1.73	2.03	15.6	0.04	0.03	3.73	3.77	0.03	0.95	0.98	—	3,757	3,757	0.16	0.17	5.52	3,816
Area	0.30	2.14	0.03	3.25	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	7.88	7.88	< 0.005	< 0.005	—	7.91

Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	275	275	0.01	< 0.005	—	276
Water	—	—	—	—	—	—	—	—	—	—	—	5.71	5.58	11.3	0.02	0.01	—	15.5
Waste	—	—	—	—	—	—	—	—	—	—	—	30.2	0.00	30.2	3.02	0.00	—	106
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.52	0.52
Total	2.22	3.87	2.06	18.9	0.04	0.03	3.73	3.77	0.03	0.95	0.98	35.9	4,045	4,081	3.22	0.18	6.04	4,221

3. Construction Emissions Details

3.1. Site Preparation (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.94	3.31	31.6	30.2	0.05	1.37	—	1.37	1.26	—	1.26	—	5,295	5,295	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	7.67	7.67	—	3.94	3.94	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.87	0.83	< 0.005	0.04	—	0.04	0.03	—	0.03	—	145	145	0.01	< 0.005	—	146

Dust From Material Movement	—	—	—	—	—	—	0.21	0.21	—	0.11	0.11	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.16	0.15	< 0.005	0.01	—	0.01	0.01	—	0.01	—	24.0	24.0	< 0.005	< 0.005	—	24.1
Dust From Material Movement	—	—	—	—	—	—	0.04	0.04	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.06	0.78	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	176	176	< 0.005	0.01	0.02	179
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.96	4.96	< 0.005	< 0.005	0.01	5.03
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.82	0.82	< 0.005	< 0.005	< 0.005	0.83
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.2. Site Preparation (2025) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.94	3.31	31.6	30.2	0.05	1.37	—	1.37	1.26	—	1.26	—	5,295	5,295	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	7.67	7.67	—	3.94	3.94	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.87	0.83	< 0.005	0.04	—	0.04	0.03	—	0.03	—	145	145	0.01	< 0.005	—	146
Dust From Material Movement	—	—	—	—	—	—	0.21	0.21	—	0.11	0.11	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.16	0.15	< 0.005	0.01	—	0.01	0.01	—	0.01	—	24.0	24.0	< 0.005	< 0.005	—	24.1

Dust From Material Movement	—	—	—	—	—	—	0.04	0.04	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.06	0.78	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	176	176	< 0.005	0.01	0.02	179
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.96	4.96	< 0.005	< 0.005	0.01	5.03
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.82	0.82	< 0.005	< 0.005	< 0.005	0.83
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Grading (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.80	3.20	29.7	28.3	0.06	1.23	—	1.23	1.14	—	1.14	—	6,599	6,599	0.27	0.05	—	6,622
Dust From Material Movement	—	—	—	—	—	—	3.59	3.59	—	1.42	1.42	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.31	0.26	2.44	2.33	0.01	0.10	—	0.10	0.09	—	0.09	—	542	542	0.02	< 0.005	—	544
Dust From Material Movement	—	—	—	—	—	—	0.30	0.30	—	0.12	0.12	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.45	0.42	< 0.005	0.02	—	0.02	0.02	—	0.02	—	89.8	89.8	< 0.005	< 0.005	—	90.1
Dust From Material Movement	—	—	—	—	—	—	0.05	0.05	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.07	0.89	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	202	202	< 0.005	0.01	0.02	204
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.07	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	17.0	17.0	< 0.005	< 0.005	0.03	17.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.81	2.81	< 0.005	< 0.005	0.01	2.85
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.4. Grading (2025) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.80	3.20	29.7	28.3	0.06	1.23	—	1.23	1.14	—	1.14	—	6,599	6,599	0.27	0.05	—	6,622

Dust From Material Movement	—	—	—	—	—	—	3.59	3.59	—	1.42	1.42	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.31	0.26	2.44	2.33	0.01	0.10	—	0.10	0.09	—	0.09	—	542	542	0.02	< 0.005	—	544
Dust From Material Movement	—	—	—	—	—	—	0.30	0.30	—	0.12	0.12	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.45	0.42	< 0.005	0.02	—	0.02	0.02	—	0.02	—	89.8	89.8	< 0.005	< 0.005	—	90.1
Dust From Material Movement	—	—	—	—	—	—	0.05	0.05	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.07	0.89	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	202	202	< 0.005	0.01	0.02	204
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.07	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	17.0	17.0	< 0.005	< 0.005	0.03	17.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.81	2.81	< 0.005	< 0.005	0.01	2.85
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Building Construction (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.81	0.68	6.32	7.89	0.01	0.26	—	0.26	0.24	—	0.24	—	1,450	1,450	0.06	0.01	—	1,455
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	1.15	1.44	< 0.005	0.05	—	0.05	0.04	—	0.04	—	240	240	0.01	< 0.005	—	241
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.52	1.39	0.96	19.9	0.00	0.00	3.33	3.33	0.00	0.78	0.78	—	3,743	3,743	0.06	0.13	14.4	3,799
Vendor	0.16	0.06	2.57	0.95	0.01	0.02	0.37	0.39	0.02	0.10	0.12	—	1,416	1,416	0.09	0.21	3.68	1,484
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.39	1.24	1.22	14.6	0.00	0.00	3.33	3.33	0.00	0.78	0.78	—	3,323	3,323	0.08	0.13	0.37	3,365
Vendor	0.15	0.05	2.74	0.97	0.01	0.02	0.37	0.39	0.02	0.10	0.12	—	1,415	1,415	0.09	0.21	0.10	1,480
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.83	0.75	0.66	9.04	0.00	0.00	2.01	2.01	0.00	0.47	0.47	—	2,062	2,062	0.04	0.08	3.75	2,091
Vendor	0.09	0.04	1.63	0.58	0.01	0.01	0.22	0.24	0.01	0.06	0.07	—	856	856	0.06	0.13	0.96	896
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.15	0.14	0.12	1.65	0.00	0.00	0.37	0.37	0.00	0.09	0.09	—	341	341	0.01	0.01	0.62	346
Vendor	0.02	0.01	0.30	0.11	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	142	142	0.01	0.02	0.16	148
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.6. Building Construction (2025) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.81	0.68	6.32	7.89	0.01	0.26	—	0.26	0.24	—	0.24	—	1,450	1,450	0.06	0.01	—	1,455
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	1.15	1.44	< 0.005	0.05	—	0.05	0.04	—	0.04	—	240	240	0.01	< 0.005	—	241
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.52	1.39	0.96	19.9	0.00	0.00	3.33	3.33	0.00	0.78	0.78	—	3,743	3,743	0.06	0.13	14.4	3,799
Vendor	0.16	0.06	2.57	0.95	0.01	0.02	0.37	0.39	0.02	0.10	0.12	—	1,416	1,416	0.09	0.21	3.68	1,484
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.39	1.24	1.22	14.6	0.00	0.00	3.33	3.33	0.00	0.78	0.78	—	3,323	3,323	0.08	0.13	0.37	3,365
Vendor	0.15	0.05	2.74	0.97	0.01	0.02	0.37	0.39	0.02	0.10	0.12	—	1,415	1,415	0.09	0.21	0.10	1,480
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.83	0.75	0.66	9.04	0.00	0.00	2.01	2.01	0.00	0.47	0.47	—	2,062	2,062	0.04	0.08	3.75	2,091
Vendor	0.09	0.04	1.63	0.58	0.01	0.01	0.22	0.24	0.01	0.06	0.07	—	856	856	0.06	0.13	0.96	896
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.15	0.14	0.12	1.65	0.00	0.00	0.37	0.37	0.00	0.09	0.09	—	341	341	0.01	0.01	0.62	346
Vendor	0.02	0.01	0.30	0.11	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	142	142	0.01	0.02	0.16	148
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Building Construction (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.28	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.28	0.23	2.14	2.82	0.01	0.08	—	0.08	0.08	—	0.08	—	521	521	0.02	< 0.005	—	523
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.39	0.51	< 0.005	0.02	—	0.02	0.01	—	0.01	—	86.2	86.2	< 0.005	< 0.005	—	86.5
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.45	1.32	0.85	18.6	0.00	0.00	3.33	3.33	0.00	0.78	0.78	—	3,670	3,670	0.05	0.13	13.1	3,722
Vendor	0.14	0.05	2.40	0.91	0.01	0.02	0.37	0.39	0.02	0.10	0.12	—	1,388	1,388	0.09	0.21	3.34	1,456
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.23	1.20	1.10	13.7	0.00	0.00	3.33	3.33	0.00	0.78	0.78	—	3,259	3,259	0.07	0.13	0.34	3,301

Vendor	0.14	0.05	2.57	0.93	0.01	0.02	0.37	0.39	0.02	0.10	0.12	—	1,387	1,387	0.09	0.21	0.09	1,452
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.26	0.26	0.21	3.03	0.00	0.00	0.72	0.72	0.00	0.17	0.17	—	727	727	0.01	0.03	1.23	737
Vendor	0.03	0.01	0.55	0.20	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.03	—	301	301	0.02	0.05	0.31	316
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.04	0.55	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	120	120	< 0.005	< 0.005	0.20	122
Vendor	0.01	< 0.005	0.10	0.04	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	< 0.005	—	49.9	49.9	< 0.005	0.01	0.05	52.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.8. Building Construction (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.28	0.23	2.14	2.82	0.01	0.08	—	0.08	0.08	—	0.08	—	521	521	0.02	< 0.005	—	523
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.39	0.51	< 0.005	0.02	—	0.02	0.01	—	0.01	—	86.2	86.2	< 0.005	< 0.005	—	86.5
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.45	1.32	0.85	18.6	0.00	0.00	3.33	3.33	0.00	0.78	0.78	—	3,670	3,670	0.05	0.13	13.1	3,722
Vendor	0.14	0.05	2.40	0.91	0.01	0.02	0.37	0.39	0.02	0.10	0.12	—	1,388	1,388	0.09	0.21	3.34	1,456
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.23	1.20	1.10	13.7	0.00	0.00	3.33	3.33	0.00	0.78	0.78	—	3,259	3,259	0.07	0.13	0.34	3,301
Vendor	0.14	0.05	2.57	0.93	0.01	0.02	0.37	0.39	0.02	0.10	0.12	—	1,387	1,387	0.09	0.21	0.09	1,452
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.26	0.26	0.21	3.03	0.00	0.00	0.72	0.72	0.00	0.17	0.17	—	727	727	0.01	0.03	1.23	737
Vendor	0.03	0.01	0.55	0.20	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.03	—	301	301	0.02	0.05	0.31	316
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.04	0.55	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	120	120	< 0.005	< 0.005	0.20	122

Vendor	0.01	< 0.005	0.10	0.04	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	< 0.005	—	49.9	49.9	< 0.005	0.01	0.05	52.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Paving (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.91	0.76	7.12	9.94	0.01	0.32	—	0.32	0.29	—	0.29	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.39	0.54	< 0.005	0.02	—	0.02	0.02	—	0.02	—	82.8	82.8	< 0.005	< 0.005	—	83.1
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.07	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	13.7	13.7	< 0.005	< 0.005	—	13.8
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.04	0.85	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	167	167	< 0.005	0.01	0.60	169
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.34	8.34	< 0.005	< 0.005	0.01	8.45
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.38	1.38	< 0.005	< 0.005	< 0.005	1.40
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.10. Paving (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.91	0.76	7.12	9.94	0.01	0.32	—	0.32	0.29	—	0.29	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.39	0.54	< 0.005	0.02	—	0.02	0.02	—	0.02	—	82.8	82.8	< 0.005	< 0.005	—	83.1
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.07	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	13.7	13.7	< 0.005	< 0.005	—	13.8
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.04	0.85	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	167	167	< 0.005	0.01	0.60	169
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.34	8.34	< 0.005	< 0.005	0.01	8.45
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.38	1.38	< 0.005	< 0.005	< 0.005	1.40
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Architectural Coating (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	0.86	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	189	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.32	7.32	< 0.005	< 0.005	—	7.34
Architectural Coatings	—	10.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.21	1.21	< 0.005	< 0.005	—	1.22
Architectural Coatings	—	1.89	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.29	0.26	0.17	3.72	0.00	0.00	0.67	0.67	0.00	0.16	0.16	—	734	734	0.01	0.03	2.62	744
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.15	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	36.7	36.7	< 0.005	< 0.005	0.06	37.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.07	6.07	< 0.005	< 0.005	0.01	6.15
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.12. Architectural Coating (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	0.86	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	189	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.32	7.32	< 0.005	< 0.005	—	7.34
Architectural Coatings	—	10.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.21	1.21	< 0.005	< 0.005	—	1.22
Architectural Coatings	—	1.89	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.29	0.26	0.17	3.72	0.00	0.00	0.67	0.67	0.00	0.16	0.16	—	734	734	0.01	0.03	2.62	744
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.15	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	36.7	36.7	< 0.005	< 0.005	0.06	37.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.07	6.07	< 0.005	< 0.005	0.01	6.15
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Apartme Mid Rise	12.1	11.0	10.6	109	0.25	0.18	21.6	21.7	0.17	5.48	5.64	—	25,633	25,633	0.99	1.00	81.2	26,036
Total	12.1	11.0	10.6	109	0.25	0.18	21.6	21.7	0.17	5.48	5.64	—	25,633	25,633	0.99	1.00	81.2	26,036
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartme nts Mid Rise	11.1	9.98	12.5	90.6	0.23	0.18	21.6	21.7	0.17	5.48	5.64	—	23,410	23,410	1.10	1.10	2.10	23,766
Total	11.1	9.98	12.5	90.6	0.23	0.18	21.6	21.7	0.17	5.48	5.64	—	23,410	23,410	1.10	1.10	2.10	23,766
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartme nts Mid Rise	1.92	1.73	2.03	15.6	0.04	0.03	3.73	3.77	0.03	0.95	0.98	—	3,757	3,757	0.16	0.17	5.52	3,816
Total	1.92	1.73	2.03	15.6	0.04	0.03	3.73	3.77	0.03	0.95	0.98	—	3,757	3,757	0.16	0.17	5.52	3,816

4.1.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartme nts Mid Rise	12.1	11.0	10.6	109	0.25	0.18	21.6	21.7	0.17	5.48	5.64	—	25,633	25,633	0.99	1.00	81.2	26,036
Total	12.1	11.0	10.6	109	0.25	0.18	21.6	21.7	0.17	5.48	5.64	—	25,633	25,633	0.99	1.00	81.2	26,036
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartme nts Mid Rise	11.1	9.98	12.5	90.6	0.23	0.18	21.6	21.7	0.17	5.48	5.64	—	23,410	23,410	1.10	1.10	2.10	23,766

Total	11.1	9.98	12.5	90.6	0.23	0.18	21.6	21.7	0.17	5.48	5.64	—	23,410	23,410	1.10	1.10	2.10	23,766
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	1.92	1.73	2.03	15.6	0.04	0.03	3.73	3.77	0.03	0.95	0.98	—	3,757	3,757	0.16	0.17	5.52	3,816
Total	1.92	1.73	2.03	15.6	0.04	0.03	3.73	3.77	0.03	0.95	0.98	—	3,757	3,757	0.16	0.17	5.52	3,816

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	1,659	1,659	0.08	0.01	—	1,664
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,659	1,659	0.08	0.01	—	1,664
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	1,659	1,659	0.08	0.01	—	1,664
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,659	1,659	0.08	0.01	—	1,664
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	275	275	0.01	< 0.005	—	275
Total	—	—	—	—	—	—	—	—	—	—	—	—	275	275	0.01	< 0.005	—	275

4.2.2. Electricity Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	1,660	1,660	0.08	0.01	—	1,665
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,660	1,660	0.08	0.01	—	1,665
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	1,660	1,660	0.08	0.01	—	1,665
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,660	1,660	0.08	0.01	—	1,665
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	275	275	0.01	< 0.005	—	276
Total	—	—	—	—	—	—	—	—	—	—	—	—	275	275	0.01	< 0.005	—	276

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Apartments	0.18	0.09	1.55	0.66	0.01	0.12	—	0.12	0.12	—	0.12	—	1,962	1,962	0.17	< 0.005	—	1,968
Total	0.18	0.09	1.55	0.66	0.01	0.12	—	0.12	0.12	—	0.12	—	1,962	1,962	0.17	< 0.005	—	1,968
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.18	0.09	1.55	0.66	0.01	0.12	—	0.12	0.12	—	0.12	—	1,962	1,962	0.17	< 0.005	—	1,968
Total	0.18	0.09	1.55	0.66	0.01	0.12	—	0.12	0.12	—	0.12	—	1,962	1,962	0.17	< 0.005	—	1,968
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.03	0.02	0.28	0.12	< 0.005	0.02	—	0.02	0.02	—	0.02	—	325	325	0.03	< 0.005	—	326
Total	0.03	0.02	0.28	0.12	< 0.005	0.02	—	0.02	0.02	—	0.02	—	325	325	0.03	< 0.005	—	326

4.2.4. Natural Gas Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	9.41	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	1.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	2.41	2.28	0.25	26.0	< 0.005	0.01	—	0.01	0.01	—	0.01	—	69.5	69.5	< 0.005	< 0.005	—	69.7
Total	2.41	12.7	0.25	26.0	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	69.5	69.5	< 0.005	< 0.005	—	69.7
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00

Consumer Products	—	9.41	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	1.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00	10.4	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	1.72	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.30	0.29	0.03	3.25	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.88	7.88	< 0.005	< 0.005	—	7.91
Total	0.30	2.19	0.03	3.25	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	7.88	7.88	< 0.005	< 0.005	—	7.91

4.3.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	9.41	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.75	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Landsca Equipment	2.41	2.28	0.25	26.0	< 0.005	0.01	—	0.01	0.01	—	0.01	—	69.5	69.5	< 0.005	< 0.005	—	69.7
Total	2.41	12.4	0.25	26.0	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	69.5	69.5	< 0.005	< 0.005	—	69.7
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	9.41	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.75	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00	10.2	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	1.72	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.30	0.29	0.03	3.25	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.88	7.88	< 0.005	< 0.005	—	7.91
Total	0.30	2.14	0.03	3.25	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	7.88	7.88	< 0.005	< 0.005	—	7.91

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	34.5	33.7	68.2	0.12	0.08	—	93.8
Total	—	—	—	—	—	—	—	—	—	—	—	34.5	33.7	68.2	0.12	0.08	—	93.8
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	34.5	33.7	68.2	0.12	0.08	—	93.8
Total	—	—	—	—	—	—	—	—	—	—	—	34.5	33.7	68.2	0.12	0.08	—	93.8
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	5.71	5.58	11.3	0.02	0.01	—	15.5
Total	—	—	—	—	—	—	—	—	—	—	—	5.71	5.58	11.3	0.02	0.01	—	15.5

4.4.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	34.5	33.7	68.2	0.12	0.08	—	93.8
Total	—	—	—	—	—	—	—	—	—	—	—	34.5	33.7	68.2	0.12	0.08	—	93.8

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	34.5	33.7	68.2	0.12	0.08	—	93.8
Total	—	—	—	—	—	—	—	—	—	—	—	34.5	33.7	68.2	0.12	0.08	—	93.8
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	5.71	5.58	11.3	0.02	0.01	—	15.5
Total	—	—	—	—	—	—	—	—	—	—	—	5.71	5.58	11.3	0.02	0.01	—	15.5

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	182	0.00	182	18.2	0.00	—	638
Total	—	—	—	—	—	—	—	—	—	—	—	182	0.00	182	18.2	0.00	—	638
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	182	0.00	182	18.2	0.00	—	638
Total	—	—	—	—	—	—	—	—	—	—	—	182	0.00	182	18.2	0.00	—	638

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	30.2	0.00	30.2	3.02	0.00	—	106
Total	—	—	—	—	—	—	—	—	—	—	—	30.2	0.00	30.2	3.02	0.00	—	106

4.5.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	182	0.00	182	18.2	0.00	—	638
Total	—	—	—	—	—	—	—	—	—	—	—	182	0.00	182	18.2	0.00	—	638
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	182	0.00	182	18.2	0.00	—	638
Total	—	—	—	—	—	—	—	—	—	—	—	182	0.00	182	18.2	0.00	—	638
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	30.2	0.00	30.2	3.02	0.00	—	106
Total	—	—	—	—	—	—	—	—	—	—	—	30.2	0.00	30.2	3.02	0.00	—	106

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.15	3.15
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.15	3.15
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.15	3.15
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.15	3.15
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.52	0.52
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.52	0.52

4.6.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Apartments	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.15	3.15
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.15	3.15
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.15	3.15
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.15	3.15
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.52	0.52
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.52	0.52

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	1/1/2025	1/14/2025	5.00	10.0	—
Grading	Grading	1/15/2025	2/25/2025	5.00	30.0	—
Building Construction	Building Construction	2/26/2025	4/21/2026	5.00	300	—
Paving	Paving	4/22/2026	5/19/2026	5.00	20.0	—
Architectural Coating	Architectural Coating	5/20/2026	6/16/2026	5.00	20.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40

Site Preparation	Tractors/Loaders/Backh	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40

Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	14.3	LDA,LDT1,LDT2
Site Preparation	Vendor	—	8.80	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	14.3	LDA,LDT1,LDT2
Grading	Vendor	—	8.80	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	330	14.3	LDA,LDT1,LDT2
Building Construction	Vendor	49.0	8.80	HHDT,MHDT

Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	14.3	LDA,LDT1,LDT2
Paving	Vendor	—	8.80	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	66.0	14.3	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	8.80	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	14.3	LDA,LDT1,LDT2
Site Preparation	Vendor	—	8.80	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	14.3	LDA,LDT1,LDT2
Grading	Vendor	—	8.80	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	330	14.3	LDA,LDT1,LDT2

Building Construction	Vendor	49.0	8.80	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	14.3	LDA,LDT1,LDT2
Paving	Vendor	—	8.80	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	66.0	14.3	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	8.80	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	890,352	296,784	0.00	0.00	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)

Site Preparation	—	—	15.0	0.00	—
Grading	—	—	90.0	0.00	—
Paving	0.00	0.00	0.00	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Apartments Mid Rise	—	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2025	0.00	295	0.01	< 0.005
2026	0.00	279	0.01	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Apartments Mid Rise	2,492	2,249	1,873	864,508	30,404	27,442	22,859	10,549,670

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year

Apartments Mid Rise	2,492	2,249	1,873	864,508	30,404	27,442	22,859	10,549,670

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Apartments Mid Rise	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	458
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.1.2. Mitigated

Hearth Type	Unmitigated (number)
Apartments Mid Rise	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	458

Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
890352	296,784	0.00	0.00	—

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Apartments Mid Rise	2,267,290	267	0.0129	0.0017	6,122,530

5.11.2. Mitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Apartments Mid Rise	2,269,291	267	0.0129	0.0017	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Apartments Mid Rise	16,148,622	1,501,065

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Apartments Mid Rise	16,148,622	1,501,065

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Apartments Mid Rise	339	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Apartments Mid Rise	339	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Apartments Mid Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Mid Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Apartments Mid Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Mid Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.15.2. Mitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	20.7	annual days of extreme heat
Extreme Precipitation	6.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	2	0	0	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	2	1	1	3
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A

Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	53.7
AQ-PM	37.6
AQ-DPM	57.1
Drinking Water	55.8
Lead Risk Housing	32.5
Pesticides	0.00
Toxic Releases	24.2
Traffic	76.4
Effect Indicators	—
CleanUp Sites	58.2
Groundwater	35.0
Haz Waste Facilities/Generators	19.2
Impaired Water Bodies	51.2
Solid Waste	0.00

Sensitive Population	—
Asthma	71.2
Cardio-vascular	80.6
Low Birth Weights	0.74
Socioeconomic Factor Indicators	—
Education	16.2
Housing	21.1
Linguistic	17.3
Poverty	56.4
Unemployment	76.1

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	54.45912999
Employed	22.03259335
Median HI	48.69754908
Education	—
Bachelor's or higher	69.9987168
High school enrollment	100
Preschool enrollment	62.73578853
Transportation	—
Auto Access	40.90850764
Active commuting	78.46785577
Social	—
2-parent households	98.06236366

Voting	75.2213525
Neighborhood	—
Alcohol availability	49.6856153
Park access	81.35506224
Retail density	38.85538304
Supermarket access	9.867830104
Tree canopy	89.04144745
Housing	—
Homeownership	58.89901193
Housing habitability	72.46246632
Low-inc homeowner severe housing cost burden	81.86834339
Low-inc renter severe housing cost burden	57.42332863
Uncrowded housing	71.88502502
Health Outcomes	—
Insured adults	77.62094187
Arthritis	0.0
Asthma ER Admissions	30.7
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	14.3
Cognitively Disabled	91.4
Physically Disabled	71.5
Heart Attack ER Admissions	22.0

Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	92.2
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	10.6
Elderly	18.2
English Speaking	71.1
Foreign-born	24.6
Outdoor Workers	52.0
Climate Change Adaptive Capacity	—
Impervious Surface Cover	61.6
Traffic Density	88.7
Traffic Access	64.8
Other Indices	—
Hardship	48.1
Other Decision Support	—
2016 Voting	63.9

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	42.0
Healthy Places Index Score for Project Location (b)	63.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	units and acreage from excel sheet; 439680/5=87936
Construction: Construction Phases	no demo
Construction: Architectural Coatings	Sac metro rule 301: Flat coating limit = 50 g/L, nonflat coating = 100 g/L, roof coating = 50 g/L, driveway sealers = 50 g/L
Operations: Architectural Coatings	Sac metro rule 301, VOC limits: flat coating = 50 g/L, nonflat coating = 100 g/L, driveway sealer = 100 g/L

APPENDIX NOI-1: NOISE MODELING OUTPUTS

Attenuation Calculations for Stationary Noise Sources

KEY: Orange cells are for input.
Grey cells are intermediate calculations performed by the model.
Green cells are data to present in a written analysis (output).

STEP 1: Identify the noise source and enter the reference noise level (dBA and distance).

STEP 2: Select the ground type (hard or soft), and enter the source and receiver heights.

STEP 3: Select the distance to the receiver.

Noise Source/ID	Reference Noise Level			Attenuation Characteristics				Attenuated Noise Level at Receptor		
	noise level (dBA)	@	distance (ft)	Ground Type (soft/hard)	Source Height (ft)	Receiver Height (ft)	Ground Factor	noise level (dBA)	@	distance (ft)
HVAC Leq - 60 dB Threshold	70.0	@	3	hard	6	5	0.00	59.5	@	10
HVAC Leq - 55 dB Threshold	70.0	@	3	hard	6	5	0.00	54.9	@	17

Notes:

Estimates of attenuated noise levels do not account for reductions from intervening barriers, including walls, trees, vegetation, or structures of any type.

Computation of the attenuated noise level is based on the equation presented on pg. 176 and 177 of FTA 2018.

Computation of the ground factor is based on the equation presentd in Table 4-26 on pg. 86 of FTA 2018, where the distance of the reference noise leve can be adjusted and the usage factor is not applied (i.e., the usage factor is equal to 1).

Sources:

Federal Transit Association (FTA). 2018 (September). Transit Noise and Vibration Impact Assessment. Washington, D.C. Available: <http://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf>Accessed: March 5, 2020.

Equipment Description	Acoustical Usage Factor (%)	Spec 721.560 Lmax @ 50ft (dBA slow)	Actual Measured Lmax @ 50ft (dBA slow)	No. of Actual Data Samples (count)	Spec 721.560 LmaxCalc	Spec 721.560 Leq	Distance	Actual Measured LmaxCalc	Actual Measured Leq
Auger Drill Rig	20	85	84	36	79.0	72.0	100	78.0	71.0
Backhoe	40	80	78	372	74.0	70.0	100	72.0	68.0
Bar Bender	20	80	na	0	74.0	67.0	100		
Blasting	na	94	na	0	88.0		100		
Boring Jack Power Unit	50	80	83	1	74.0	71.0	100	77.0	74.0
Chain Saw	20	85	84	46	79.0	72.0	100	78.0	71.0
Clam Shovel (dropping)	20	93	87	4	87.0	80.0	100	81.0	74.0
Compactor (ground)	20	80	83	57	74.0	67.0	100	77.0	70.0
Compressor (air)	40	80	78	18	74.0	70.0	100	72.0	68.0
Concrete Batch Plant	15	83	na	0	77.0	68.7	100		
Concrete Mixer Truck	40	85	79	40	79.0	75.0	100	73.0	69.0
Concrete Pump Truck	20	82	81	30	76.0	69.0	100	75.0	68.0
Concrete Saw	20	90	90	55	84.0	77.0	100	84.0	77.0
Crane	16	85	81	405	79.0	71.0	100	75.0	67.0
Dozer	40	85	82	55	79.0	75.0	100	76.0	72.0
Drill Rig Truck	20	84	79	22	78.0	71.0	100	73.0	66.0
Drum Mixer	50	80	80	1	74.0	71.0	100	74.0	71.0
Dump Truck	40	84	76	31	78.0	74.0	100	70.0	66.0
Excavator	40	85	81	170	79.0	75.0	100	75.0	71.0
Flat Bed Truck	40	84	74	4	78.0	74.0	100	68.0	64.0
Front End Loader	40	80	79	96	74.0	70.0	100	73.0	69.0
Generator	50	82	81	19	76.0	73.0	100	75.0	72.0
Generator (<25KVA, VMS signs)	50	70	73	74	64.0	61.0	100	67.0	64.0
Gradall	40	85	83	70	79.0	75.0	100	77.0	73.0
Grader	40	85	na	0	79.0	75.0	100		
Grapple (on Backhoe)	40	85	87	1	79.0	75.0	100	81.0	77.0
Horizontal Boring Hydr. Jack	25	80	82	6	74.0	68.0	100	76.0	70.0
Hydra Break Ram	10	90	na	0	84.0	74.0	100		
Impact Pile Driver	20	95	101	11	89.0	82.0	100	95.0	88.0
Jackhammer	20	85	89	133	79.0	72.0	100	83.0	76.0
Man Lift	20	85	75	23	79.0	72.0	100	69.0	62.0
Mounted Impact Hammer (hoe ram)	20	90	90	212	84.0	77.0	100	84.0	77.0
Pavement Scarafier	20	85	90	2	79.0	72.0	100	84.0	77.0
Paver	50	85	77	9	79.0	76.0	100	71.0	68.0
Pickup Truck	40	55	75	1	49.0	45.0	100	69.0	65.0
Pneumatic Tools	50	85	85	90	79.0	76.0	100	79.0	76.0
Pumps	50	77	81	17	71.0	68.0	100	75.0	72.0
Refrigerator Unit	100	82	73	3	76.0	76.0	100	67.0	67.0
Rivit Buster/chipping gun	20	85	79	19	79.0	72.0	100	73.0	66.0
Rock Drill	20	85	81	3	79.0	72.0	100	75.0	68.0
Roller	20	85	80	16	79.0	72.0	100	74.0	67.0
Sand Blasting (Single Nozzle)	20	85	96	9	79.0	72.0	100	90.0	83.0
Scraper	40	85	84	12	79.0	75.0	100	78.0	74.0
Shears (on backhoe)	40	85	96	5	79.0	75.0	100	90.0	86.0
Slurry Plant	100	78	78	1	72.0	72.0	100	72.0	72.0
Slurry Trenching Machine	50	82	80	75	76.0	73.0	100	74.0	71.0
Soil Mix Drill Rig	50	80	na	0	74.0	71.0	100		
Tractor	40	84	na	0	78.0	74.0	100		
Vacuum Excavator (Vac-truck)	40	85	85	149	79.0	75.0	100	79.0	75.0
Vacuum Street Sweeper	10	80	82	19	74.0	64.0	100	76.0	66.0
Ventilation Fan	100	85	79	13	79.0	79.0	100	73.0	73.0
Vibrating Hopper	50	85	87	1	79.0	76.0	100	81.0	78.0
Vibratory Concrete Mixer	20	80	80	1	74.0	67.0	100	74.0	67.0
Vibratory Pile Driver	20	95	101	44	89.0	82.0	100	95.0	88.0
Warning Horn	5	85	83	12	79.0	66.0	100	77.0	64.0
Welder / Torch	40	73	74	5	67.0	63.0	100	68.0	64.0
chipper		75							

Source:
FHWA Roadway Construction Noise Model, January 2006. Table 9.1
U.S. Department of Transportation
CA/T Construction Spec. 721.560

Site Grading (Leq)

Location	Distance to Nearest Receptor in feet	Combined Predicted Noise Level (L_{eq} dBA)
Residential Threshold	1,378	55.0
FTA Threshold	25	90.0

Equipment	Reference Emission Noise Levels (L_{max}) at 50 feet[1]	Usage Factor[1]
Grader	85	0.4
Dozer	82	0.4
Excavator	81	0.4

Ground Type	hard
Source Height	8
Receiver Height	5
Ground Factor[2]	0.00

Predicted Noise Level [3]	L_{eq} dBA at 50 feet[3]
Grader	81.0
Dozer	78.0
Excavator	77.0

Combined Predicted Noise Level (L_{eq} dBA at 50 feet)
83.8

Sources:

[1] Obtained from the FHWA Roadway Construction Noise Model, January 2006. Table 1.

[2] Based on Figure 6-5 from the Federal Transit Noise and Vibration Impact Assessment, 2006 (pg 6-23).

[3] Based on the following from the Federal Transit Noise and Vibration Impact Assessment, 2006 (pg 12-3).

$L_{eq}(equip) = E.L.+10*\log(U.F.) - 20*\log(D/50) - 10*G*\log(D/50)$

Where: E.L. = Emission Level;

U.F.= Usage Factor;

G = Constant that accounts for topography and ground effects (FTA 2006: pg 6-23); and

D = Distance from source to receiver.

Grading (Lmax)

Location	Distance to Nearest Receptor in feet	Combined Predicted Noise Level (L_{eq} dBA)
Residential Threshold	2,396	55.0
FTA Threshold	43	90.0

Equipment	Reference Emission Noise Levels (L_{max}) at 50 feet[1]	Usage Factor[1]
Grader	85	1
Dozer	82	1
Excavator	84	1

Ground Type	hard
Source Height	8
Receiver Height	5
Ground Factor[2]	0.00

Predicted Noise Level [3]	L_{eq} dBA at 50 feet[3]
Grader	85.0
Dozer	82.0
Excavator	84.0

Combined Predicted Noise Level (L_{eq} dBA at 50 feet)
88.6

Sources:

[1] Obtained from the FHWA Roadway Construction Noise Model, January 2006. Table 1.

[2] Based on Figure 6-5 from the Federal Transit Noise and Vibration Impact Assessment, 2006 (pg 6-23).

[3] Based on the following from the Federal Transit Noise and Vibration Impact Assessment, 2006 (pg 12-3).

$L_{eq}(equip) = E.L.+10*\log(U.F.) - 20*\log(D/50) - 10*G*\log(D/50)$

Where: E.L. = Emission Level;

U.F.= Usage Factor;

G = Constant that accounts for topography and ground effects (FTA 2006: pg 6-23); and

D = Distance from source to receiver.

Building Construction (Leq)

Location	Distance to Nearest Receptor in feet	Combined Predicted Noise Level (L_{eq} dBA)
Residential Threshold	4,501	55.0
FTA Threshold	80	90.0

Equipment	Reference Emission Noise Levels (L_{max}) at 50 feet[1]	Usage Factor[1]
Impact Pile Driver	101	0.2
Front End Loader	79	0.4
Pickup Truck	75	0.4

Ground Type	hard
Source Height	8
Receiver Height	5
Ground Factor[2]	0.00

Predicted Noise Level [3]	L_{eq} dBA at 50 feet[3]
Impact Pile Driver	94.0
Front End Loader	75.0
Pickup Truck	71.0

Combined Predicted Noise Level (L_{eq} dBA at 50 feet)
94.1

Sources:

[1] Obtained from the FHWA Roadway Construction Noise Model, January 2006. Table 1.

[2] Based on Figure 6-5 from the Federal Transit Noise and Vibration Impact Assessment, 2006 (pg 6-23).

[3] Based on the following from the Federal Transit Noise and Vibration Impact Assessment, 2006 (pg 12-3).

$L_{eq}(equip) = E.L.+10*\log(U.F.) - 20*\log(D/50) - 10*G*\log(D/50)$

Where: E.L. = Emission Level;

U.F.= Usage Factor;

G = Constant that accounts for topography and ground effects (FTA 2006: pg 6-23); and

D = Distance from source to receiver.

Nighttime Construction (Lmax)

Location	Distance to Nearest Receptor in feet	Combined Predicted Noise Level (L_{eq} dBA)
Residential Nighttime Threshold	3,378	50.0
FTA Nighttime Threshold	107	80.0

Equipment	Reference Emission Noise Levels (L_{max}) at 50 feet[1]	Usage Factor[1]
Concrete Mixer Truck	79	1
Concrete Pump Truck	81	1
Tractor	84	1

Ground Type	hard
Source Height	8
Receiver Height	5
Ground Factor[2]	0.00

Predicted Noise Level [3]	L_{eq} dBA at 50 feet[3]
Concrete Mixer Truck	79.0
Concrete Pump Truck	81.0
Tractor	84.0

Combined Predicted Noise Level (L_{eq} dBA at 50 feet)
86.6

Sources:

[1] Obtained from the FHWA Roadway Construction Noise Model, January 2006. Table 1.

[2] Based on Figure 6-5 from the Federal Transit Noise and Vibration Impact Assessment, 2006 (pg 6-23).

[3] Based on the following from the Federal Transit Noise and Vibration Impact Assessment, 2006 (pg 12-3).

$L_{eq}(equip) = E.L.+10*\log(U.F.) - 20*\log(D/50) - 10*G*\log(D/50)$

Where: E.L. = Emission Level;

U.F.= Usage Factor;

G = Constant that accounts for topography and ground effects (FTA 2006: pg 6-23); and

D = Distance from source to receiver.

Building Construction (Lmax)

Location	Distance to Nearest Receptor in feet	Combined Predicted Noise Level (L_{eq} dBA)
Residential Threshold	1,500	55.0
FTA Threshold	15	111.5

Equipment	Reference Emission Noise Levels (L_{max}) at 50 feet[1]	Usage Factor[1]
Impact Pile Driver	101	1
Front End Loader	79	1
Backhoe	78	1

Ground Type	hard
Source Height	8
Receiver Height	5
Ground Factor[2]	0.00

Predicted Noise Level [3]	L_{eq} dBA at 50 feet[3]
Impact Pile Driver	101.0
Front End Loader	79.0
Backhoe	78.0

Combined Predicted Noise Level (L_{eq} dBA at 50 feet)
101.0

Sources:

[1] Obtained from the FHWA Roadway Construction Noise Model, January 2006. Table 1.

[2] Based on Figure 6-5 from the Federal Transit Noise and Vibration Impact Assessment, 2006 (pg 6-23).

[3] Based on the following from the Federal Transit Noise and Vibration Impact Assessment, 2006 (pg 12-3).

$L_{eq}(equip) = E.L.+10*\log(U.F.) - 20*\log(D/50) - 10*G*\log(D/50)$

Where: E.L. = Emission Level;

U.F.= Usage Factor;

G = Constant that accounts for topography and ground effects (FTA 2006: pg 6-23); and

D = Distance from source to receiver.

Nighttime Construction Leq

Location	Distance to Nearest Receptor in feet	Combined Predicted Noise Level (L_{eq} dBA)
Residential Nighttime Threshold	1,984	50.0
FTA Nighttime Threshold	63	80.0

Equipment	Reference Emission Noise Levels (L_{max}) at 50 feet[1]	Usage Factor[1]
Concrete Mixer Truck	79	0.4
Concrete Pump Truck	81	0.2
Tractor	84	0.4

Ground Type	hard
Source Height	8
Receiver Height	5
Ground Factor[2]	0.00

Predicted Noise Level [3]	L_{eq} dBA at 50 feet[3]
Concrete Mixer Truck	75.0
Concrete Pump Truck	74.0
Tractor	80.0

Combined Predicted Noise Level (L_{eq} dBA at 50 feet)
82.0

Sources:

[1] Obtained from the FHWA Roadway Construction Noise Model, January 2006. Table 1.

[2] Based on Figure 6-5 from the Federal Transit Noise and Vibration Impact Assessment, 2006 (pg 6-23).

[3] Based on the following from the Federal Transit Noise and Vibration Impact Assessment, 2006 (pg 12-3).

$L_{eq}(equip) = E.L.+10*\log(U.F.) - 20*\log(D/50) - 10*G*\log(D/50)$

Where: E.L. = Emission Level;

U.F.= Usage Factor;

G = Constant that accounts for topography and ground effects (FTA 2006: pg 6-23); and

D = Distance from source to receiver.

Citation #	Citations	
1	Caltrans Technical Noise Supplement. 2009 (November). Table (5-11), Pg 5-60.	Caltrans Technical Noise Supplement. 2013 (September). Table (4-2), Pg 4-17.
2	Caltrans Technical Noise Supplement. 2009 (November). Equation (5-26), Pg 5-60.	Caltrans Technical Noise Supplement. 2013 (September). Equation (4-5), Pg 4-17.
3	Caltrans Technical Noise Supplement. 2009 (November). Equation (2-16), Pg 2-32.	FHWA 2004 TNM Version 2.5
4	Caltrans Technical Noise Supplement. 2009 (November). Equation (5-11), Pg 5-47, 48.	FHWA 2004 TNM Version 2.5
5	Caltrans Technical Noise Supplement. 2009 (November). Equation (2-26), Pg 2-55, 56.	Caltrans Technical Noise Supplement. 2013 (September). Equation (2-23), Pg 2-51, 52.
6	Caltrans Technical Noise Supplement. 2009 (November). Equation (2-27), Pg 2-57.	Caltrans Technical Noise Supplement. 2013 (September). Equation (2-24), Pg 2-53.
7	Caltrans Technical Noise Supplement. 2009 (November). Pg 2-53.	Caltrans Technical Noise Supplement. 2013 (September). Pg 2-57.
8	Caltrans Technical Noise Supplement. 2009 (November). Equation (5-7), Pg 5-45.	FHWA 2004 TNM Version 2.5
9	Caltrans Technical Noise Supplement. 2009 (November). Equation (5-8), Pg 5-45.	FHWA 2004 TNM Version 2.5
10	Caltrans Technical Noise Supplement. 2009 (November). Equation (5-9), Pg 5-45.	FHWA 2004 TNM Version 2.5
11	Caltrans Technical Noise Supplement. 2009 (November). Equation (5-13), Pg 5-49.	FHWA 2004 TNM Version 2.5
12	Caltrans Technical Noise Supplement. 2009 (November). Equation (5-14), Pg 5-49.	FHWA 2004 TNM Version 2.5
13	Federal Highway Administration Traffic Noise Model Technical Manual. Report No. FHWA-PD-96-010. 1998 (January). Equation (16), Pg 67	
14	Federal Highway Administration Traffic Noise Model Technical Manual. Report No. FHWA-PD-96-010. 1998 (January). Equation (20), Pg 69	
15	Federal Highway Administration Traffic Noise Model Technical Manual. Report No. FHWA-PD-96-010. 1998 (January). Equation (18), Pg 69	

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California Department of Transportation (Caltrans). 2009 (November). Technical Noise Supplement. Available: http://www.dot.ca.gov/hq/env/noise/pub/tens_complete.pdf. Accessed August 17, 2017.

California Department of Transportation (Caltrans). 2013 (September). Technical Noise Supplement. Available: http://www.dot.ca.gov/hq/env/noise/pub/TeNS_Sept_2013A.pdf. Accessed August 17, 2017.

Federal Highway Administration. 2004. Traffic Noise Model Version 2.5. Available: https://www.fhwa.dot.gov/environment/noise/traffic_noise_model/tnm_v25/. Accessed August 17, 2017.

Traffic Noise Spreadsheet Calculator

Project: Sacramento County RHNA Rezone Project

Number	Name	Segment Description and Location From	To	Existing Conditions	Existing + Project Conditions	Δ Existing – Existing + Project	Cumulative Conditions	Cumulative +Project Conditions	Δ Cumulative – Cumulative + Project
Summary of Net Changes									
1	Antelope North Road	Antelope Road	PFE Road	59.5	59.4	-0.1	60.1	60.1	0.0
2	Antelope Road	Walerga Road	Elverta Road/Antelope Road	61.5	61.7	0.1	61.8	61.9	0.1
3	Antelope Road	Elverta Road/Antelope Road	Don Julio Blvd	65.2	65.5	0.3	67.1	67.3	0.2
4	Beech Avenue	Central Ave.	Greenback Lane	49.6	49.7	0.1	50.3	50.3	0.0
5	Chestnut Avenue	Central Ave.	Greenback Lane	56.2	56.4	0.2	56.8	56.7	-0.1
6	Curved Bridge Rd	Oak Lane	Dry Creek Road	51.2	51.8	0.6	53.6	54.1	0.5
7	Dry Creek Road	Elkhorn Boulevard	Vinci Avenue	58.9	59.0	0.1	61.5	61.6	0.1
8	Edison Avenue	Bell Street	Fullton Avenue	33.5	32.3	-1.2	35.3	36.0	0.7
9	Elk Grove Florin Road	Florin Road	Gerber Road	66.1	66.1	0.0	69.6	69.6	0.1
10	Elk Grove Florin Road	Gerber Road	Calvine Road	67.4	67.4	0.0	69.3	69.3	0.0
11	Elkhorn Blvd	2nd Street	Rio Linda Blvd	65.1	65.1	0.0	68.8	68.8	0.0
12	Elsie Avenue	Stockton Blvd	Iona Way	66.1	66.3	0.3	66.6	66.7	0.1
13	Elverta Road	Cherry Brook Drive	28th Street	68.3	68.3	0.0	71.3	71.3	0.0
14	Fair Oaks Boulevard	Jacob Lane	Arden Way	67.3	67.3	0.0	67.7	67.7	0.0
15	Fair Oaks Boulevard[1]	California Avenue	Marhsall Avenue	69.2	69.2	0.0	69.7	69.8	0.0
16	Fair Oaks Boulevard	Marshall Avenue	Hollister Avenue	69.5	69.5	0.0	69.9	70.0	0.0
17	Florin Road[2]	Franklin Blvd	SR 99	69.7	69.7	0.0	70.3	70.3	0.0
18	Florin Road[2]	Power Inn Road	Florin Perkins Road/French Road	65.1	65.1	0.0	67.2	67.3	0.1
19	Folsom Boulevard	Mayhew Road	Bradshaw Road	67.7	67.8	0.1	68.4	68.4	0.0
20	Franklin Boulevard	Fruitridge Road	47th Avenue	66.4	66.4	0.1	66.1	66.1	0.0
21	Franklin Boulevard	47th Avenue	Florin Road	69.1	69.1	0.0	69.3	69.3	0.0
22	Franklin Boulevard	Florin Road	Mack Road	68.2	68.2	0.0	68.2	68.3	0.0
23	Fruitridge Road	44th Street	Dewey Blvd	66.6	66.7	0.1	67.2	67.2	0.0
24	Garfield Avenue	El Camino Ave	Fair Oaks Blvd	54.4	54.5	0.2	54.6	54.7	0.2
25	Garfield Avenue	Greenback Lane	Auburn Blvd	69.3	69.5	0.1	69.5	69.6	0.0
26	Greenback Lane	I-80 interchange	Auburn Blvd	73.5	73.7	0.2	73.9	73.9	0.0
27	Greenback Lane	Kenneth Avenue	Hazel Avenue	68.5	68.6	0.0	68.9	68.9	0.0
28	Hemlock St	Madison Avenue	Myrtle Avenue	58.8	58.7	0.0	58.9	58.9	0.0
29	Madison Avenue	Harrison Street	Hillsdale Blvd	68.6	68.6	0.1	69.3	69.3	0.1
30	Manzanita Avenue	Madison Avenue	Winding Way	67.3	67.2	0.0	67.7	67.8	0.0
31	Oak Lane	Front Street	Curved Bridge Road	52.9	53.2	0.3	53.7	54.2	0.4
32	Pasadena Avenue	Norris Avenue	Creek Road	59.5	59.6	0.1	60.0	60.0	0.0
33	Power Inn Road[2]	Elder Creek Road/Glen Elder Roac	Florin Road	67.6	67.8	0.2	68.0	68.1	0.1
34	Power Inn Road[2]	Florin Road	Gerber Road	68.4	68.5	0.1	68.7	68.8	0.1
35	Power Inn Road	Elsie Ave/Mack Road	Meadowhaven Drive	67.1	67.1	0.0	68.1	68.3	0.2
36	Roseville Road	Antelope Road	Outlook Drive	67.9	67.9	0.0	68.9	68.9	0.0
37	Stockton Blvd	Fruitridge Road	Elder Creek Road	65.0	64.9	0.0	64.5	64.5	0.0
38	Stockton Blvd	Elder Creek Road	Florin Road	68.3	68.3	0.0	68.5	68.6	0.1
39	Stockton Blvd	Florin Road	Gerber Road	68.7	68.8	0.1	69.1	69.2	0.1
40	Stockton Blvd	Gerber Road	Mack Rd/Elise Ave	68.6	68.6	0.1	69.2	69.2	0.1
41	Stockton Blvd	٨d/Elise Ave. south along SR 99 frontage		54.1	54.0	-0.1	55.4	55.7	0.2
42	Sunrise Avenue	Sunset Avenue	Winding Way	72.1	72.2	0.0	72.4	72.4	0.0
43	Walerga Road	Elverta Road	Antelope Road	68.4	68.6	0.1	69.4	69.5	0.0
44	Walerga Road	Antelope Road	Elkhorn Boulevard	70.5	70.6	0.1	71.3	71.3	0.0
45	Walerga Road	Elkhorn Boulevard	Don Julio Blvd	68.8	69.0	0.2	70.2	70.3	0.0
46	Walerga Road	Don Julio Blvd	Roseville Road	64.4	64.7	0.2	66.3	66.4	0.1
47	Watt Avenue[3]	Antelope Road	Elkhorn Boulevard	66.6	66.6	0.0	69.1	69.2	0.0
48	Watt Avenue[3]	Elkhorn Boulevard	Don Julio Blvd	66.0	66.1	0.1	67.8	67.8	0.0

*All modeling assumes average pavement, level roadways (less than 1.5% grade), constant traffic flow and does not account for shielding of any type or finite roadway adjustments. All levels are reported as A-weighted noise levels.

Notes:
[1] Roadway segment in the Fair Oaks Boulevard Corridor Plan Area
[2] Roadway segment in the Old Florin Town SPA area
[3] Roadway segment in the North Watt Corridor Plan area

Existing Traffic Noise Spreadsheet Calculator

Project: Sacramento County RHNA Rezone Project

Noise Level Descriptor: Ldn
Site Conditions: Hard
Traffic Input: ADT
Traffic K-Factor:

		Segment Description and Location		Input										Output				
						Distance to Directional Centerline, (feet)[4]		Traffic Distribution Characteristics							Distance to Contour, (feet)[3]			
Number	Name	From	To	ADT	Speed (mph)	Near	Far	% Auto	% Medium	% Heavy	% Day	% Eve	% Night	Ldn, (dBA)[5,6,7]	75 dBA	70 dBA	65 dBA	60 dBA
Existing Conditions																		
1	Antelope North Road	Antelope Road	PFE Road	10,730	30	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	59.5	3	9	28	88
2	Antelope Road	Walerga Road	Elverta Road/Antelope Road	11,750	35	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	61.5	4	14	45	142
3	Antelope Road	Elverta Road/Antelope Road	Don Julio Blvd	27,500	35	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	65.2	11	33	105	332
4	Beech Avenue	Central Ave.	Greenback Lane	2,200	20	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	49.6		1	3	9
5	Chestnut Avenue	Central Ave.	Greenback Lane	7,420	25	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	56.2	1	4	13	42
6	Curved Bridge Rd	Oak Lane	Dry Creek Road	1,600	30	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	51.2		1	4	13
7	Dry Creek Road	Elkhorn Boulevard	Vinci Avenue	6,430	35	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	58.9	2	8	25	78
8	Edison Avenue	Bell Street	Fullton Avenue	40	25	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	33.5				
9	Elk Grove Florin Road	Florin Road	Gerber Road	23,200	40	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	66.1	13	40	128	403
10	Elk Grove Florin Road	Gerber Road	Calvine Road	31,740	40	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	67.4	17	55	174	552
11	Elkhorn Blvd	2nd Street	Rio Linda Blvd	13,340	45	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	65.1	10	32	103	325
12	Elsie Avenue	Stockton Blvd	Iona Way	33,400	35	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	66.1	13	40	128	404
13	Elverta Road	Cherry Brook Drive	28th Street	15,310	55	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	68.3	21	67	213	674
14	Fair Oaks Boulevard	Jacob Lane	Arden Way	30,920	40	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	67.3	17	54	170	537
15	Fair Oaks Boulevard	California Avenue	Marhsall Avenue	34,430	45	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	69.2	26	84	265	838
16	Fair Oaks Boulevard	Marshall Avenue	Hollister Avenue	36,680	45	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	69.5	28	89	282	892
17	Florin Road	Franklin Blvd	SR 99	53,960	40	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	69.7	30	94	297	938
18	Florin Road	Power Inn Road	lorin Perkins Road/French Roa	26,510	35	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	65.1	10	32	101	320
19	Folsom Boulevard	Mayhew Road	Bradshaw Road	33,880	40	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	67.7	19	59	186	589
20	Franklin Boulevard	Fruitridge Road	47th Avenue	25,090	40	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	66.4	14	44	138	436
21	Franklin Boulevard	47th Avenue	Florin Road	46,720	40	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	69.1	26	81	257	812
22	Franklin Boulevard	Florin Road	Mack Road	38,330	40	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	68.2	21	67	211	666
23	Fruitridge Road	44th Street	Dewey Blvd	26,350	40	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	66.6	14	46	145	458
24	Garfield Avenue	El Camino Ave	Fair Oaks Blvd	6,560	20	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	54.4	1	3	9	27
25	Garfield Avenue	Greenback Lane	Auburn Blvd	35,270	45	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	69.3	27	86	271	858
26	Greenback Lane	I-80 interchange	Auburn Blvd	92,580	45	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	73.5	71	225	712	2252
27	Greenback Lane	Kenneth Avenue	Hazel Avenue	41,150	40	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	68.5	23	72	226	715
28	Hemlock St	Madison Avenue	Myrtle Avenue	13,370	25	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	58.8	2	8	24	75
29	Madison Avenue	Harrison Street	Hillsdale Blvd	29,470	45	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	68.6	23	72	227	717
30	Manzanita Avenue	Madison Avenue	Winding Way	30,600	40	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	67.3	17	53	168	532
31	Oak Lane	Front Street	Curved Bridge Road	2,350	30	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	52.9	1	2	6	19
32	Pasadena Avenue	Norris Avenue	Creek Road	15,650	25	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	59.5	3	9	28	88
33	Power Inn Road	Elder Creek Road/Glen Elder Road	Florin Road	33,060	40	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	67.6	18	57	182	575
34	Power Inn Road	Florin Road	Gerber Road	39,800	40	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	68.4	22	69	219	692
35	Power Inn Road	Elsie Ave/Mack Road	Meadowhaven Drive	29,640	40	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	67.1	16	52	163	515
36	Roseville Road	Antelope Road	Outlook Drive	18,560	50	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	67.9	19	62	195	615
37	Stockton Blvd	Fruitridge Road	Elder Creek Road	25,880	35	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	65.0	10	31	99	313
38	Stockton Blvd	Elder Creek Road	Florin Road	38,890	40	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	68.3	21	68	214	676
39	Stockton Blvd	Florin Road	Gerber Road	43,020	40	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	68.7	24	75	236	748
40	Stockton Blvd	Gerber Road	Mack Rd/Elise Ave	41,310	40	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	68.6	23	72	227	718
41	Stockton Blvd	Rd/Elise Ave. south along SR 99 frontage		2,120	35	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	54.1	1	3	8	26
42	Sunrise Avenue	Sunset Avenue	Winding Way	67,330	45	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	72.1	52	164	518	1638
43	Walerga Road	Elverta Road	Antelope Road	40,110	40	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	68.4	22	70	220	697
44	Walerga Road	Antelope Road	Elkhorn Boulevard	46,220	45	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	70.5	36	112	356	1125
45	Walerga Road	Elkhorn Boulevard	Don Julio Blvd	31,050	45	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	68.8	24	76	239	755
46	Walerga Road	Don Julio Blvd	Roseville Road	33,820	30	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	64.4	9	28	88	278
47	Watt Avenue	Antelope Road	Elkhorn Boulevard	26,310	40	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	66.6	14	46	145	457
48	Watt Avenue	Elkhorn Boulevard	Don Julio Blvd	32,760	35	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	66.0	13	40	125	396

*All modeling assumes average pavement, level roadways (less than 1.5% grade), constant traffic flow and does not account for shielding of any type or finite roadway adjustments. All levels are reported as A-weighted noise levels.

Existing Traffic Noise Spreadsheet Calculator

Project: Sacramento County RHNA Rezone Project

Noise Level Descriptor: Ldn
Site Conditions: Hard
Traffic Input: ADT
Traffic K-Factor:

		Segment Description and Location		Input										Output				
						Distance to Directional Centerline, (feet)[4]		Traffic Distribution Characteristics							Distance to Contour, (feet)[3]			
Number	Name	From	To	ADT	Speed (mph)	Near	Far	% Auto	% Medium	% Heavy	% Day	% Eve	% Night	Ldn, (dBA)[5,6,7]	75 dBA	70 dBA	65 dBA	60 dBA
Existing Conditions																		
1	Antelope North Road	Antelope Road	PFE Road	10,520	30	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	59.4	3	9	27	87
2	Antelope Road	Walerga Road	Elverta Road/Antelope Road	12,160	35	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	61.7	5	15	46	147
3	Antelope Road	Elverta Road/Antelope Road	Don Julio Blvd	29,330	35	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	65.5	11	35	112	354
4	Beech Avenue	Central Ave.	Greenback Lane	2,250	20	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	49.7		1	3	9
5	Chestnut Avenue	Central Ave.	Greenback Lane	7,710	25	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	56.4	1	4	14	43
6	Curved Bridge Rd	Oak Lane	Dry Creek Road	1,850	30	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	51.8		2	5	15
7	Dry Creek Road	Elkhorn Boulevard	Vinci Avenue	6,640	35	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	59.0	3	8	25	80
8	Edison Avenue	Bell Street	Fullton Avenue	30	25	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	32.3				
9	Elk Grove Florin Road	Florin Road	Gerber Road	23,380	40	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	66.1	13	41	129	406
10	Elk Grove Florin Road	Gerber Road	Calvine Road	31,690	40	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	67.4	17	55	174	551
11	Elkhorn Blvd	2nd Street	Rio Linda Blvd	13,250	45	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	65.1	10	32	102	322
12	Elsie Avenue	Stockton Blvd	Iona Way	35,510	35	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	66.3	14	43	136	429
13	Elverta Road	Cherry Brook Drive	28th Street	15,350	55	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	68.3	21	68	214	676
14	Fair Oaks Boulevard	Jacob Lane	Arden Way	30,580	40	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	67.3	17	53	168	532
15	Fair Oaks Boulevard	California Avenue	Marhsall Avenue	34,200	45	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	69.2	26	83	263	832
16	Fair Oaks Boulevard	Marshall Avenue	Hollister Avenue	36,480	45	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	69.5	28	89	281	888
17	Florin Road	Franklin Blvd	SR 99	54,180	40	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	69.7	30	94	298	942
18	Florin Road	Power Inn Road	lorin Perkins Road/French Roa	26,800	35	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	65.1	10	32	102	324
19	Folsom Boulevard	Mayhew Road	Bradshaw Road	34,440	40	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	67.8	19	60	189	599
20	Franklin Boulevard	Fruitridge Road	47th Avenue	25,400	40	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	66.4	14	44	140	442
21	Franklin Boulevard	47th Avenue	Florin Road	46,830	40	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	69.1	26	81	257	814
22	Franklin Boulevard	Florin Road	Mack Road	38,360	40	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	68.2	21	67	211	667
23	Fruitridge Road	44th Street	Dewey Blvd	26,910	40	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	66.7	15	47	148	468
24	Garfield Avenue	El Camino Ave	Fair Oaks Blvd	6,830	20	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	54.5	1	3	9	28
25	Garfield Avenue	Greenback Lane	Auburn Blvd	36,350	45	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	69.5	28	88	280	884
26	Greenback Lane	I-80 interchange	Auburn Blvd	96,760	45	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	73.7	74	235	744	2354
27	Greenback Lane	Kenneth Avenue	Hazel Avenue	41,310	40	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	68.6	23	72	227	718
28	Hemlock St	Madison Avenue	Myrtle Avenue	13,270	25	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	58.7	2	7	24	75
29	Madison Avenue	Harrison Street	Hillsdale Blvd	29,830	45	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	68.6	23	73	230	726
30	Manzanita Avenue	Madison Avenue	Winding Way	30,450	40	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	67.2	17	53	167	529
31	Oak Lane	Front Street	Curved Bridge Road	2,530	30	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	53.2	1	2	7	21
32	Pasadena Avenue	Norris Avenue	Creek Road	16,170	25	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	59.6	3	9	29	91
33	Power Inn Road	Elder Creek Road/Glen Elder Road	Florin Road	34,490	40	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	67.8	19	60	190	600
34	Power Inn Road	Florin Road	Gerber Road	40,470	40	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	68.5	22	70	222	703
35	Power Inn Road	Elsie Ave/Mack Road	Meadowhaven Drive	29,470	40	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	67.1	16	51	162	512
36	Roseville Road	Antelope Road	Outlook Drive	18,520	50	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	67.9	19	61	194	614
37	Stockton Blvd	Fruitridge Road	Elder Creek Road	25,710	35	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	64.9	10	31	98	311
38	Stockton Blvd	Elder Creek Road	Florin Road	38,890	40	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	68.3	21	68	214	676
39	Stockton Blvd	Florin Road	Gerber Road	43,550	40	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	68.8	24	76	239	757
40	Stockton Blvd	Gerber Road	Mack Rd/Elise Ave	41,930	40	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	68.6	23	73	230	729
41	Stockton Blvd	Rd/Elise Ave. south along SR 99 frontage		2,080	35	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	54.0	1	3	8	25
42	Sunrise Avenue	Sunset Avenue	Winding Way	67,570	45	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	72.2	52	164	520	1644
43	Walerga Road	Elverta Road	Antelope Road	41,390	40	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	68.6	23	72	228	719
44	Walerga Road	Antelope Road	Elkhorn Boulevard	47,280	45	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	70.6	36	115	364	1150
45	Walerga Road	Elkhorn Boulevard	Don Julio Blvd	32,440	45	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	69.0	25	79	250	789
46	Walerga Road	Don Julio Blvd	Roseville Road	35,820	30	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	64.7	9	29	93	295
47	Watt Avenue	Antelope Road	Elkhorn Boulevard	26,490	40	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	66.6	15	46	146	460
48	Watt Avenue	Elkhorn Boulevard	Don Julio Blvd	33,760	35	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	66.1	13	41	129	408

*All modeling assumes average pavement, level roadways (less than 1.5% grade), constant traffic flow and does not account for shielding of any type or finite roadway adjustments. All levels are reported as A-weighted noise levels.

Existing Traffic Noise Spreadsheet Calculator

Project: Sacramento County RHNA Rezone Project

Noise Level Descriptor: Ldn
Site Conditions: Hard
Traffic Input: ADT
Traffic K-Factor:

		Segment Description and Location		Input											Output				
						Distance to Directional Centerline, (feet)[4]		Traffic Distribution Characteristics							Distance to Contour, (feet)[3]				
Number	Name	From	To	ADT	Speed (mph)	Near	Far	% Auto	% Medium	% Heavy	% Day	% Eve	% Night	Ldn, (dBA)[5,6,7]	75 dBA	70 dBA	65 dBA	60 dBA
Existing Conditions																		
1	Antelope North Road	Antelope Road	PFE Road	12,390	30	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	60.1	3	10	32	102
2	Antelope Road	Walerga Road	Elverta Road/Antelope Road	12,540	35	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	61.8	5	15	48	152
3	Antelope Road	Elverta Road/Antelope Road	Don Julio Blvd	42,080	35	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	67.1	16	51	161	509
4	Beech Avenue	Central Ave.	Greenback Lane	2,560	20	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	50.3		1	3	11
5	Chestnut Avenue	Central Ave.	Greenback Lane	8,430	25	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	56.8	2	5	15	48
6	Curved Bridge Rd	Oak Lane	Dry Creek Road	2,800	30	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	53.6	1	2	7	23
7	Dry Creek Road	Elkhorn Boulevard	Vinci Avenue	11,600	35	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	61.5	4	14	44	140
8	Edison Avenue	Bell Street	Fullton Avenue	60	25	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	35.3				
9	Elk Grove Florin Road	Florin Road	Gerber Road	51,890	40	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	69.6	29	90	285	902
10	Elk Grove Florin Road	Gerber Road	Calvine Road	48,480	40	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	69.3	27	84	266	843
11	Elkhorn Blvd	2nd Street	Rio Linda Blvd	30,830	45	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	68.8	24	75	237	750
12	Elsie Avenue	Stockton Blvd	Iona Way	38,120	35	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	66.6	15	46	146	461
13	Elverta Road	Cherry Brook Drive	28th Street	30,560	55	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	71.3	43	135	426	1346
14	Fair Oaks Boulevard	Jacob Lane	Arden Way	33,940	40	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	67.7	19	59	187	590
15	Fair Oaks Boulevard	California Avenue	Marhsall Avenue	38,740	45	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	69.7	30	94	298	943
16	Fair Oaks Boulevard	Marshall Avenue	Hollister Avenue	40,530	45	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	69.9	31	99	312	986
17	Florin Road	Franklin Blvd	SR 99	61,940	40	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	70.3	34	108	340	1077
18	Florin Road	Power Inn Road	Iorin Perkins Road/French Roa	43,800	35	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	67.2	17	53	167	529
19	Folsom Boulevard	Mayhew Road	Bradshaw Road	39,690	40	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	68.4	22	69	218	690
20	Franklin Boulevard	Fruitridge Road	47th Avenue	23,510	40	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	66.1	13	41	129	409
21	Franklin Boulevard	47th Avenue	Florin Road	48,860	40	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	69.3	27	85	269	849
22	Franklin Boulevard	Florin Road	Mack Road	38,400	40	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	68.2	21	67	211	667
23	Fruitridge Road	44th Street	Dewey Blvd	30,080	40	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	67.2	17	52	165	523
24	Garfield Avenue	El Camino Ave	Fair Oaks Blvd	6,890	20	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	54.6	1	3	9	29
25	Garfield Avenue	Greenback Lane	Auburn Blvd	36,670	45	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	69.5	28	89	282	892
26	Greenback Lane	I-80 interchange	Auburn Blvd	101,340	45	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	73.9	78	247	780	2466
27	Greenback Lane	Kenneth Avenue	Hazel Avenue	44,540	40	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	68.9	24	77	245	774
28	Hemlock St	Madison Avenue	Myrtle Avenue	13,730	25	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	58.9	2	8	24	77
29	Madison Avenue	Harrison Street	Hillsdale Blvd	34,650	45	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	69.3	27	84	267	843
30	Manzanita Avenue	Madison Avenue	Winding Way	34,250	40	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	67.7	19	60	188	595
31	Oak Lane	Front Street	Curved Bridge Road	2,880	30	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	53.7	1	2	7	24
32	Pasadena Avenue	Norris Avenue	Creek Road	17,540	25	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	60.0	3	10	31	99
33	Power Inn Road	Elder Creek Road/Glen Elder Road	Florin Road	36,190	40	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	68.0	20	63	199	629
34	Power Inn Road	Florin Road	Gerber Road	42,770	40	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	68.7	24	74	235	743
35	Power Inn Road	Elsie Ave/Mack Road	Meadowhaven Drive	37,140	40	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	68.1	20	65	204	646
36	Roseville Road	Antelope Road	Outlook Drive	23,430	50	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	68.9	25	78	246	777
37	Stockton Blvd	Fruitridge Road	Elder Creek Road	23,250	35	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	64.5	9	28	89	281
38	Stockton Blvd	Elder Creek Road	Florin Road	40,910	40	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	68.5	22	71	225	711
39	Stockton Blvd	Florin Road	Gerber Road	46,910	40	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	69.1	26	82	258	815
40	Stockton Blvd	Gerber Road	Mack Rd/Elise Ave	47,560	40	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	69.2	26	83	261	827
41	Stockton Blvd	Rd/Elise Ave. south along SR 99 frontage		2,900	35	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	55.4	1	4	11	35
42	Sunrise Avenue	Sunset Avenue	Winding Way	71,260	45	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	72.4	55	173	548	1734
43	Walerga Road	Elverta Road	Antelope Road	50,240	40	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	69.4	28	87	276	873
44	Walerga Road	Antelope Road	Elkhorn Boulevard	55,110	45	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	71.3	42	134	424	1341
45	Walerga Road	Elkhorn Boulevard	Don Julio Blvd	43,420	45	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	70.2	33	106	334	1056
46	Walerga Road	Don Julio Blvd	Roseville Road	51,600	30	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	66.3	13	42	134	425
47	Watt Avenue	Antelope Road	Elkhorn Boulevard	47,050	40	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	69.1	26	82	259	818
48	Watt Avenue	Elkhorn Boulevard	Don Julio Blvd	50,020	35	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%	67.8	19	60	191	604

*All modeling assumes average pavement, level roadways (less than 1.5% grade), constant traffic flow and does not account for shielding of any type or finite roadway adjustments. All levels are reported as A-weighted noise levels.

Existing Traffic Noise Spreadsheet Calculator

Project: Sacramento County RHNA Rezone Project

Noise Level Descriptor: Ldn
Site Conditions: Hard
Traffic Input: ADT
Traffic K-Factor:

		Segment Description and Location		Input											Output				
						Distance to Directional Centerline, (feet)[4]		Traffic Distribution Characteristics							Ldn,	Distance to Contour, (feet)[3]			
Number	Name	From	To	ADT	Speed (mph)	Near	Far	% Auto	% Medium	% Heavy	% Day	% Eve	% Night		(dBA)[5,6,7]	75 dBA	70 dBA	65 dBA	60 dBA
Existing Conditions																			
1	Antelope North Road	Antelope Road	PFE Road	12,520	30	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%		60.1	3	10	33	103
2	Antelope Road	Walerga Road	Elverta Road/Antelope Road	12,950	35	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%		61.9	5	16	49	156
3	Antelope Road	Elverta Road/Antelope Road	Don Julio Blvd	44,030	35	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%		67.3	17	53	168	532
4	Beech Avenue	Central Ave.	Greenback Lane	2,570	20	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%		50.3		1	3	11
5	Chestnut Avenue	Central Ave.	Greenback Lane	8,320	25	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%		56.7	1	5	15	47
6	Curved Bridge Rd	Oak Lane	Dry Creek Road	3,120	30	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%		54.1	1	3	8	26
7	Dry Creek Road	Elkhorn Boulevard	Vinci Avenue	11,990	35	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%		61.6	5	14	46	145
8	Edison Avenue	Bell Street	Fullton Avenue	70	25	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%		36.0				
9	Elk Grove Florin Road	Florin Road	Gerber Road	52,500	40	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%		69.6	29	91	289	913
10	Elk Grove Florin Road	Gerber Road	Calvine Road	48,940	40	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%		69.3	27	85	269	851
11	Elkhorn Blvd	2nd Street	Rio Linda Blvd	31,160	45	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%		68.8	24	76	240	758
12	Elsie Avenue	Stockton Blvd	Iona Way	38,670	35	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%		66.7	15	47	148	467
13	Elverta Road	Cherry Brook Drive	28th Street	30,870	55	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%		71.3	43	136	430	1359
14	Fair Oaks Boulevard	Jacob Lane	Arden Way	34,130	40	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%		67.7	19	59	188	593
15	Fair Oaks Boulevard	California Avenue	Marhsall Avenue	39,030	45	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%		69.8	30	95	300	950
16	Fair Oaks Boulevard	Marshall Avenue	Hollister Avenue	40,810	45	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%		70.0	31	99	314	993
17	Florin Road	Franklin Blvd	SR 99	62,220	40	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%		70.3	34	108	342	1082
18	Florin Road	Power Inn Road	Iorin Perkins Road/French Roa	44,530	35	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%		67.3	17	54	170	538
19	Folsom Boulevard	Mayhew Road	Bradshaw Road	40,090	40	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%		68.4	22	70	220	697
20	Franklin Boulevard	Fruitridge Road	47th Avenue	23,690	40	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%		66.1	13	41	130	412
21	Franklin Boulevard	47th Avenue	Florin Road	49,220	40	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%		69.3	27	86	271	856
22	Franklin Boulevard	Florin Road	Mack Road	38,520	40	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%		68.3	21	67	212	670
23	Fruitridge Road	44th Street	Dewey Blvd	30,320	40	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%		67.2	17	53	167	527
24	Garfield Avenue	El Camino Ave	Fair Oaks Blvd	7,170	20	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%		54.7	1	3	9	30
25	Garfield Avenue	Greenback Lane	Auburn Blvd	37,070	45	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%		69.6	29	90	285	902
26	Greenback Lane	I-80 interchange	Auburn Blvd	101,890	45	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%		73.9	78	248	784	2479
27	Greenback Lane	Kenneth Avenue	Hazel Avenue	44,640	40	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%		68.9	25	78	245	776
28	Hemlock St	Madison Avenue	Myrtle Avenue	13,850	25	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%		58.9	2	8	25	78
29	Madison Avenue	Harrison Street	Hillsdale Blvd	35,070	45	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%		69.3	27	85	270	853
30	Manzanita Avenue	Madison Avenue	Winding Way	34,400	40	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%		67.8	19	60	189	598
31	Oak Lane	Front Street	Curved Bridge Road	3,190	30	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%		54.2	1	3	8	26
32	Pasadena Avenue	Norris Avenue	Creek Road	17,650	25	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%		60.0	3	10	31	100
33	Power Inn Road	Elder Creek Road/Glen Elder Road	Florin Road	36,850	40	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%		68.1	20	64	203	641
34	Power Inn Road	Florin Road	Gerber Road	43,390	40	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%		68.8	24	75	239	754
35	Power Inn Road	Elsie Ave/Mack Road	Meadowhaven Drive	38,450	40	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%		68.3	21	67	211	668
36	Roseville Road	Antelope Road	Outlook Drive	23,660	50	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%		68.9	25	78	248	784
37	Stockton Blvd	Fruitridge Road	Elder Creek Road	23,320	35	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%		64.5	9	28	89	282
38	Stockton Blvd	Elder Creek Road	Florin Road	41,400	40	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%		68.6	23	72	228	720
39	Stockton Blvd	Florin Road	Gerber Road	47,620	40	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%		69.2	26	83	262	828
40	Stockton Blvd	Gerber Road	Mack Rd/Elise Ave	48,130	40	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%		69.2	26	84	265	837
41	Stockton Blvd	Rd/Elise Ave. south along SR 99 frontage		3,070	35	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%		55.7	1	4	12	37
42	Sunrise Avenue	Sunset Avenue	Winding Way	71,070	45	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%		72.4	55	173	547	1729
43	Walerga Road	Elverta Road	Antelope Road	50,810	40	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%		69.5	28	88	279	883
44	Walerga Road	Antelope Road	Elkhorn Boulevard	55,370	45	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%		71.3	43	135	426	1347
45	Walerga Road	Elkhorn Boulevard	Don Julio Blvd	43,860	45	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%		70.3	34	107	337	1067
46	Walerga Road	Don Julio Blvd	Roseville Road	52,510	30	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%		66.4	14	43	137	432
47	Watt Avenue	Antelope Road	Elkhorn Boulevard	47,520	40	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%		69.2	26	83	261	826
48	Watt Avenue	Elkhorn Boulevard	Don Julio Blvd	50,380	35	100	100	97.0%	2.0%	1.0%	80.0%	15.0%	5.0%		67.8	19	61	193	609

*All modeling assumes average pavement, level roadways (less than 1.5% grade), constant traffic flow and does not account for shielding of any type or finite roadway adjustments. All levels are reported as A-weighted noise levels.

	End Nodes						Base Year (2016)		Super-Cumulative	
Community	A	B	Roadway Name	From	To	Speed	Base (Existing ADT)	Package 1 (Existing + Project ADT)	Cumulative (Existing ADT)	Package 1 (Cumulative + Project ADT)
	2660	2923	Antelope North Road	Antelope Road	PFE Road	30	10,730	10,520	12,390	12,520
	2921	15653	Antelope Road	Walerga Road	Elverta Road/Antelope Road	35	11,750	12,160	12,540	12,950
	2922	6619	Antelope Road	Elverta Road/Antelope Road	Don Julio Blvd	35	27,500	29,330	42,080	44,030
	459	2279	Beech Avenue	Central Ave.	Greenback Lane	20	2,200	2,250	2,560	2,570
	3086	8215	Chestnut Avenue	Central Ave.	Greenback Lane	25	7,420	7,710	8,430	8,320
	2955	2956	Curved Bridge Rd	Oak Lane	Dry Creek Road	30	1,600	1,850	2,800	3,120
	4484	5912	Dry Creek Road	Elkhorn Boulevard	Vinci Avenue	35	6,430	6,640	11,600	11,990
	3171	8245	Edison Avenue	Bell Street	Fullton Avenue	25	40	30	60	70
	3808	3865	Elk Grove Florin Road	Florin Road	Gerber Road	40	23,200	23,380	51,890	52,500
	3864	6659	Elk Grove Florin Road	Gerber Road	Calvine Road	40	31,740	31,690	48,480	48,940
	2965	2966	Elkhorn Blvd	2nd Street	Rio Linda Blvd	45	13,340	13,250	30,830	31,160
	3815	8083	Elsie Avenue	Stockton Blvd	Iona Way	35	33,400	35,510	38,120	38,670
	2911	4639	Elverta Road	Cherry Brook Drive	28th Street	55	15,310	15,350	30,560	30,870
	3279	8057	Fair Oaks Boulevard	Jacob Lane	Arden Way	40	30,920	30,580	33,940	34,130
Fair Oaks Blvd.	3289	4421	Fair Oaks Boulevard	California Avenue	Marhsall Avenue	45	34,430	34,200	38,740	39,030
	3290	4421	Fair Oaks Boulevard	Marshall Avenue	Hollister Avenue	45	36,680	36,480	40,530	40,810
Old Florin	3775	8347	Florin Road	Franklin Blvd	SR 99	40	53,960	54,180	61,940	62,220
Old Florin	3781	3892	Florin Road	Power Inn Road	Florin Perkins Road/French Road	35	26,510	26,800	43,800	44,530
	3537	3552	Folsom Boulevard	Mayhew Road	Bradshaw Road	40	33,880	34,440	39,690	40,090
	3728	4085	Franklin Boulevard	Fruitridge Road	47th Avenue	40	25,090	25,400	23,510	23,690
	4499	8346	Franklin Boulevard	47th Avenue	Florin Road	40	46,720	46,830	48,860	49,220
	3846	4396	Franklin Boulevard	Florin Road	Mack Road	40	38,330	38,360	38,400	38,520
	3884	8352	Fruitridge Road	44th Street	Dewey Blvd	40	26,350	26,910	30,080	30,320
	392	3218	Garfield Avenue	El Camino Ave	Fair Oaks Blvd	20	6,560	6,830	6,890	7,170
	3345	4407	Garfield Avenue	Greenback Lane	Auburn Blvd	45	35,270	36,350	36,670	37,070
	4407	5518	Greenback Lane	I-80 interchange	Auburn Blvd	45	92,580	96,760	101,340	101,890
	2279	3084	Greenback Lane	Kenneth Avenue	Hazel Avenue	40	41,150	41,310	44,540	44,640
	2277	8203	Hemlock St	Madison Avenue	Myrtle Avenue	25	13,370	13,270	13,730	13,850
	3036	3100	Madison Avenue	Harrison Street	Hillsdale Blvd	45	29,470	29,830	34,650	35,070
	3104	4319	Manzanita Avenue	Madison Avenue	Winding Way	40	30,600	30,450	34,250	34,400
	2954	2955	Oak Lane	Front Street	Curved Bridge Road	30	2,350	2,530	2,880	3,190
	3119	3162	Pasadena Avenue	Norris Avenue	Creek Road	25	15,650	16,170	17,540	17,650
Old Florin	3763	3856	Power Inn Road	Elder Creek Road/Glen Elder Road	Florin Road	40	33,060	34,490	36,190	36,850
Old Florin	3780	3891	Power Inn Road	Florin Road	Gerber Road	40	39,800	40,470	42,770	43,390
	3815	4239	Power Inn Road	Elsie Ave/Mack Road	Meadowhaven Drive	40	29,640	29,470	37,140	38,450
	2925	3025	Roseville Road	Antelope Road	Outlook Drive	50	18,560	18,520	23,430	23,660
	3732	3895	Stockton Blvd	Fruitridge Road	Elder Creek Road	35	25,880	25,710	23,250	23,320
	3852	3893	Stockton Blvd	Elder Creek Road	Florin Road	40	38,890	38,890	40,910	41,400
	3850	3851	Stockton Blvd	Florin Road	Gerber Road	40	43,020	43,550	46,910	47,620
	3814	4078	Stockton Blvd	Gerber Road	Mack Rd/Elise Ave	40	41,310	41,930	47,560	48,130
	11852	11877	Stockton Blvd	Mack Rd/Elise Ave. south along SR 99 frontage		35	2,120	2,080	2,900	3,070
	3133	3153	Sunrise Avenue	Sunset Avenue	Winding Way	45	67,330	67,570	71,260	71,070
	2294	2921	Walerga Road	Elverta Road	Antelope Road	40	40,110	41,390	50,240	50,810
	2921	3342	Walerga Road	Antelope Road	Elkhorn Boulevard	45	46,220	47,280	55,110	55,370
	2974	3341	Walerga Road	Elkhorn Boulevard	Don Julio Blvd	45	31,050	32,440	43,420	43,860
	3022	3340	Walerga Road	Don Julio Blvd	Roseville Road	30	33,820	35,820	51,600	52,510
North Watt Ave	2920	13630	Watt Avenue	Antelope Road	Elkhorn Boulevard	40	26,310	26,490	47,050	47,520
North Watt Ave	3335	3336	Watt Avenue	Elkhorn Boulevard	Don Julio Blvd	35	32,760	33,760	50,020	50,380

Notes: Data provided by DKS Associates

Distance Propagation Calculations for Stationary Sources of Ground Vibration

KEY: Orange cells are for input.

Grey cells are intermediate calculations performed by the model.

Green cells are data to present in a written analysis (output).

STEP 1: Determine units in which to perform calculation.

— If vibration decibels (VdB), then use Table A and proceed to Steps 2A and 3A.

— If peak particle velocity (PPV), then use Table B and proceed to Steps 2B and 3B.

STEP 2A: Identify the vibration source and enter the reference vibration level (VdB) and distance.

STEP 3A: Select the distance to the receiver.

Table A. Propagation of vibration decibels (VdB) with distance

Noise Source/ID	Reference Noise Level			Attenuated Noise Level at Receptor		
	vibration level (VdB)	@	distance (ft)	vibration level (VdB)	@	distance (ft)
Impact pile driver	112	@	25	71.9	@	541
Vibratory Roller	94	@	25	71.9	@	136
Large bulldozer	87.0	@	25	71.8	@	80

The Lv metric (VdB) is used to assess the likelihood for vibration to result in human annoyance.

STEP 2B: Identify the vibration source and enter the reference peak particle velocity (PPV) and distance.

STEP 3B: Select the distance to the receiver.

Table B. Propagation of peak particle velocity (PPV) with distance

Noise Source/ID	Reference Noise Level			Attenuated Noise Level at Receptor		
	vibration level (PPV)	@	distance (ft)	vibration level (PPV)	@	distance (ft)
Impact pile driver	1.518	@	25	0.199	@	97
Vibratory Roller	0.210	@	25	0.198	@	26
Large bulldozer	0.089	@	25	0.191	@	15

The PPV metric (in/sec) is used for assessing the likelihood for the potential of structural damage.

Notes:

Computation of propagated vibration levels is based on the equations presented on pg. 185 of FTA 2018. Estimates of attenuated vibration levels do not account for reductions from intervening underground barriers or other underground structures of any type, or changes in soil type.

Federal Transit Association (FTA). 2018 (September). Transit Noise and Vibration Impact Assessment Manual. FTA Report No. 0123. Washington, D.C. Accessed: December 20, 2020.

https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-asse

APPENDIX TRAN-1: PROJECT SPECIFIC VEHICLE MILES TRAVELED ANALYSIS MEMO

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MEMORANDUM

DATE: February 23, 2024

TO: Kari Zajac | Ascent Environmental

FROM: Dave Tokarski | DKS Associates

SUBJECT: Sacramento County Residential Rezones – VMT Analysis Project # P23063-000

INTRODUCTION

Ascent Environmental has contracted with DKS Associates to prepare a Vehicle Miles Traveled (VMT) analysis for the proposed rezoning of parcels throughout unincorporated Sacramento County from their current General Plan zoning to residential zoning. The list of parcels includes approximately 80 parcels representing nearly 235 total acres. Each parcel listed includes data including property address (if available), assessor parcel number (APN), CPAC community, current General Plan land use designation and zoning, proposed zoning designation, minimum proposed residential density, maximum proposed residential density, existing use (or vacancy), ownership (public or private), and proposed residential capacity by income level (lower income, moderate income, and above moderate income), and total proposed residential capacity. In addition to a spreadsheet containing the list of proposed parcels, County staff provided the project team with a GIS geodatabase locating each of the sites within the county.

PROPOSED REZONES

Table 1 shows the number of parcels identified for rezones and the number of parcels identified per Community Plan Area, as well as the unincorporated County as a whole. The table shows that a majority of the proposed units are located in the South Sacramento (41%), North Highlands (18%), and Antelope (14%) areas. All other areas combined total approximately 27% of the total potential increase in residential capacity.

Figure 1 shows the location (and site number) of each of the rezone parcels along with the extents of unincorporated communities.

TABLE 1: REZONE PARCELS BY COMMUNITY PLAN AREA

UNINCORPORATED COMMUNITY	NUMBER OF PARCELS	TOTAL ACRES	TOTAL CAPACITY (DU)	PERCENT OF TOTAL CAPACITY
ANTELOPE	4	29.63	1,037	14%
ARDEN ARCADE	1	1.98	59	1%
CARMICHAEL/OLD FOOTHILL FARMS	10	16.62	387	5%
FAIR OAKS	2	2.89	85	1%
NATOMAS	0	0.00	-	0%
NORTH HIGHLANDS	10	42.52	1,359	18%
ORANGEVALE	7	7.93	218	3%
CORDOVA	2	13.90	556	7%
RIO LINDA/ELVERTA	6	18.77	561	8%
SOUTH SACRAMENTO	35	96.47	3,014	41%
VINEYARD	2	4.81	143	2%
TOTAL REZONE SITES	79	235.52	7,419	100%

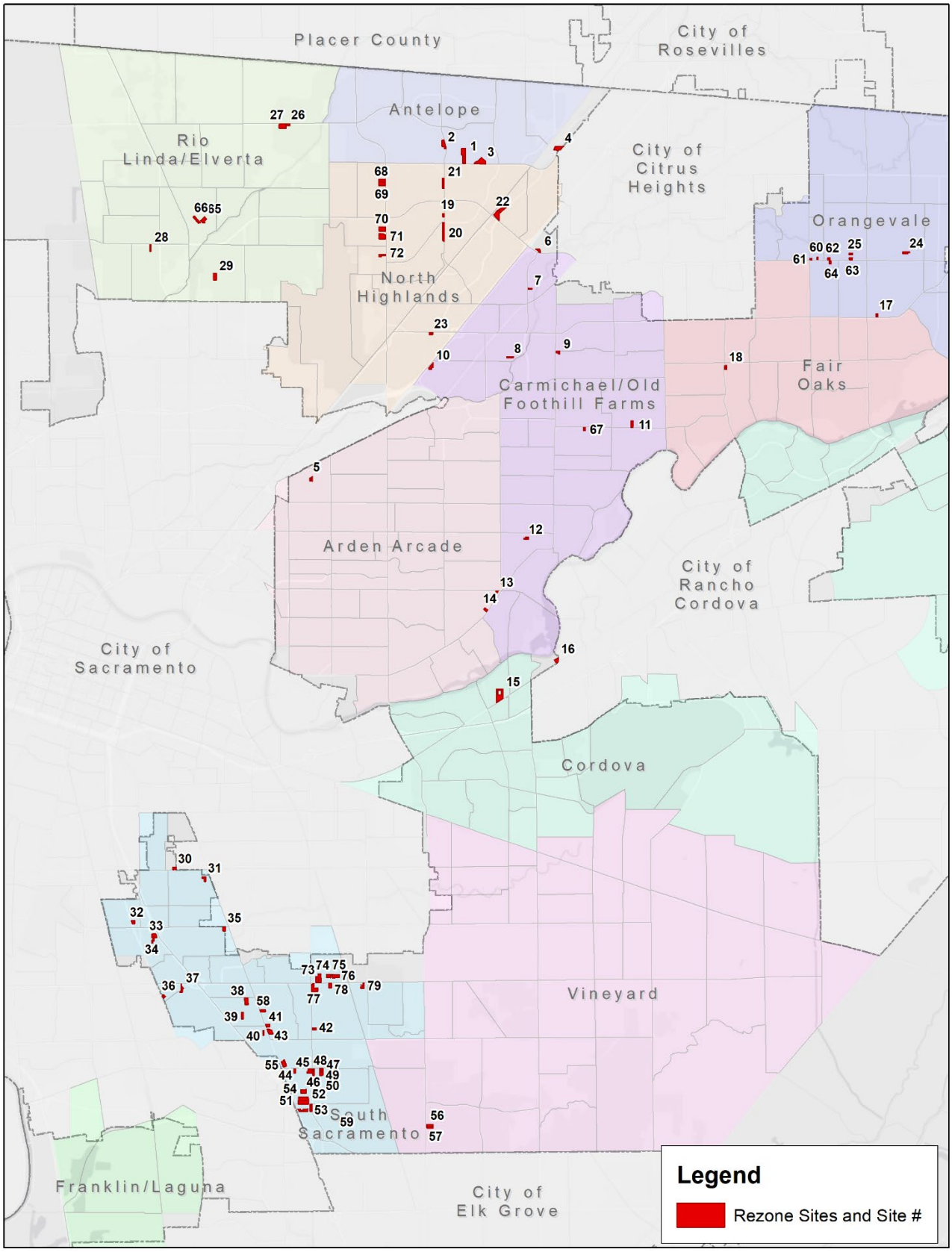


FIGURE 1: LOCATION OF REZONE PARCELS

VMT MODELING

In order to analyze the impacts of the rezones on VMT, the potential rezone parcels needed to be modified in the regional travel demand model used for VMT analysis by Sacramento County. SACOG (the Sacramento Area Council of Governments) maintains a regional activity-based model (ABM) called SACSIM19, which is used by local jurisdictions, including Sacramento County, for regional transportation impact analysis. SACOG currently maintains a base year (2016) scenario, as well as a number of future year (2027, 2035, and 2040) scenarios. Additionally, Sacramento County has had its consultants develop a "Super-Cumulative" scenario for use in major impact studies in the unincorporated County, including major development projects along Jackson Highway in the southeast portion of the County and in the Natomas area. Based on discussions with County staff, this analysis relies on this "Super-Cumulative" model for cumulative conditions.

The model uses "pseudo" parcels as its main land use input. Each "pseudo" parcel consists of a set of XY coordinates to represent the approximate center of the actual land use area, as well as other data including traffic analysis zone (TAZ), number of households, number of enrolled students at schools (primary, high school, and university), number of employees (education, food/beverage, government, industrial, medical, office, retail, service, other, and total), and other fields not directly involved in land use modifications. In addition to the parcels file, the land use inputs include a "households" file (with details for each household linked to a parent parcel) and a "persons" file (with details for each person linked to a parent household). These files are all interdependent, so changing land use includes making changes to all three of them.

In order to apply the proposed rezones at a parcel level, it was necessary to associate each parcel (polygon) identified for rezoning to an appropriate pseudo parcel (XY point) in the model. This was achieved using GIS (geographic information systems) spatial joining processes. Once the appropriate SACSIM19 parcel was identified in both the base year (2016) and super-cumulative models, then land use assumed in the model was identified in order to determine how best to apply the rezone dwelling units. In some cases, there was no model pseudo-parcel match for the identified polygon parcel. These locations had to be added to the model input.

Based on review of all rezone parcels and both the 2016 (for existing plus project) and super-cumulative (cumulative plus project) models, a number of cases were identified that each would require assumptions to be made regarding the relationship between the assumed dwelling unit capacity assumed with the rezones and the data already contained in the models. These cases and assumptions made for allocating the rezone dwelling units in the model are listed below.

- Existing Plus Project
    - For sites where there are 1 or 2 dwelling units in the model, assume those dwelling units will be replaced by the County's assumed rezone units
    - For sites where there are higher dwelling units in base year SACSIM model than County's rezone units, keep the units already in the model
    - For sites where base year model has fewer dwelling units than County Rezone units, replace with County Rezone units
    - For sites where there is a small amount of employment, zero out the employment
    - For sites where there is a large amount of employment, review case by case

- Cumulative Plus Project
    - For sites where there are 1 or 2 dwelling units in the model, assume those dwelling units will be replaced by the County's assumed rezone units
    - For sites where there are higher dwelling units in cumulative SACSIM model than County's rezone units, keep the units already in the model
    - For sites where there is a small amount of employment, zero out the employment
    - For sites where there is a large amount of employment, review case by case

Based on these assumptions, less than the total 7,419 total dwelling units were added to each model, as some of the rezone units were already included in each of the model land use inputs. Once the land use changes were applied to subject parcels, households, and persons in the model, the model was rerun for both Existing Plus Rezones and Super-Cumulative Plus Rezones scenarios. As with previous VMT studies prepared for Sacramento County, VMT per Capita and VMT per Employee were calculated for each TAZ and the region as a whole, as was VMT by speed bin data for the region as a whole.

VMT RESULTS

Table 2 shows the changes in regionwide VMT associated with the proposed rezones. The table summarizes both total region wide network VMT and VMT per Capita for both Existing (2016) and Super Cumulative conditions without and with the rezones, as well as the difference between the two. The table shows that region wide network VMT increases by approximately 1.2% under Existing Plus Project conditions and by approximately 0.2% under Super-Cumulative Plus Project conditions. It should be noted that network VMT reported in this table are rounded to the nearest 100. A more detailed version of this data (unrounded and divided into 5 mile per hour "speed bins") is shown in **Table 3**.

Sacramento County, in accordance with OPR (Office of Planning and Research) guidance[1] has identified an 85% threshold for residential VMT for projects within Unincorporated Sacramento County. In other words, any project whose VMT per Capita (calculated using an accepted methodology, such as using the travel demand model as done in this analysis) exceeds 85% of the regional average represents a significant impact in regard to VMT.

[1] *Technical Advisory on Evaluating Transportation Impacts in CEQA*, California OPR, December 2018

TABLE 2: CHANGE IN REGION WIDE VMT METRICS

	BASE YEAR			SUPER-CUMULATIVE		
	NO PROJECT	WITH REZONEES	CHANGE	NO PROJECT	WITH REZONEES	CHANGE
REGION WIDE NETWORK VMT	58,394,800	59,033,100	+638,300	76,811,500	77,021,600	+210,100
% CHANGE			+1.1%			+0.3%
REGION WIDE VMT PER CAPITA	20.20	20.26	+0.06	18.39	18.39	No change
85% THRESHOLD	17.17			15.63		

Note: Network VMT rounded to the nearest 100

TABLE 3: CHANGE IN REGION WIDE VMT BY SPEED BIN

SPEED BIN	BASE YEAR			SUPER-CUMULATIVE		
	NO PROJECT	WITH REZONES	CHANGE	NO PROJECT	WITH REZONES	CHANGE
0 TO 5MPH	50,799	27,469	-23,329	125,841	129,050	+3,209
5 TO 10MPH	200,934	167,696	-33,238	495,852	514,762	+18,909
10-15MPH	456,721	423,387	-33,334	821,862	861,363	+39,501
15-20MPH	5,728,177	5,771,262	+43,085	7,658,454	7,682,544	+24,089
20-25MPH	2,460,631	2,593,557	+132,927	3,471,090	3,476,845	+5,755
25-30MPH	3,491,580	3,528,941	+37,361	5,433,368	5,531,272	+97,904
30-35MPH	7,185,027	7,277,347	+92,321	10,666,252	10,664,753	-1,500
35-40MPH	6,866,787	6,707,873	-158,914	9,791,219	9,801,348	+10,129
40-45MPH	5,504,646	5,218,567	-286,079	6,460,529	6,478,169	+17,641
45-50MPH	3,879,665	3,013,793	-865,873	5,423,781	5,451,761	+27,980
50-55MPH	7,268,118	6,077,210	-1,190,908	10,335,231	10,306,342	-28,890
55-60MPH	11,253,035	12,038,521	+785,486	12,276,140	12,249,091	-27,048
60-65MPH	2,788,265	4,676,265	+1,888,001	2,308,016	2,330,235	+22,219
65+MPH	1,260,403	1,511,260	+250,857	1,543,895	1,544,080	+184
TOTAL	**58,394,787**	**59,033,149**	**+638,362**	**76,811,532**	**7,021,615**	**+210,083**

Table 4 shows the changes in VMT per Capita summarized by unincorporated community with implementation of the rezones. The table shows that under base year no project conditions, five of the ten communities have VMT per Capita 85% or less of the regional average. Of these five, four communities see a decrease in VMT per Capita with the addition of the rezones, while one (Vineyard) sees an increase the VMT per Capita that is already beyond the threshold for a VMT impact. None of the decreases result in VMT per Capita decreasing to below the 85% threshold. Under future ("Super-Cumulative") conditions, one of the ten communities (Rio Linda/ Elverta) is projected to have VMT per Capita beyond the 85% threshold without the rezones. This community sees an increase in VMT per Capita with the addition of the rezones. One additional community (Orangevale) is projected to have VMT per Capita at exactly the 85% threshold, while the addition of the rezones increases VMT per Capita in this community beyond the threshold.

TABLE 4:VMT PER CAPITA (ALL UNINCORPORATED TAZS) BY COMMUNITY PLAN AREA1

	# of TAZs		VMT/Capita (Sacramento County CPACs)			
			2016		Super-Cumulative	
Sacramento County CPAC	Uninc CPAC	Changed TAZs	Base	Rezone Change	No Build	Rezone Change
Antelope	9	3	**18.30**	**18.14** -0.16	16.97	17.13 +0.16
Arden Arcade	42	1	14.45	14.51 +0.06	13.27	13.33 +0.06
Carmichael/Old Foothill Farms	36	9	15.84	15.85 +0.01	14.74	14.80 +0.06
Fair Oaks	17	1	**17.76**	**17.71** -0.05	16.35	16.41 +0.06
North Highlands	20	8	15.68	15.51 -0.17	14.68	14.68 +0
Orangevale	16	5	**17.82**	**17.80** -0.02	17.17	**17.22** **+0.05**
Rancho Cordova	32	2	17.03	17.16 +0.13	15.25	15.21 -0.04
Rio Linda/Elverta	22	4	**21.32**	**21.08** -0.24	**19.58**	**19.75** **+0.17**
South Sacramento	25	15	15.27	14.92 -0.35	14.22	14.13 -0.09
Vineyard	41	1	**19.68**	**20.48** **+0.80**	15.17	14.77 -0.40
Regionwide VMT per Capita			**20.20**			
85% of Regional			17.17			

Note: **Bold** numbers represent VMT per Capita greater than 17.17 (85% of base year regionwide average)
TAZ = Traffic Analysis Zone

[1] The results presented in this table are inclusive of three candidate rezone sites (in the South Sacramento community) that are no longer part of the project.

Table 5 shows the changes in VMT per Capita summarized by each of the four EIR's that have been certified by Sacramento County in previous years, including the North Watt Corridor Plan, The Old Florin Town SPA, the Fair Oaks Boulevard Corridor Plan, and the remaining area of the Sacramento County General Plan. The table shows that the rezone sites in each of the areas above covered by a previous EIR have VMT per Capita less than the 85% threshold and although the North Watt Corridor sites show a slight increase in VMT per Capita under Super-Cumulative conditions, none of the sites show VMT per Capita increases that would put them above the threshold.

TABLE 5: VMT PER CAPITA FOR REZONE SITES WITHIN PREVIOUS EIRS

Sacramento County CPAC	Number Of Sites	Number Of DU	VMT/Capita (Sacramento County CPACs)			
			2016		Super-Cumulative	
			Base	Rezone Change	No Build	Rezone Change
North Watt Corridor Plan EIR	5	735	15.39	13.42 -1.97	14.61	14.64 +0.04
Old Florin Town SPA EIR	7	777	13.90	11.73 -2.17	12.65	12.29 -0.36
Fair Oaks Blvd EIR	1	37	14.64	14.25 -0.39	13.46	13.40 -0.06
Remainder GP EIR	66	5,870	16.59	15.86 -0.73	15.61	15.08 -0.52
All Rezone Sites	79	7,419	16.18	15.17 -1.01	15.19	14.74 -0.45
Regionwide VMT per Capita			**20.20**			
85% of Regional			17.17			

Note: **Bold** numbers represent VMT per Capita greater than 17.17 (85% of base year regionwide average)
TAZ = Traffic Analysis Zone

Table 6 summarizes the number of rezone dwelling units that meet the 85% threshold (non-impact) or exceed the 85% threshold (impact). The table show that of the 7,419 total proposed units, 1,282 (or 17.3%) of the units exceed the threshold under base year conditions, while 1,119 (or 15.1%) of the units exceed the threshold under Super-Cumulative conditions.

TABLE 6:DWELLING UNITS IMPACTS BY COMMUNITY PLAN AREA

Sacramento County CPAC	Number Of Sites	Number of DU	Dwelling Unit Impacts by CPAC			
			2016 Rezone		Super-Cumulative Rezone	
			Non-Impact	Impact	Non-Impact	Impact
Antelope	4	1,037	687	350	826	211
Arden Arcade	1	59	59	-	59	-
Carmichael/Old Foothill Farms	10	387	305	82	387	-
Cordova	2	556	556	-	556	-
Fair Oaks	2	85	-	85	48	37
North Highlands	10	1,359	1,359	-	1,359	-
Orangevale	7	218	51	167	51	167
Rio Linda/Elverta	6	561	106	455	-	561
South Sacramento	35	3,014	3,014	-	3,014	-
Vineyard	2	143	-	143	-	143
Total	79	7,419	6,137	1,282	6,300	1,119
Percent of Units >85% of Regional Average				17.3%		15.1%

Note: DU = Dwelling Unit

Impact = VMT per Capita greater than 17.17 (85% of base year regionwide average)

Table 7 shows the VMT per Capita (and resultant percentage of regional average) for each of the 79 sites identified for rezone dwelling units. This table allows the County to review each site individually to determine if that site meets or exceeds the 85% threshold. Any locations that are shown in **bold** and **shaded** exceed the 85% threshold and represent a significant impact in terms of VMT. Those that are not bold or shaded meet the threshold and therefore do not represent a significant impact in terms of VMT.

In addition to the results for each site, the table also shows that the weighted average VMT per Capita for all rezone households (based on number of units per site) falls within the 85% threshold for both base year (75%) and future year (73%) conditions.

TABLE 7:VMT PER CAPITA (REZONE PARCELS ONLY) BY SITE

Rezone Location	Sacramento County CPAC	Site #	TAZ	DU	VMT/Capita (Rezone Locations)			
					2016		Super-Cumulative	
					VMT per Capita	% of Region Wide	VMT per Capita	% of Region Wide
0.3 miles W of Antelope Road/Walerga Road	Antelope	1	324	300	16.32	81%	15.34	76%
0.2 miles S of Elverta Road/Walerga Road		2	1107	139	**17.75**	**88%**	16.18	80%
S Antelope Road/Elverta Road		3	324	387	16.32	81%	15.34	76%
370 feet N Roseville Road/Antelope Road		4	427	211	**18.63**	**92%**	**17.22**	**85%**
2328 Edison Avenue, 2332 Edison Avenue & 2336 Edison Avenue	Arden Arcade	5	378	59	12.56	62%	11.86	59%
6344 Verner Avenue	Carmichael/ Old Foothill Farms	6	433	54	**17.88**	**89%**	16.69	83%
5804 Garfield Avenue		7	434	26	15.60	77%	14.58	72%
4921 Hemlock Street		8	886	39	14.19	70%	13.16	65%
5817 Muldrow Road		9	405	13	15.84	78%	14.46	72%
5108 Pasadena Avenue		10	384	45	14.44	71%	13.56	67%
8545 Fair Oaks Boulevard		11	403	90	16.50	82%	15.47	77%
2421 Garfield Avenue & 2413 Garfield Avenue		12	392	55	16.42	81%	15.41	76%
5020 Arden Way		13	365	7	**18.03**	**89%**	16.61	82%
4845 Fair Oaks Boulevard		14	365	21	**18.03**	**89%**	16.61	82%
9425 Folsom Boulevard	Cordova	15	590	458	14.78	73%	13.89	69%
450 feet NE Folsom Boulevard/Paseo Rio Way		16	570	98	14.47	72%	13.42	66%
8933 Madison Avenue & 8937 Madison Avenue	Fair Oaks	17	465	37	**17.88**	**89%**	**17.26**	**85%**
4746 Sunrise Boulevard & 4742 Sunrise Boulevard	Fair Oaks	18	415	48	**17.37**	**86%**	15.15	75%
NW Walerga Road/Blackjack Way	North Highlands	19	315	19	14.80	73%	14.20	70%
SW Walerga Road/Don Julio Boulevard		20	317	171	14.58	72%	13.75	68%
NW Walerga Road/Galbraith Drive		21	321	100	15.49	77%	14.87	74%
E Roseville Road/Elkhorn Boulevard overpass		22	328	298	13.75	68%	13.21	65%
5140 Harrison Street		23	331	36	14.64	72%	13.63	67%
6321 Chestnut Avenue	Orangevale	24	455	65	**18.95**	**94%**	**17.19**	**85%**
6245 Beech Avenue		25	459	42	**17.64**	**87%**	**17.50**	**87%**

TABLE 7: (CONTINUED): VMT PER CAPITA (REZONE PARCELS ONLY) BY SITE

Rezone Location	Sacramento County CPAC	Site #	TAZ	Rezone Dwelling Units	VMT/Capita (Rezone Locations)			
					2016		Super-Cumulative	
					VMT per Capita	% of Region Wide	VMT per Capita	% of Region Wide
120 feet W of Elverta Road/Bellingrath Drive	Rio Linda/Elverta	26	1411	34	**18.65**	**92%**	**17.64**	**87%**
480 feet W of Elverta Road/Bellingrath Drive		27	1411	175	**18.65**	**92%**	**17.64**	**87%**
232 Elkhorn Boulevard		28	303	45	**19.87**	**98%**	**18.73**	**93%**
5919 Dry Creek Road		29	300	106	17.04	84%	**17.22**	**85%**
4541 Fruitridge Road	South Sacramento	30	493	53	15.47	77%	14.46	72%
5903 Southwest Avenue		31	495	85	13.42	66%	12.62	62%
SE 45th Avenue/Franklin Boulevard & 6301 Franklin Boulevard		32	698	51	12.70	63%	11.27	56%
4001 48th Avenue		33	696	105	13.16	65%	12.84	64%
NE 49th Avenue/Wesley Avenue		34	696	41	13.16	65%	12.84	64%
240 feet W of 47th Avenue/Stockton Boulevard		35	497	64	13.37	66%	13.31	66%
180 feet SE of Franklin Boulevard/ Meadowgate Drive		36	700	42	10.74	53%	10.80	53%
7236 E Parkway		37	701	62	15.81	78%	15.44	76%
630 feet W of 66th Avenue/Stockton Boulevard		38	1160	175	14.05	70%	14.02	69%
6130 Orange Avenue		39	1160	70	14.05	70%	14.02	69%
6707 Stacy Avenue		40	503	33	16.33	81%	15.18	75%
NE Stockton Boulevard/Walter Avenue		41	898	67	13.14	65%	12.41	61%
7525 Power Inn Road & 7521 Power Inn Road		42	510	42	13.16	65%	12.51	62%
NE Stockton Boulevard/ Whitewillow Drive		43	898	128	13.14	65%	12.41	61%
7604 Elsie Avenue		44	914	18	15.91	79%	16.06	80%
7825 Robinette Road		45	914	123	15.91	79%	16.06	80%
SE Elsie Avenue/Power Inn Road		46	914	26	15.91	79%	16.06	80%
SW Elsie Avenue/Iona Way		47	914	10	15.91	79%	16.06	80%

TABLE 7: (CONTINUED): VMT PER CAPITA (REZONE PARCELS ONLY) BY SITE

Rezone Location	Sacramento County CPAC	Site #	TAZ	Rezone Dwelling Units	VMT/Capita (Rezone Locations)			
					2016		Super-Cumulative	
					VMT per Capita	% of Region Wide	VMT per Capita	% of Region Wide
140 feet W of Elsie Avenue/Iona Way	South Sacramento	48	914	12	15.91	79%	16.06	80%
220 feet S of Elsie Avenue/Iona Way		49	914	14	15.91	79%	16.06	80%
350 feet S of Elsie Avenue/Iona Way		50	914	28	15.91	79%	16.06	80%
7901 Stevenson Avenue		51	914	195	15.91	79%	16.06	80%
7516 Rangeview Lane		52	914	279	15.91	79%	16.06	80%
8016 Stevenson Avenue & 540 feet S of Stevenson Avenue/Power Inn Rd		53	1125	79	15.46	77%	14.25	71%
540 feet W of Lenhart Road/Power Inn Road		54	914	61	15.91	79%	16.06	80%
7333 Elsie Avenue		55	503	145	16.33	81%	15.18	75%
8207 Elk Grove Florin Road	Vineyard	56	1127	72	**20.30**	**100%**	**17.46**	**86%**
8225 Elk Grove Florin Road		57	1127	71	**20.30**	**100%**	**17.46**	**86%**
NE Stockton Boulevard/Orange Avenue	South Sacramento	58	898	90	13.14	65%	12.41	61%
8095 E Stockton Boulevard & 8099 E Stockton Boulevard		59	1125	139	15.46	77%	14.25	71%
8553 Greenback Lane	Orangevale	60	453	10	15.10	75%	15.50	77%
NE Greenback Lane/Kenneth Avenue		61	453	6	15.10	75%	15.50	77%
300 feet E of Greenback Lane/Almond Avenue		62	459	8	**17.64**	**87%**	**17.50**	**87%**
NW Beech Avenue/Greenback Lane		63	459	52	**17.64**	**87%**	**17.50**	**87%**
8646 Greenback Lane		64	461	35	17.15	85%	16.44	81%
970 Oak Lane	Rio Linda/Elverta	65	302	111	**20.04**	**99%**	**18.92**	**94%**
864 Oak Lane		66	302	90	**20.04**	**99%**	**18.92**	**94%**
7904 Fair Oaks Boulevard	Carmichael/ Old Foothill Farms[1]	67	397	37	14.25	71%	13.40	66%
500 feet N of Watt Avenue/Q Street	North Highlands[2]	68	320	122	13.65	68%	15.14	75%
7235 Watt Avenue		69	320	184	13.65	68%	15.14	75%
0.2 miles S Watt Avenue/Elkhorn Blvd		70	316	154	13.11	65%	14.45	72%
0.1 miles N Watt Avenue/I Street		71	316	190	13.11	65%	14.45	72%
6233 Watt Avenue		72	318	85	13.86	69%	13.65	68%

Note [1]: Within Fair Oaks Blvd Corridor Plan EIR Area

Note [2]: Within North Watt Avenue Corridor Plan EIR Area

TABLE 7: (CONTINUED): VMT PER CAPITA (REZONE PARCELS ONLY) BY SITE

Rezone Location	Sacramento County CPAC	Site #	TAZ	Rezone Dwelling Units	VMT/Capita (Rezone Locations)			
					2016		Super-Cumulative	
					VMT per Capita	% of Region Wide	VMT per Capita	% of Region Wide
8149 Florin Road	South Sacramento[3]	73	512	84	10.43	52%	12.09	60%
8165 Florin Road		74	512	141	10.43	52%	12.09	60%
90 feet N of Augusta Way/Bacchini Avenue		75	512	72	10.43	52%	12.09	60%
430 feet N of McCurdy Lane/Florin Road		76	512	141	10.43	52%	12.09	60%
SE Power Inn Road/Florin Road		77	510	174	13.16	65%	12.51	62%
180 feet E of Florin Road/Kara Drive		78	510	90	13.16	65%	12.51	62%
8475 Florin Road & 180 feet S of Florin Road/Simon Street		79	1185	75	14.28	71%	12.69	63%
Weighted Average VMT per Capita				7,419	15.17	75%	14.74	73%

Note [3]: Within Old Florin Town SPA EIR Area

Note: DU = Dwelling Unit

Bold and **shaded** represent VMT Impact = VMT per Capita greater than 17.17 (85% of base year regionwide average)

TAZ = Traffic Analysis Zone

APPENDIX UTIL-1: ABILITY TO SERVE CORRESPONDENCE WITH WATER DISTRICTS

THESE CORRESPONDENCES INCLUDED FOUR ADDITIONAL SITES THAT ARE LONGER INCLUDED IN THE PROJECT. ADDITIONALLY, NUMBERING OF THE CANDIDATE REZONE SITES HAVE BEEN MODIFIED SINCE THE OCCURRENCE OF THESE CORRESPONDENCES.

Todd Smith, Planning Director
Planning and Environmental Review

Troy Givans, Director
Department of Community Development

County of Sacramento

December 29, 2023

Justin Chen, Associate Engineer
Carmichael Water District
7837 Fair Oaks Boulevard
Carmichael, CA 95609
justinc@carmichaelwd.org

Subject: Request for Ability to Serve the Sacramento County Regional Housing Needs Allocation (RHNA) Rezone Project (Control No. PLNP2020-00042)

Dear Justin Chen,

Planning and Environmental Review (PER) is currently preparing the environmental analysis associated with the Sacramento County Regional Housing Needs Allocation (RHNA) Rezone Project (Project). The Project's revised Notice of Preparation (NOP) was released on December 22, 2023, and may be viewed online at: https://planning.saccounty.gov/PlansandProjectsIn-Progress/Pages/Countywide-Rezone-Program.aspx.

The Sacramento County Housing Element of 2021-2029 identifies a shortfall of 2,884 units for the lower-income category (includes the low, very low, and extremely low income categories; incomes ranging from $0 to $69,050 annually) in the County. Simply, there is insufficient appropriately-zoned sites to accommodate the County's RHNA obligation for the lower-income category. As such, PER is undertaking a rezone of ±248.33 acres comprising 83 candidate rezone sites within the unincorporated County to provide additional lower-income (to fulfill the RHNA obligation and increase the buffer) and moderate income (to increase the buffer) category housing opportunities. The Project does not propose to construct new residential or other development on the ±248.33 acres proposed to be rezoned; rather, it provides capacity for future development of housing units to meet the County's remaining unmet RHNA of 2,884 lower income category units, consistent with State law. The planning horizon year for the Project is 2029.

Attachment 1 lists the 3 candidate rezone sites (Sites 12, 13 and 71) within Carmichael Water District's service area that are proposed to be rezoned with the Project. Information regarding site acreage, existing and proposed zoning designations, and net increase in units are also provided. The net increase in residential units is calculated as the difference between an existing zoning designation's maximum density and the proposed zoning designation's maximum density. For example, a 1-acre site currently zoned RD-20 (maximum density of 20 units per acre) with a proposed zoning of RD-30 (maximum density of 30 units per acre) nets 10 additional units with the Project. Attachment 2 depicts the locations of these candidate rezone sites within Carmichael Water District's service area, as well as individual site maps. In total, the Project is anticipated

to result in a net increase of 142 lower-income units within Carmichael Water District's service area.

It is noted that Section 4.6 of the Carmichael Water District's 2020 Urban Water Management Plan provides a projection of water use for lower income households. Pursuant to California Water Code §10910 through 10915, PER requests the following information:

1. Whether the projected water demand associated with the Project was include as part of the most recently adopted urban water management plan; and
2. If the Project's water demand was not included as part of the most recently adopted urban water management plan, does Carmichael Water District have adequate capacities to serve the Project?

Additionally, PER requests any comments (including conditions of approval or advisories) Carmichael Water District may have for the Project. If you have any questions or would like to set up a meeting to further discuss the Project, please contact me at shenj@saccounty.gov or 916.875.3711.

Sincerely,



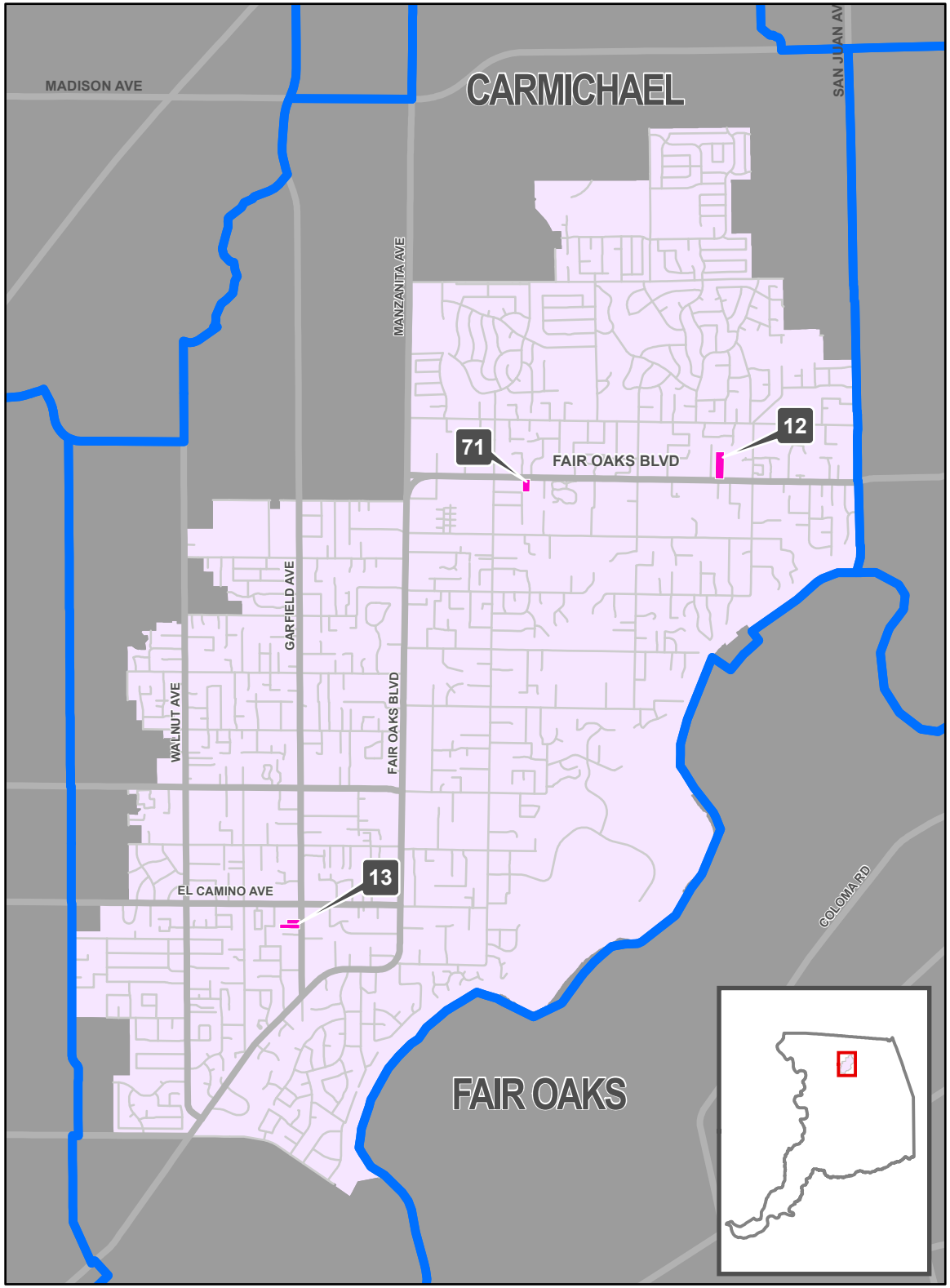
Jessie Shen
Senior Planner

Attachments

Attachment 1 – Carmichael Water District List of Candidate Rezone Sites
Attachment 2 – Carmichael Water District Maps of Candidate Rezone Sites

Site #	APN	Address/Siting Description	Lot size / Portion of Lot Rezoned (net acres)	Zoning Designation/SPA/ Specific or Master Plan Area (Current)	Zoning Designation (Proposed)	Net Increase
12	247-0220-004-0000	8545 Fair Oaks Boulevard	3.00	RD-2	RD-30	84
13	283-0020-016-0000 & 283-0020-017-0000	2421 Garfield Avenue & 2413 Garfield Avenue	1.84	RD-5	RD-30	46
71	260-0310-025-0000	7904 Fair Oaks Boulevard	1.25	SPA (Fair Oaks Central - BP)	RD-30	12

Carmichael Water District



12 APN 247-0220-004-0000

13 APNs 283-0020-016-0000 & 283-0020-017-0000

71 APN 260-0310-025-0000

Legend

- Proposed Rezone Sites
- Community Boundaries
- Major Roads
- Local Roads

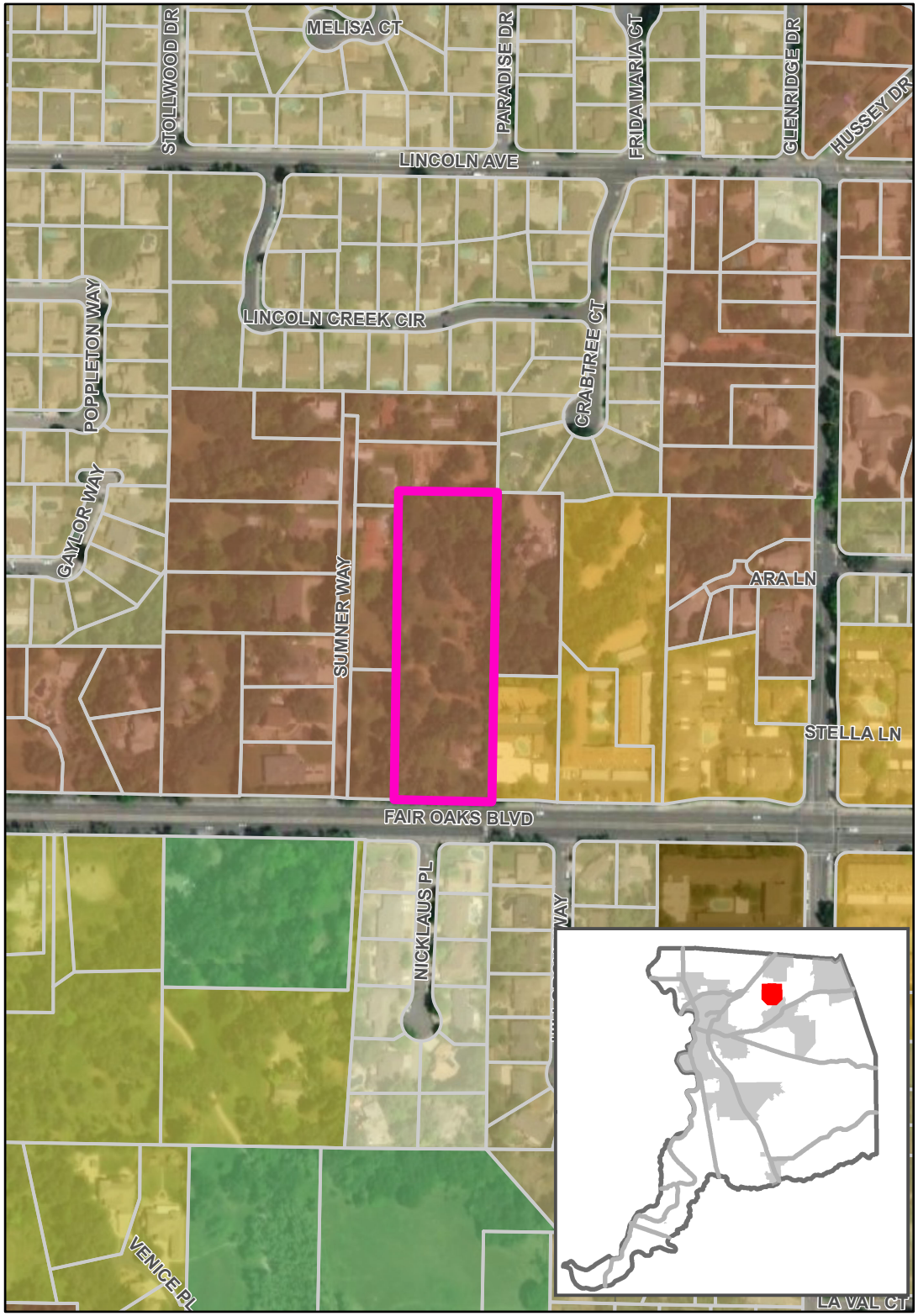
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0 0.25 0.5 1 Miles

Site 12

APN 247-0220-004-0000

8545 Fair Oaks Boulevard,
Carmichael/Old Foothill Farms



Legend

Proposed Rezone Site

Zoning

- O Recreation
- RD-1 Residential
- RD-2 Residential
- RD-20 Multiple Family Residential
- RD-3 Residential
- RD-40 Multiple Family Residential
- RD-5 Residential

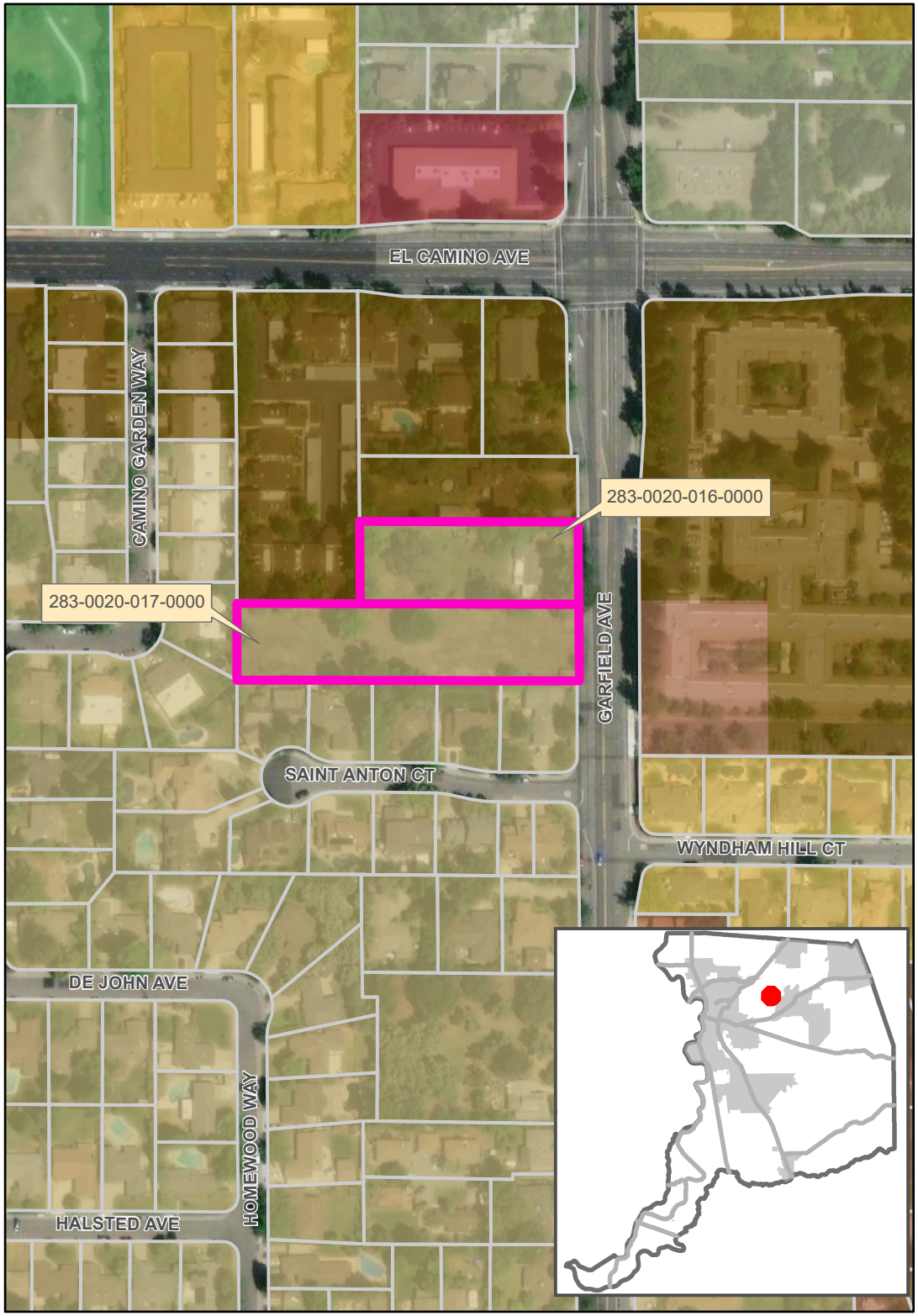
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Site 13

APNs 283-0020-016-0000
& 283-0020-017-0000

2421 & 2413 Garfield Ave,
Carmichael/Old Foothill Farms



Legend

- Proposed Rezone Site

Zoning

- BP Business and Professional Office
- O Recreation
- RD-10 Residential
- RD-2 Residential
- RD-20 Multiple Family Residential
- RD-4 Residential
- RD-40 Multiple Family Residential
- RD-5 Residential

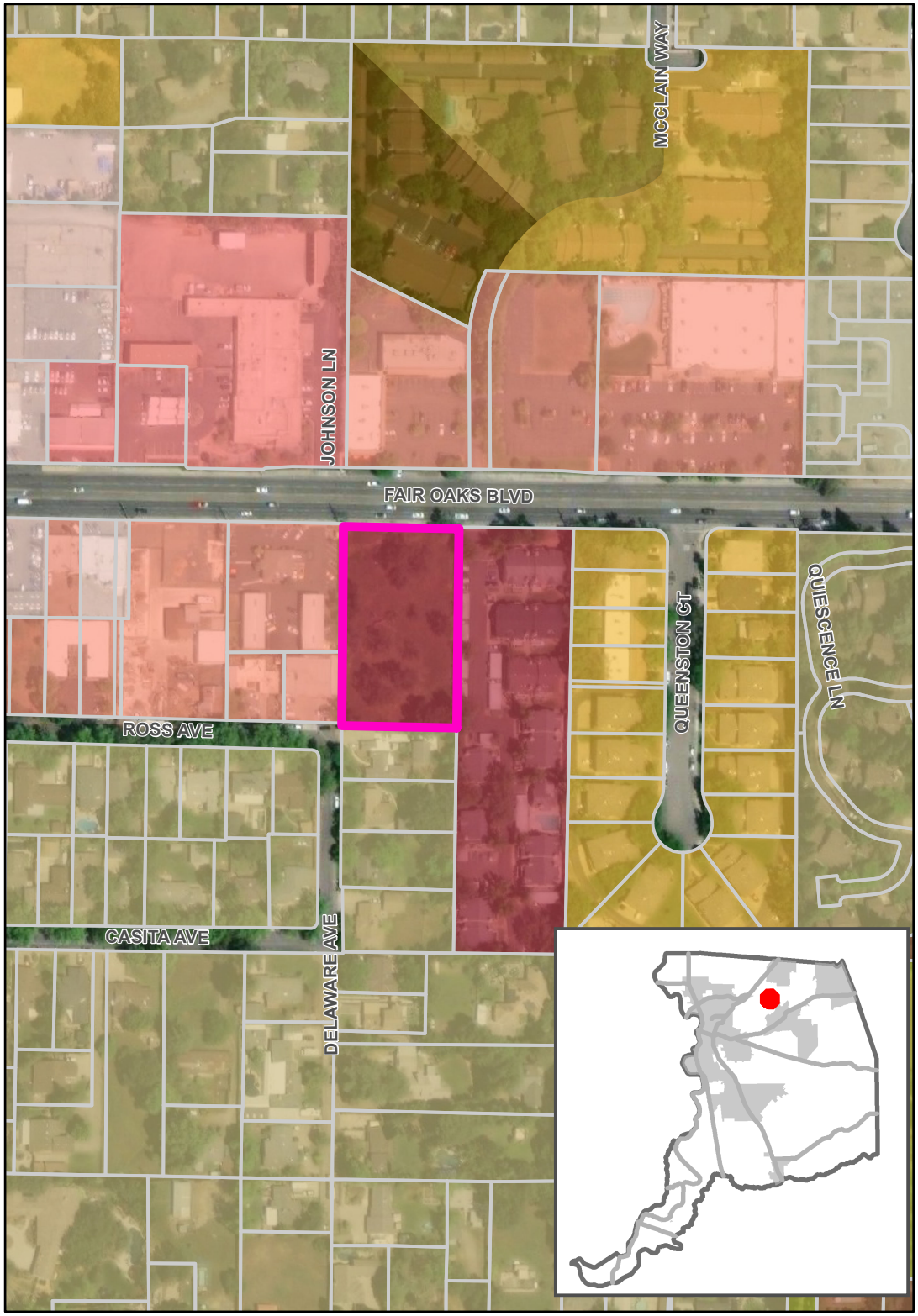
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Site 71

APN 260-0310-025-0000

7904 Fair Oaks Boulevard,
Carmichael/Old Foothill Farms



Legend

Proposed Rezone Site

Zoning

- AC Auto Commercial
- BP Business and Professional Office
- GC General Commercial
- LC Light Commercial
- RD-1 Residential
- RD-10 Residential
- RD-2 Residential
- RD-20 Multiple Family Residential
- RD-30 Multiple Family Residential
- RD-40 Multiple Family Residential
- RD-5 Residential

N

0 0.0375 0.075 0.15 Miles

Ronald Davis
Director Division 1

Mark R. Emmerson
Director Division 2

Jeff Nelson
Director Division 3

CARMICHAEL WATER DISTRICT

7837 FAIR OAKS BOULEVARD
CARMICHAEL, CALIFORNIA 95608
TELEPHONE: (916) 483-2452
FAX: (916) 483-5509
EMAIL: mail@carmichaelwd.org

Ron Greenwood
Director Division 4

Paul Selsky
Director Division 5

Cathy Lee
General Manager

January 12th, 2024

Jessie Shen, Senior Planner
Planning and Environmental Review
7th Street, Room 225
Sacramento, CA 95814
shenj@saccounty.gov

RE: Request for Ability to Serve the Sacramento County Regional Housing Needs Allocation (RHNA) Rezone Project (Control No. PLNP2020-0042)

Dear Jessie Shen,

We have received your inquiry requesting information regarding the 3 candidate rezone sites (Sites 12, 13, and 71) within Carmichael Water District's service area.

Please see the response to the request for information:

1. Whether the projected water demand associated with the Project was included as part of the most recently adopted urban water management plan; and

   According to Carmichael Water District's 2020 Urban Water Management Plan (2020 UWMP), the anticipated net increase of 142 lower-income units fall within the forecasted future water use 2020 – 2030 (Section 4.4.3), thus, within the timeline of Sacramento County Housing Element of 2021 – 2029 project.

   Annual demand of water for multi-family residential is 0.14 acre-feet/dwelling unit and the proposed net increase of 142 units will result in annual water demand of 19.88 acre-feet. Carmichael Water District anticipates ~30 acre-feet of estimated low-income water use by 2030 (Section 4.6). Carmichael Water District is capable of meeting the water demands in its service area in normal, single dry, and five consecutive dry years from 2020 – 2045 as long as the guidelines disclosed in the portfolio is strategically implemented (2020 UWMP, Section 5.4).

   Carmichael Water District concludes that the district holds adequate capacity to serve the Project and has considered this level of increased demand within the specified timeframe.

2. If the Project's water demand was not included as part of the most recently adopted water management plan, does Carmichael Water District have adequate capacities to serve the project?

   N/A.

We do not have any further comments at this time. However, if you have any questions or require additional information, please contact the office at (916) 483-2452 or send our department an email at engineering@carmichaelwd.org.

Sincerely,

Gregory R. Norris

Greg Norris, P.E.
Engineering Manager

cc: Troy Givans, Planning Director

Todd Smith, Planning Director
Planning and Environmental Review

Troy Givans, Director
Department of Community Development

County of Sacramento

December 29, 2023

Michelle Carrey, Supervising Engineer
City of Sacramento Department of Utilities
1395 35th Avenue
Sacramento, CA 95822
mcarrey@cityofsacramento.org

Subject: Request for Ability to Serve the Sacramento County Regional Housing Needs Allocation (RHNA) Rezone Project (Control No. PLNP2020-00042)

Dear Michelle Carrey,

Planning and Environmental Review (PER) is currently preparing the environmental analysis associated with the Sacramento County Regional Housing Needs Allocation (RHNA) Rezone Project (Project). The Project's revised Notice of Preparation (NOP) was released on December 22, 2023, and may be viewed online at: https://planning.saccounty.gov/PlansandProjectsIn-Progress/Pages/Countywide-Rezone-Program.aspx.

The Sacramento County Housing Element of 2021-2029 identifies a shortfall of 2,884 units for the lower-income category (includes the low, very low, and extremely low income categories; incomes ranging from $0 to $69,050 annually) in the County. Simply, there is insufficient appropriately-zoned sites to accommodate the County's RHNA obligation for the lower-income category. As such, PER is undertaking a rezone of ±248.33 acres comprising 83 candidate rezone sites within the unincorporated County to provide additional lower-income (to fulfill the RHNA obligation and increase the buffer) and moderate income (to increase the buffer) category housing opportunities. The Project does not propose to construct new residential or other development on the ±248.33 acres proposed to be rezoned; rather, it provides capacity for future development of housing units to meet the County's remaining unmet RHNA of 2,884 lower income category units, consistent with State law. The planning horizon year for the Project is 2029.

Attachment 1 lists the 1 candidate rezone site (Site 32) within the City of Sacramento's water service area that is proposed to be rezoned with the Project. Information regarding site acreage, existing and proposed zoning designations, and net increase in units are also provided. The net increase in residential units is calculated as the difference between an existing zoning designation's maximum density and the proposed zoning designation's maximum density. For example, a 1-acre site currently zoned RD-20 (maximum density of 20 units per acre) with a proposed zoning of RD-30 (maximum density of 30 units per acre) nets 10 additional units with a rezone. Attachment 2 depicts the location of this candidate rezone site within the City of Sacramento's water service area, as well as an individual site map. In total, the Project is anticipated to result in a net increase of 43 lower-income units within the City of Sacramento's water service area.

It is noted that Section 4.6 of the City of Sacramento's 2020 Urban Water Management Plan provides a projection of water use for lower income households. Pursuant to California Water Code §10910 through 10915, PER requests the following information:

1. Whether the projected water demand associated with the Project was include as part of the most recently adopted urban water management plan; and
2. If the Project's water demand was not included as part of the most recently adopted urban water management plan, does the City of Sacramento have adequate capacities to serve the Project?

Additionally, PER requests any comments (including conditions of approval or advisories) the City of Sacramento may have for the Project. If you have any questions or would like to set up a meeting to further discuss the Project, please contact me at shenj@saccounty.gov or 916.875.3711.

Sincerely,

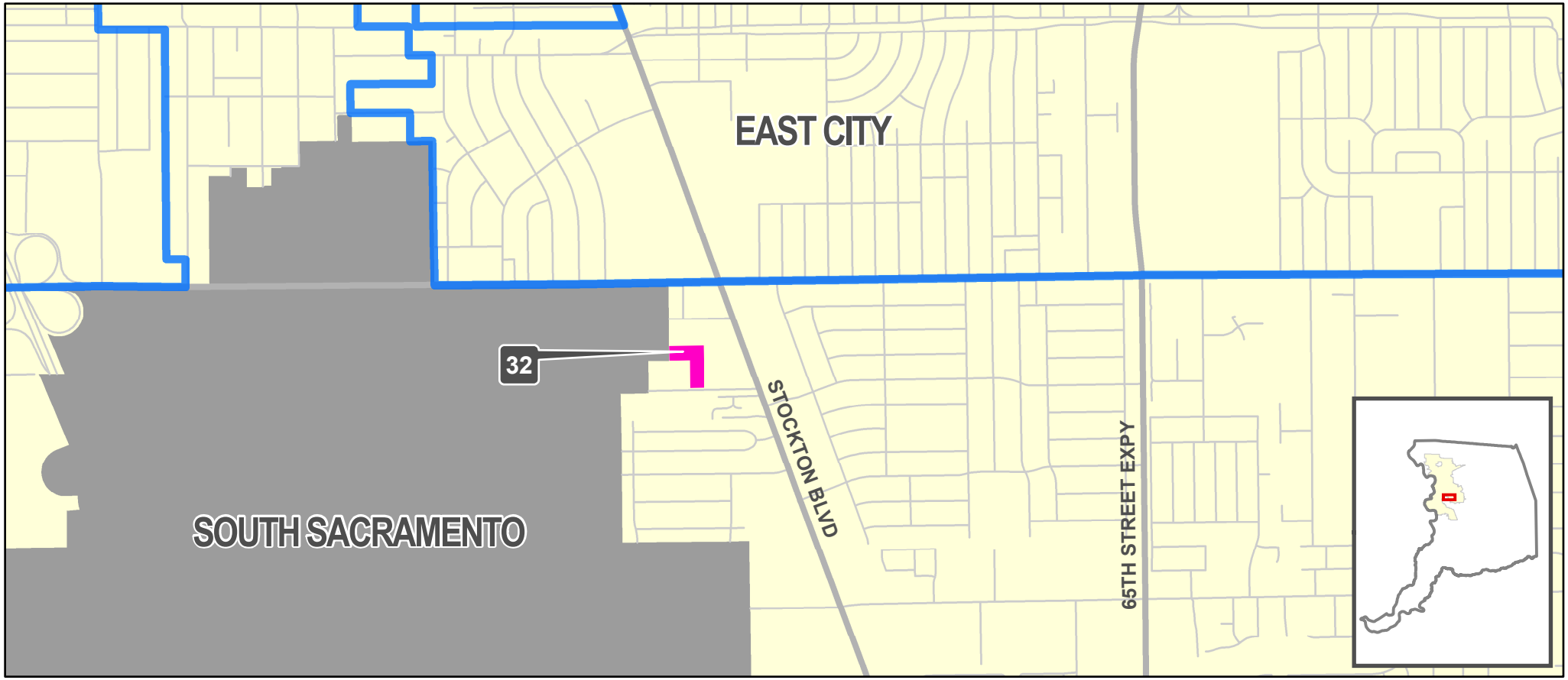


Jessie Shen
Senior Planner

Attachments

Attachment 1 – City of Sacramento's Water Service Area List of Candidate Rezone Site
Attachment 2 – City of Sacramento's Water Service Area Map of Candidate Rezone Site

Site #	APN	Address/Siting Description	Lot size / Portion of Lot Rezoned (net acres)	Zoning Designation/SPA/ Specific or Master Plan Area (Current)	Zoning Designation (Proposed)	Net Increase
32	026-0102-023-0000	5903 Southwest Avenue	2.13	RD-20	RD-40	43



City of Sacramento Water

32 APN 026-0102-023-0000

Legend

- Proposed Rezone Sites
- Community Boundaries
- Major Roads
- Local Roads

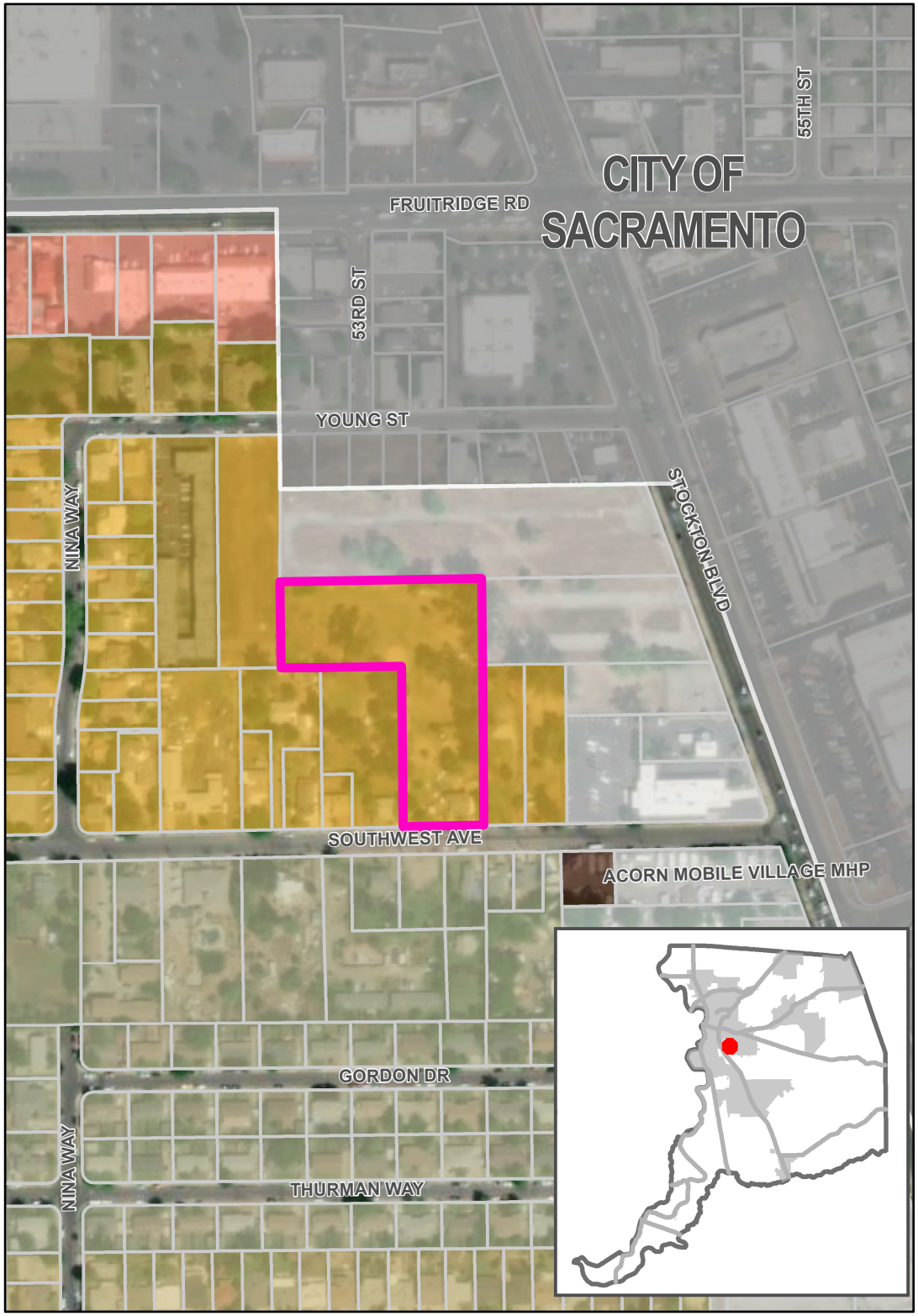
N

0 0.25 0.5 1 Miles

Site 32

APN 026-0102-023-0000

5903 Southwest Avenue,
South Sacramento



Legend

Proposed Rezone Site

Zoning

- LC Light Commercial
- RD-10 Residential
- RD-20 Multiple Family Residential
- RD-30 Multiple Family Residential
- RD-5 Residential
- RM-1 Mobile Home Subdivision
- SPA Special Planning Area

N

0 0.0375 0.075 0.15
Miles

☐ Press to clear form

City of Sacramento
SB 610/SB 221 Water Supply Assessment and Certification Form

This form may be used to complete water supply assessments for projects located in an area covered by the City's most recent Urban Water Management Plan.

Note: Please do not use this form if the projected water demand for your project area was not included in the City's latest Urban Water Management Plan. To review the City's Urban Water Management Plan, please visit: https://www.cityofsacramento.org/Utilities/Reports

Project: PLNP2020-00042 Sacramento County RHNA Rezone Project

Date: 3/5/2024

Project Applicant (Name of Company): Sacramento County Planning and Environmental Review

Applicant Contact (Name of Individual): Nathan Serafin

Phone Number: 916-874-7708

E-mail: serafinn@saccounty.gov

Address: 827 7th Street, Room 225, Sacramento, CA 95814

Project Applicant to fill in the following:

1. Does the project include:

Type of Development	Yes	No
A proposed residential development of 500 or more dwelling units	☐	✓
A shopping Center employing more than 1,000 persons or having more than 500,000 square feet?	☐	✓
A Commercial Office building employing more than 1,000 persons or having more than 250,000 square feet?	☐	✓
A proposed hotel or motel, or both, having more than 500 rooms	☐	✓
A proposed industrial, manufacturing, or processing plant or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area	☐	✓
A mixed use project that includes one or more of the projects specified above	☐	✓
A project that would demand an amount of water equivalent to, or greater than, the water required by a 500 dwelling unit project	☐	✓

If the answer is no to all of the above, a water supply assessment is not required for the project.

2. Is the projected water demand for the project location included in the City's 2020 Urban Water Management Plan, adopted June 29, 2021?

Yes: ☑ No: ☐

If the answer is no, you cannot use this form. Please refer to the requirements of SB 610 for preparing a water supply assessment.

3. Please fill in the project demands below:

Type of Development	Land Use Category	Demand Factor		Proposed Development			Current Zoning		
		Residential Water Use Factor, afy/dwelling unit	Non-Residential Water Use Factor, afy/employee	Number Dwelling Units	Number Employees	Total Demand	Number Dwelling Units	Number Employees	Total Demand
Residential - Low	Rural Residential (RR)	.61	.09						
	Suburban Neighborhood Low Density (SNLD)								
	Traditional Neighborhood Low Density (TLDR)								
Residential - Medium	Suburban Neighborhood Medium Density (SMDR)	.39	.09						
	Urban Neighborhood Low Density (ULDR)								
Residential - High	Suburban Neighborhood High Density (SHDR)	.12	.04						
	Traditional Neighborhood Medium Density (TMDR)								
	Urban Neighborhood Medium Density (UMDR)								
	Traditional Neighborhood High Density (THDR)			43					5.16
Mixed Use	Employment Center Mid Rise (ECMR)	.19	.09						
	Suburban Center (SCnt)								
	Suburban Corridor (Scor)								
	Traditional Center (TCnt)								

Mixed Use - Higher Density	Urban Center High (UCntHigh)	.15	.04						
	Urban Center Low (UcntLow)								
	Urban Corridor High (UCorHigh)								
	Urban Corridor Low (UCorLow)								
Central Business District	Central Business District (CBD)	.15	.02						
	Urban Neighborhood High Density (UHDR)								
Commercial	Regional Commercial (RC)	.15	.09						
	Employment Center Low Rise (ECLR)								
Industrial	Industrial (IND)		.14						
Public	Public/Quasi-Public (PUB)	.37	.17						
Park	Parks and Recreation (PRK)	.37	.17						
Open Space	Open Space (OS)	0	0						
Other									
Other									
Other									
Total Demand (AFY)									5.16

4. Required Elements of Water Supply Assessment (Water Code § 10910)

A. Water supply entitlements, water rights or water service contracts (Water Code § 10910(d)):

The City's water supply entitlements, water rights and water service contract are identified and discussed in the Urban Water Management Plan, Chapters 3, 6, and 7.

All infrastructure necessary to deliver a water supply to the project is in place, excepting any distribution facilities required to be constructed and financed by the project applicant: Yes: [✓] No: [ ]

B. Identification of other sources of water supply if no water has been received under City's existing entitlements, water rights or water service contracts (Water Code § 10910(e)):

Not applicable.

C. Information and analysis pertaining to groundwater supply (Water Code § 10910(f)):

Addressed by Urban Water Management Plan, Chapters 3, 6, and 7.

Verification of Water Supply
(for residential development of more than 500 dwelling units)

Based on the City's most recent Urban Water Management Plan, are there sufficient water supplies for the project during normal, single dry and multiple dry years over a 20 year period?

Yes: [✓] No: [ ]

By: Brett Ewart

Title: Supervising Engineer

Date: 3/8/2024

This box to be filled in by the City

Distribution:

Applicant
Development Services Department (Org: 4913) – Assigned Planner:_____
Utilities Department (Org: 3334) - Development Review (Tony Bertrand)
Utilities Department (Org: 3332) - Capital Improvements (Brett Ewart)

Todd Smith, Planning Director
Planning and Environmental Review

Troy Givans, Director
Department of Community Development

County of Sacramento

December 29, 2023

Tom Gray, General Manager
Fair Oaks Water District
10326 Fair Oaks Boulevard
Fair Oaks, CA 95628
tgray@fowd.com

Subject: Request for Ability to Serve the Sacramento County Regional Housing Needs Allocation (RHNA) Rezone Project (Control No. PLNP2020-00042)

Dear Tom Gray,

Planning and Environmental Review (PER) is currently preparing the environmental analysis associated with the Sacramento County Regional Housing Needs Allocation (RHNA) Rezone Project (Project). The Project's revised Notice of Preparation (NOP) was released on December 22, 2023, and may be viewed online at: https://planning.saccounty.gov/PlansandProjectsIn-Progress/Pages/Countywide-Rezone-Program.aspx.

The Sacramento County Housing Element of 2021-2029 identifies a shortfall of 2,884 units for the lower-income category (includes the low, very low, and extremely low income categories; incomes ranging from $0 to $69,050 annually) in the County. Simply, there is insufficient appropriately-zoned sites to accommodate the County's RHNA obligation for the lower-income category. As such, PER is undertaking a rezone of ±248.33 acres comprising 83 candidate rezone sites within the unincorporated County to provide additional lower-income (to fulfill the RHNA obligation and increase the buffer) and moderate income (to increase the buffer) category housing opportunities. The Project does not propose to construct new residential or other development on the ±248.33 acres proposed to be rezoned; rather, it provides capacity for future development of housing units to meet the County's remaining unmet RHNA of 2,884 lower income category units, consistent with State law. The planning horizon year for the Project is 2029.

Attachment 1 lists the 2 candidate rezone sites (Sites 18 and 19) within Fair Oaks Water District's service area that are proposed to be rezoned with the Project. Information regarding site acreage, existing and proposed zoning designations, and net increase in units are also provided. The net increase in residential units is calculated as the difference between an existing zoning designation's maximum density and the proposed zoning designation's maximum density. For example, a 1-acre site currently zoned RD-20 (maximum density of 20 units per acre) with a proposed zoning of RD-30 (maximum density of 30 units per acre) nets 10 additional units with a rezone. Attachment 2 depicts the locations of these candidate rezone sites within Fair Oaks Water District's service area, as well as individual site maps. In total, the Project is anticipated to result in a net increase of 51 lower-income units within Fair Oaks Water District's service area.

It is noted that Section 4-6 of the Fair Oaks Water District's 2020 Urban Water Management Plan provides a projection of water use for lower income households. Pursuant to California Water Code §10910 through 10915, PER requests the following information:

1. Whether the projected water demand associated with the Project was include as part of the most recently adopted urban water management plan; and
2. If the Project's water demand was not included as part of the most recently adopted urban water management plan, does Fair Oaks Water District have adequate capacities to serve the Project?

Additionally, PER requests any comments (including conditions of approval or advisories) Fair Oaks Water District may have for the Project. If you have any questions or would like to set up a meeting to further discuss the Project, please contact me at shenj@saccounty.gov or 916.875.3711.

Sincerely,



Jessie Shen
Senior Planner

Attachments

Attachment 1 – Fair Oaks Water District List of Candidate Rezone Sites
Attachment 2 – Fair Oaks Water District Maps of Candidate Rezone Sites

Site #	APN	Address/Siting Description	Lot size / Portion of Lot Rezoned (net acres)	Zoning Designation/SPA/ Specific or Master Plan Area (Current)	Zoning Designation (Proposed)	Net Increase
18	235-0060-010-0000 & 235-0060-011-0000	8933 Madison Avenue & 8937 Madison Avenue	1.26	RD-2	RD-30	35
19	244-0058-025-0000 & 244-0058-028-0000	4746 Sunrise Boulevard & 4742 Sunrise Boulevard	1.63	BP	RD-30	16



Fair Oaks Water District

18 APNs 235-0060-010-0000 & 235-0060-011-0000

19 APNs 244-0058-025-0000 & 244-0058-028-0000

Legend

- Proposed Rezone Sites
- Community Boundaries
- Major Roads
- Local Roads

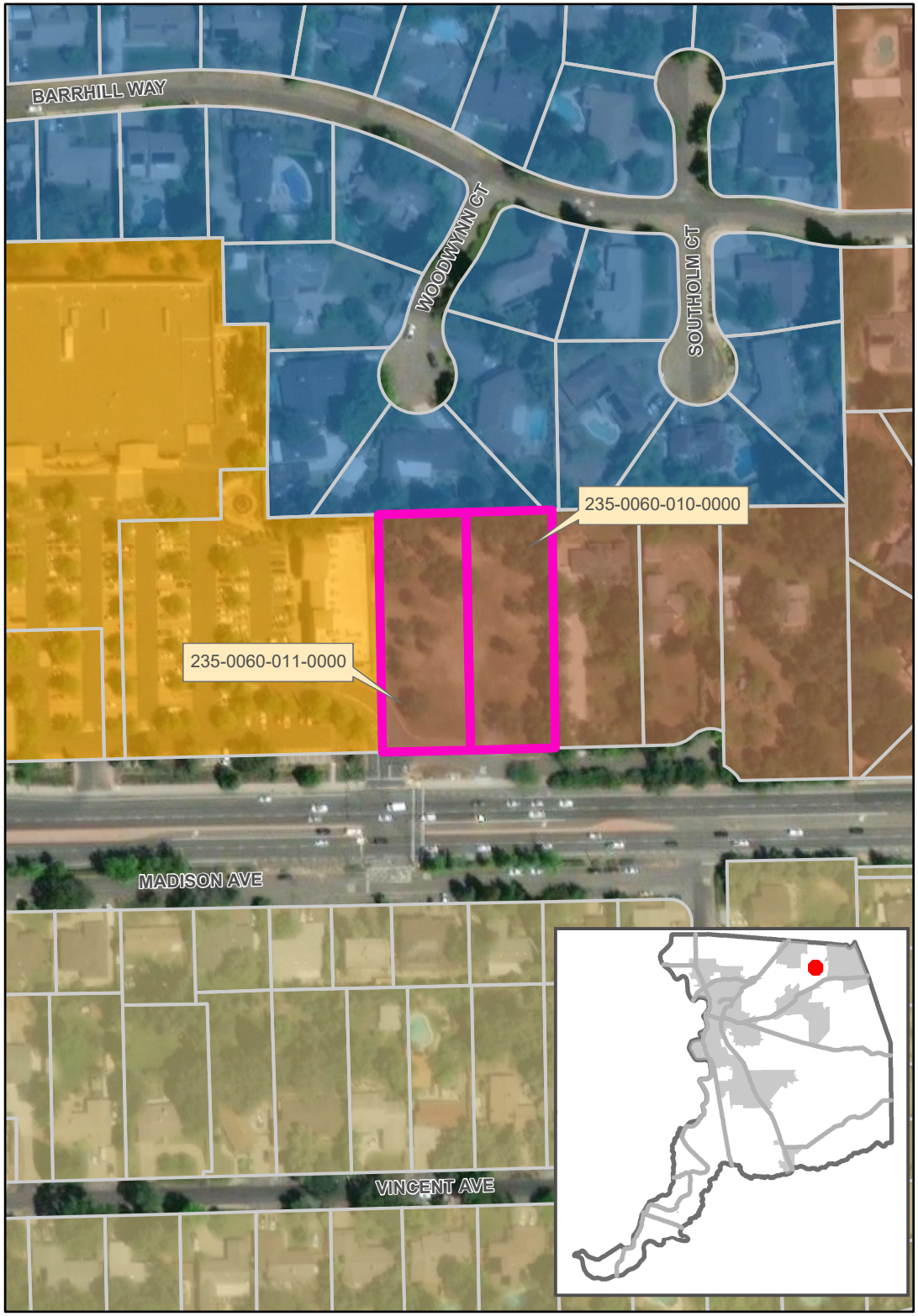
N

0 0.2 0.4 0.8 1.2 Miles

Site 18

APNs 235-0060-010-0000
& 235-0060-011-0000

8933 & 8937 Madison Avenue,
Fair Oaks



Legend

Proposed Rezone Site

Zoning

- A-1-A Limited Agricultural
- RD-2 Residential
- RD-5 Residential
- SC Shopping Center

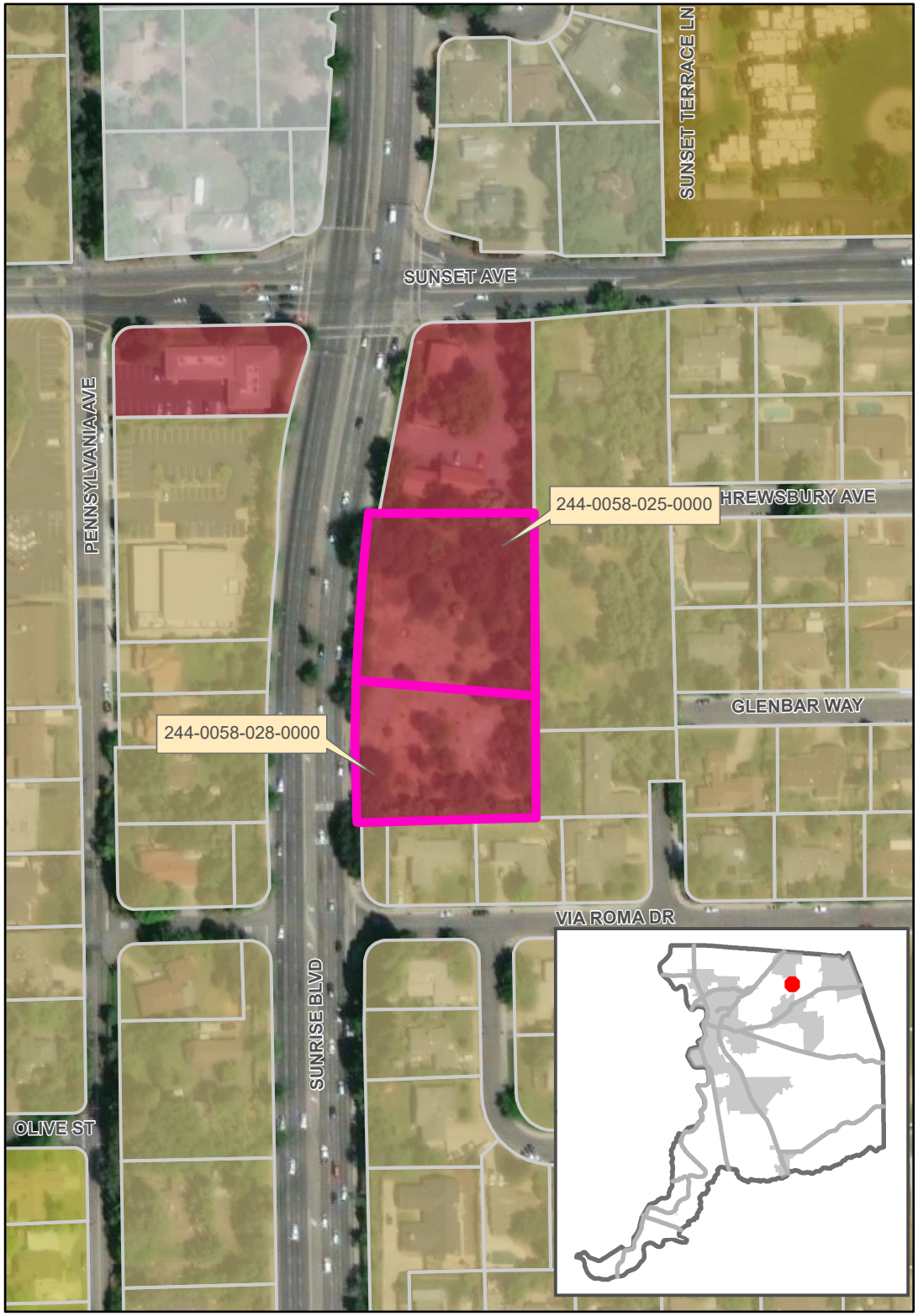
N

0 0.025 0.05 0.1
Miles

Site 19

APNs 244-0058-025-0000
& 244-0058-028-0000

4746 & 4742 Sunrise Boulevard,
Fair Oaks



Legend

Proposed Rezone Site

Zoning

- BP Business and Professional Office
- RD-1 Residential
- RD-10 Residential
- RD-30 Multiple Family Residential
- RD-5 Residential
- SPA Special Planning Area

N

0 0.025 0.05 0.1
Miles

From:	Paul Siebensohn
To:	Serafin. Nathan
Cc:	Tom Gray; Shen. Jessie; Inman. Joelle
Subject:	FW: ATTENTION: Request for Ability To Serve for PLNP2020-00042 - Sacramento County RHNA Rezone Project
Date:	Tuesday, February 27, 2024 12:16:51 PM
Attachments:	image001.jpg image002.png

EXTERNAL EMAIL: If unknown sender, **do not** click links/attachments.
If you have concerns about this email, please report it via the Phish Alert button.

Nathan,

The Fair Oaks Water District (FOWD) can serve all parcels within our existing service area, including those parcels within the Sacramento County Regional Housing Needs Allocation (RHNA) Rezone Project (Control No. PLNP2020-00042). Specific conditions for approval for each parcel will be determined upon the County Planning application distribution for comments and conditions and with a service application to the FOWD.

Please contact me with any questions.

Regards,

Paul Siebensohn
Technical Services Manager
Fair Oaks Water District
Office (916)844-3513



From: Serafin. Nathan <serafinn@saccounty.gov>
Sent: Friday, December 29, 2023 10:33 AM
To: Tom Gray <tgray@fowd.com>
Cc: Shen. Jessie <ShenJ@saccounty.gov>; Inman. Joelle <inmanj@saccounty.gov>
Subject: ATTENTION: Request for Ability To Serve for PLNP2020-00042 - Sacramento County RHNA Rezone Project
Importance: High

Dear Tom Gray,

Please find attached Sacramento County PER's Request for Ability to Serve the Regional Housing Needs Allocation (RHNA) Rezone Project (Control No. PLNP2020-00042).

Full details are included in the attached PDF, which include the request letter and a description of sites within your service area. Please reach out if you have any questions or issues accessing the document.

Best,

Nathan Serafin, Planning Associate
Planning and Environmental Review
827 7th Street, Room 225, Sacramento, CA 95814
916.874-7708 (direct) | serafinn@saccounty.gov
www.per.saccounty.net



Planning and Environmental Review has several customer service options available and appointments can be made for most services. Please see our website at planning.saccounty.gov for the most current information on how to obtain services including office and public counter hours.

Todd Smith, Planning Director
Planning and Environmental Review

Troy Givans, Director
Department of Community Development

County of Sacramento

December 29, 2023

Edmond Leggette, General Manager
Florin County Water District
PO Box 292055
Sacramento, CA 95829
fcwd@sbcglobal.net

Subject: Request for Ability to Serve the Sacramento County Regional Housing Needs Allocation (RHNA) Rezone Project (Control No. PLNP2020-00042)

Dear Edmond Leggette,

Planning and Environmental Review (PER) is currently preparing the environmental analysis associated with the Sacramento County Regional Housing Needs Allocation (RHNA) Rezone Project (Project). The Project's revised Notice of Preparation (NOP) was released on December 22, 2023, and may be viewed online at: https://planning.saccounty.gov/PlansandProjectsIn-Progress/Pages/Countywide-Rezone-Program.aspx.

The Sacramento County Housing Element of 2021-2029 identifies a shortfall of 2,884 units for the lower-income category (includes the low, very low, and extremely low income categories; incomes ranging from $0 to $69,050 annually) in the County. Simply, there is insufficient appropriately-zoned sites to accommodate the County's RHNA obligation for the lower-income category. As such, PER is undertaking a rezone of ±248.33 acres comprising 83 candidate rezone sites within the unincorporated County to provide additional lower-income (to fulfill the RHNA obligation and increase the buffer) and moderate income (to increase the buffer) category housing opportunities. The Project does not propose to construct new residential or other development on the ±248.33 acres proposed to be rezoned; rather, it provides capacity for future development of housing units to meet the County's remaining unmet RHNA of 2,884 lower income category units, consistent with State law. The planning horizon year for the Project is 2029.

Attachment 1 lists the 8 candidate rezone sites (Sites 43, 77-83) within Florin County Water District's service area that are proposed to be rezoned with the Project. Information regarding site acreage, existing and proposed zoning designations, and net increase in units are also provided. The net increase in residential units is calculated as the difference between an existing zoning designation's maximum density and the proposed zoning designation's maximum density. For example, a 1-acre site currently zoned RD-20 (maximum density of 20 units per acre) with a proposed zoning of RD-30 (maximum density of 30 units per acre) nets 10 additional units with a rezone. Attachment 2 depicts the locations of these candidate sites within Florin County Water District's service area, as well as individual site maps. In total, the Project is anticipated to result in a net increase of 288 lower-income units within Florin County Water District's service area.

PER requests information pertaining to whether Florin County Water District has adequate capacities to serve the Project. It is noted that Florin County Water District does not meet the criteria that necessitates the preparation of an urban water management plan. Additionally, PER requests any comments (including conditions of approval or advisories) Florin County Water District may have for the Project. If you have any questions or would like to set up a meeting to further discuss the Project, please contact me at shenj@saccounty.gov or 916.875.3711.

Sincerely,



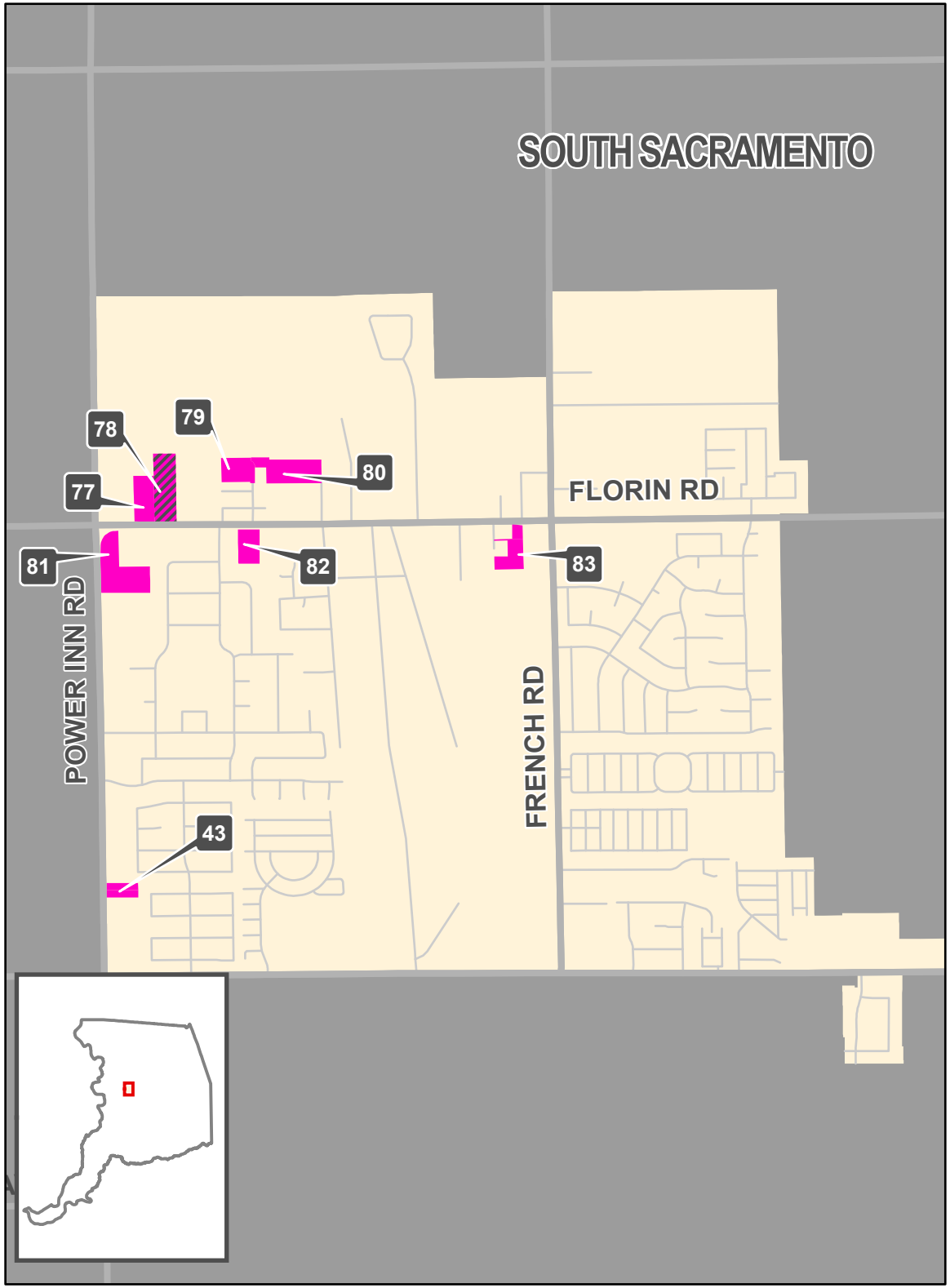
Jessie Shen
Senior Planner

Attachments

Attachment 1 – Florin County Water District List of Candidate Rezone Sites
Attachment 2 – Florin County District Maps of Candidate Rezone Sites

Site #	APN	Address/Siting Description	Lot size / Portion of Lot Rezoned (net acres)	Zoning Designation/SPA/ Specific or Master Plan Area (Current)	Zoning Designation (Proposed)	Net Increase
43	051-0200-017-0000 & 051-0200-018-0000	7525 Power Inn Road & 7521 Power Inn Road	1.43	RD-20	RD-30	14
77	043-0070-005-0000	8149 Florin Road	2.80	SPA (Old Florin Town - MUR)	RD-30	28
78	043-0070-034-0000	8165 Florin Road	4.70	SPA (Old Florin Town - MUR)	RD-30	47
79	043-0230-021-0000	90 feet N of Augusta Way/Bacchini Avenue	2.43	SPA (Old Florin Town - MUR)	RD-30	24
80	043-0230-022-0000	430 feet N of McCurdy Lane/Florin Road	4.70	SPA (Old Florin Town - MUR)	RD-30	47
81	051-0030-012-0000	SE Power Inn Road/Florin Road	5.82	SPA (Old Florin Town - MUR/MUC)	RD-30	58
82	051-0061-018-0000	180 feet E of Florin Road/Kara Drive	2.26	SPA (Old Florin Town - MUR/MUC)	RD-40	45
83	065-0020-012-0000 & 065-0020-045-0000	8475 Florin Road & 180 feet S of Florin Road/Simon Street	2.51	SPA (Old Florin Town - MUR)	RD-30	25

Florin County Water District



- 43 APNs 051-0200-017-0000 & 051-0200-018-0000
- 77 APN 043-0070-005-0000
- 78 APN 043-0070-034-0000
- 79 APN 043-0230-021-0000
- 80 APN 043-0230-022-0000
- 81 APN 051-0030-012-0000
- 82 APN 051-0061-018-0000
- 83 APNs 065-0020-012-0000 & 065-0020-045-0000

Legend

- Proposed Rezone Sites
- Partially Rezoned Site
- Community Boundaries
- Major Roads
- Local Roads

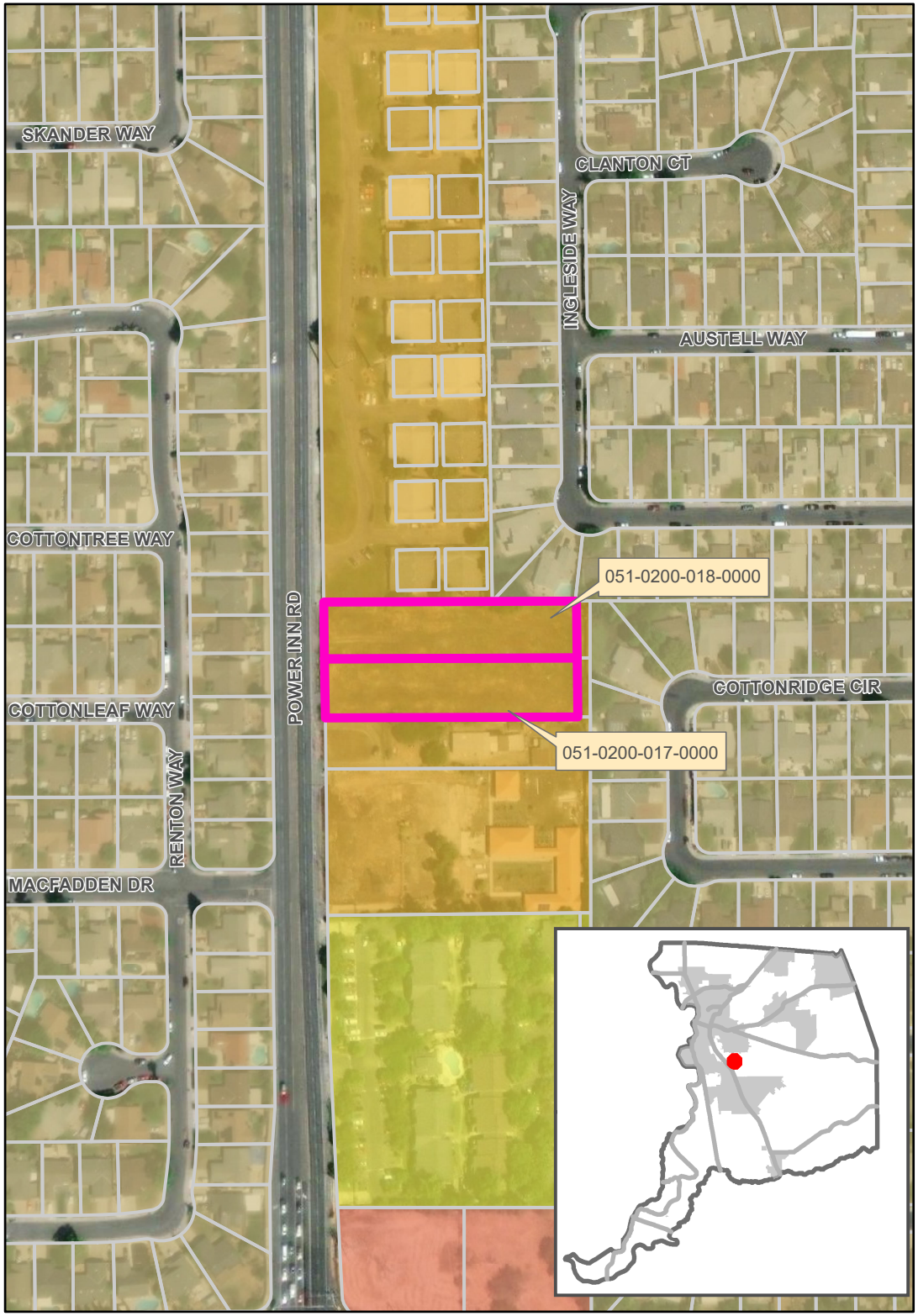
N

0 0.125 0.25 0.5 Miles

Site 43

APNs 051-0200-017-0000
& 051-0200-018-0000

7525 & 7521 Power Inn Road,
South Sacramento



Legend

- Proposed Rezone Site

Zoning

- LC Light Commercial
- RD-20 Multiple Family Residential
- RD-25 Multiple Family Residential
- RD-5 Residential

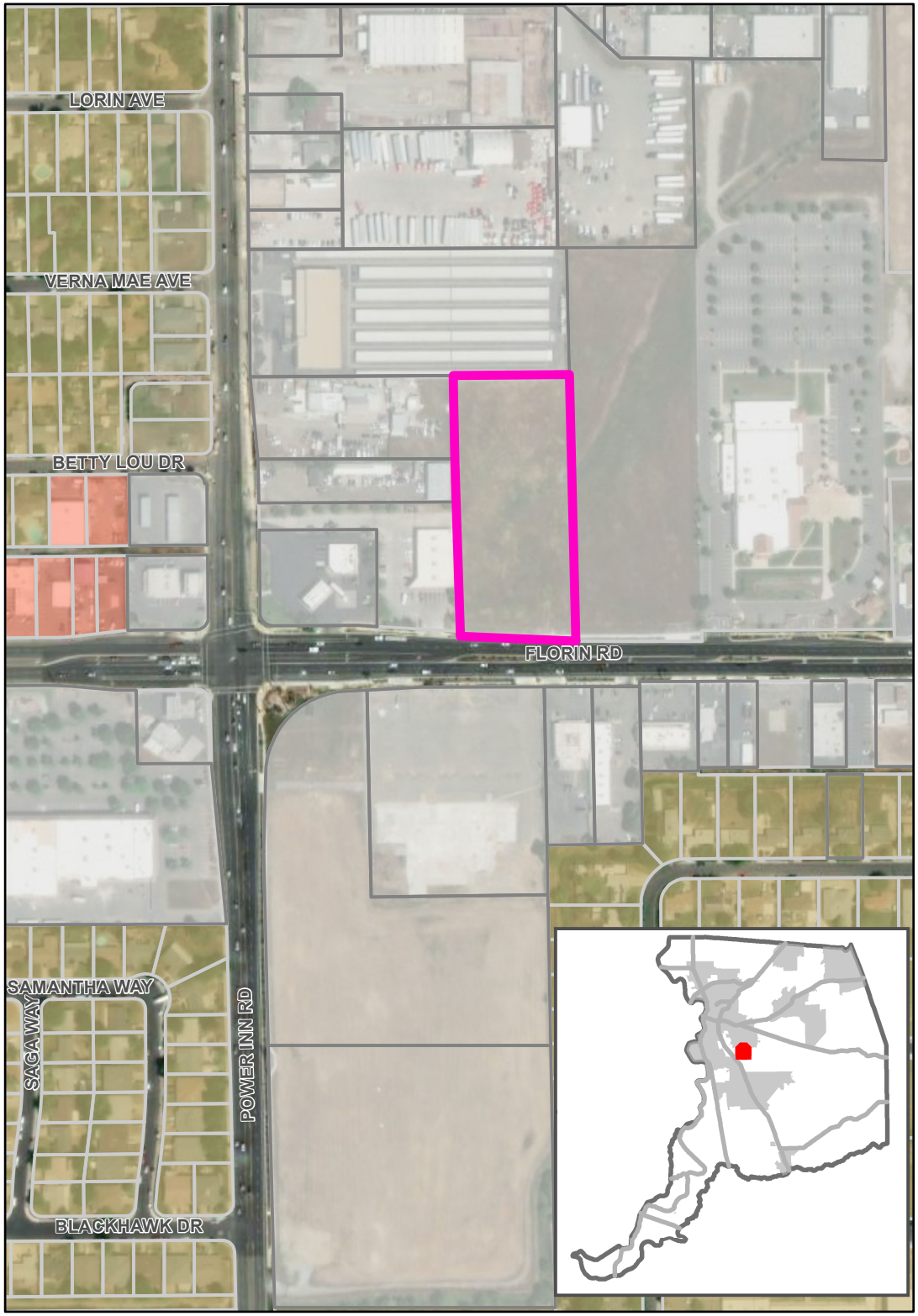
N

0 0.025 0.05 0.1
Miles

Site 77

APN 043-0070-005-0000

8149 Florin Road,
South Sacramento



Legend

Proposed Rezone Site

Zoning

- LC Light Commercial
- RD-10 Residential
- RD-5 Residential
- SPA Special Planning Area

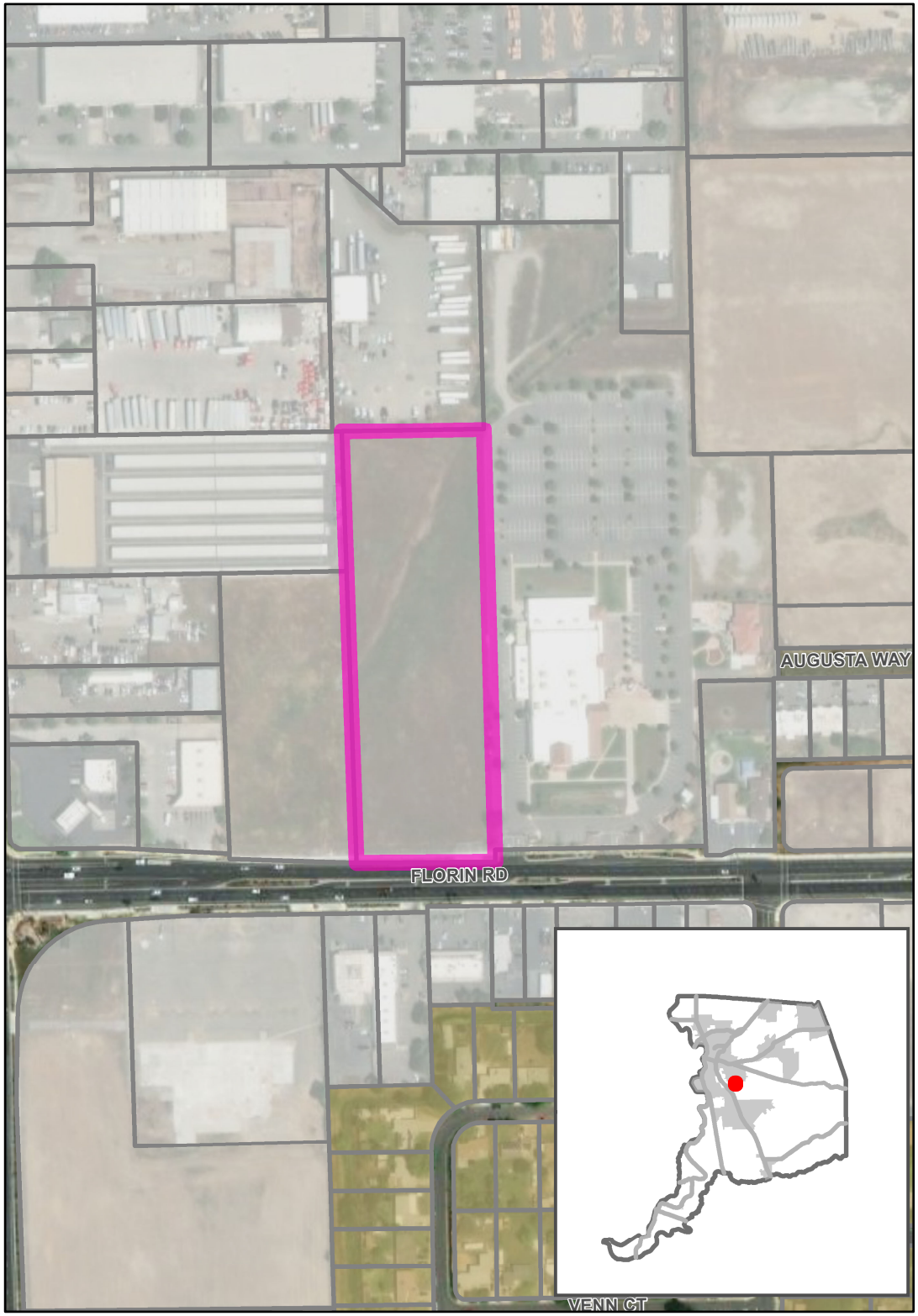
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0 0.0375 0.075 0.15 Miles

Site 78

APN 043-0070-034-0000

8165 Florin Road,
South Sacramento



Legend

Proposed Rezone Site

Zoning

RD-10 Residential

RD-5 Residential

SPA Special Planning Area

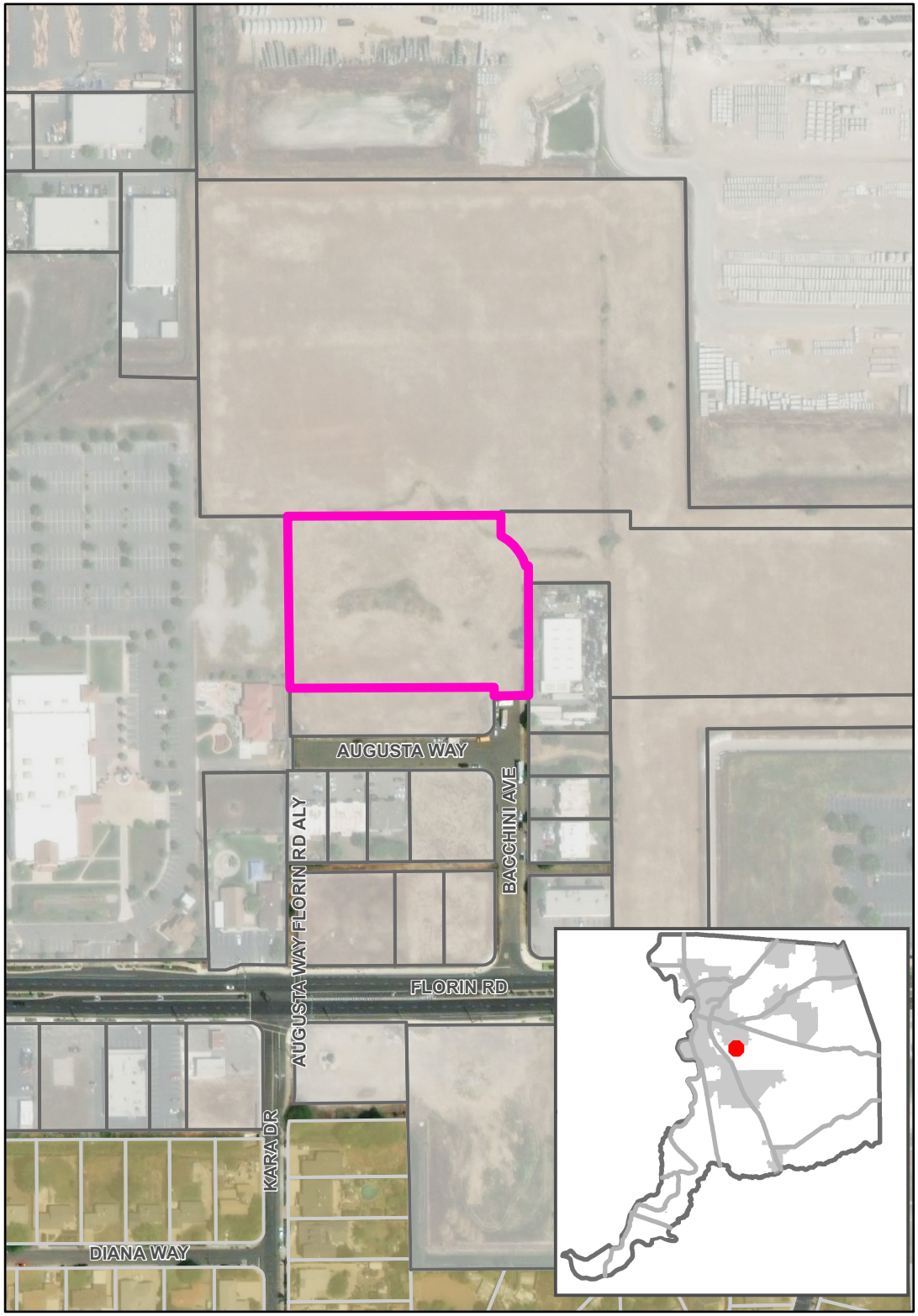
N

0 0.0375 0.075 0.15
Miles

Site 79

APN 043-0230-021-0000

90 feet North of Augusta Way/Bacchini Avenue,
South Sacramento



Legend

Proposed Rezone Site

Zoning

RD-5 Residential

SPA Special Planning Area

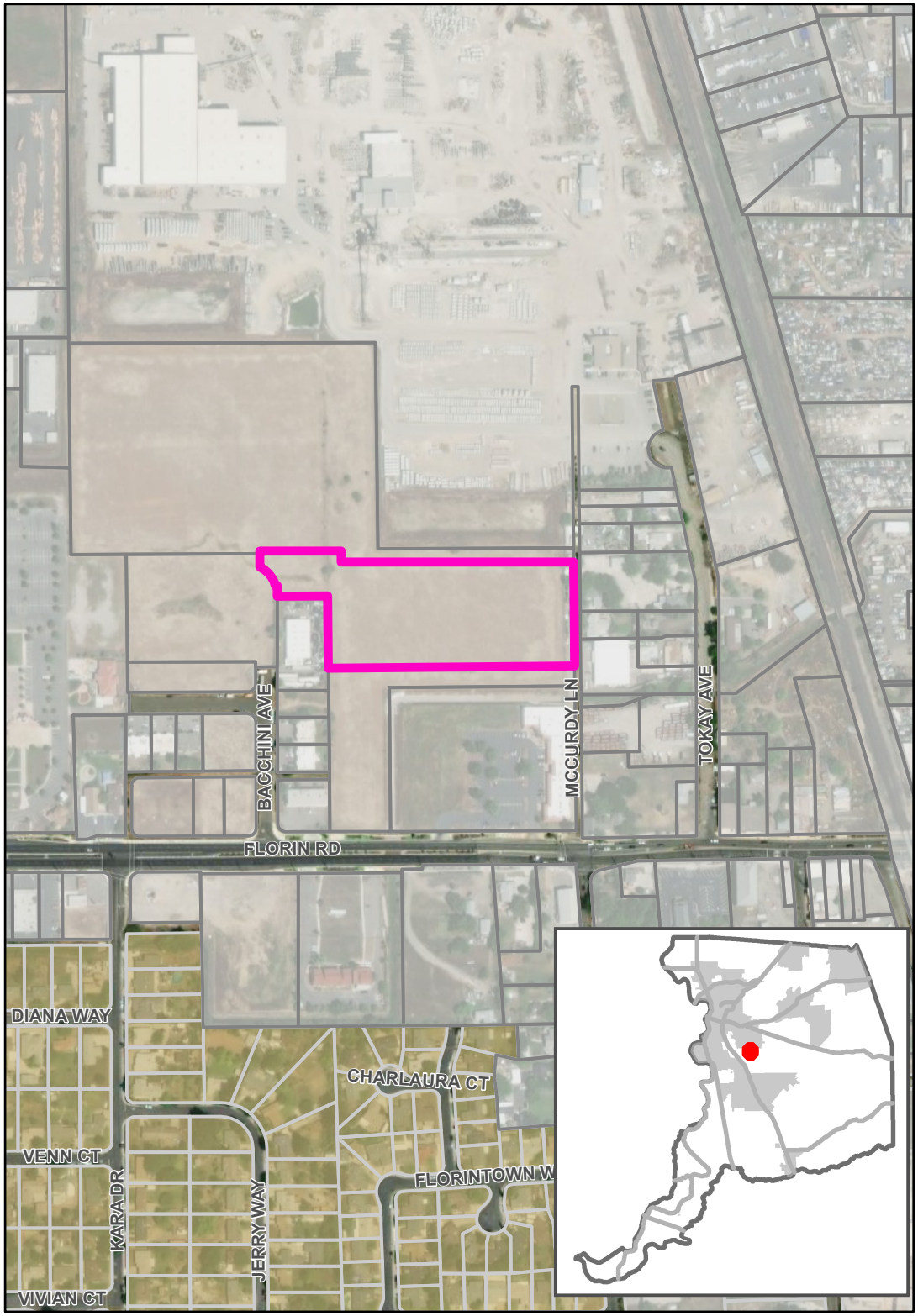
N

0 0.0375 0.075 0.15 Miles

Site 80

APN 043-0230-022-0000

430 feet North of McCurdy Lane/Florin Road, South Sacrameto



Legend

Proposed Rezone Site

Zoning

RD-5 Residential

SPA Special Planning Area

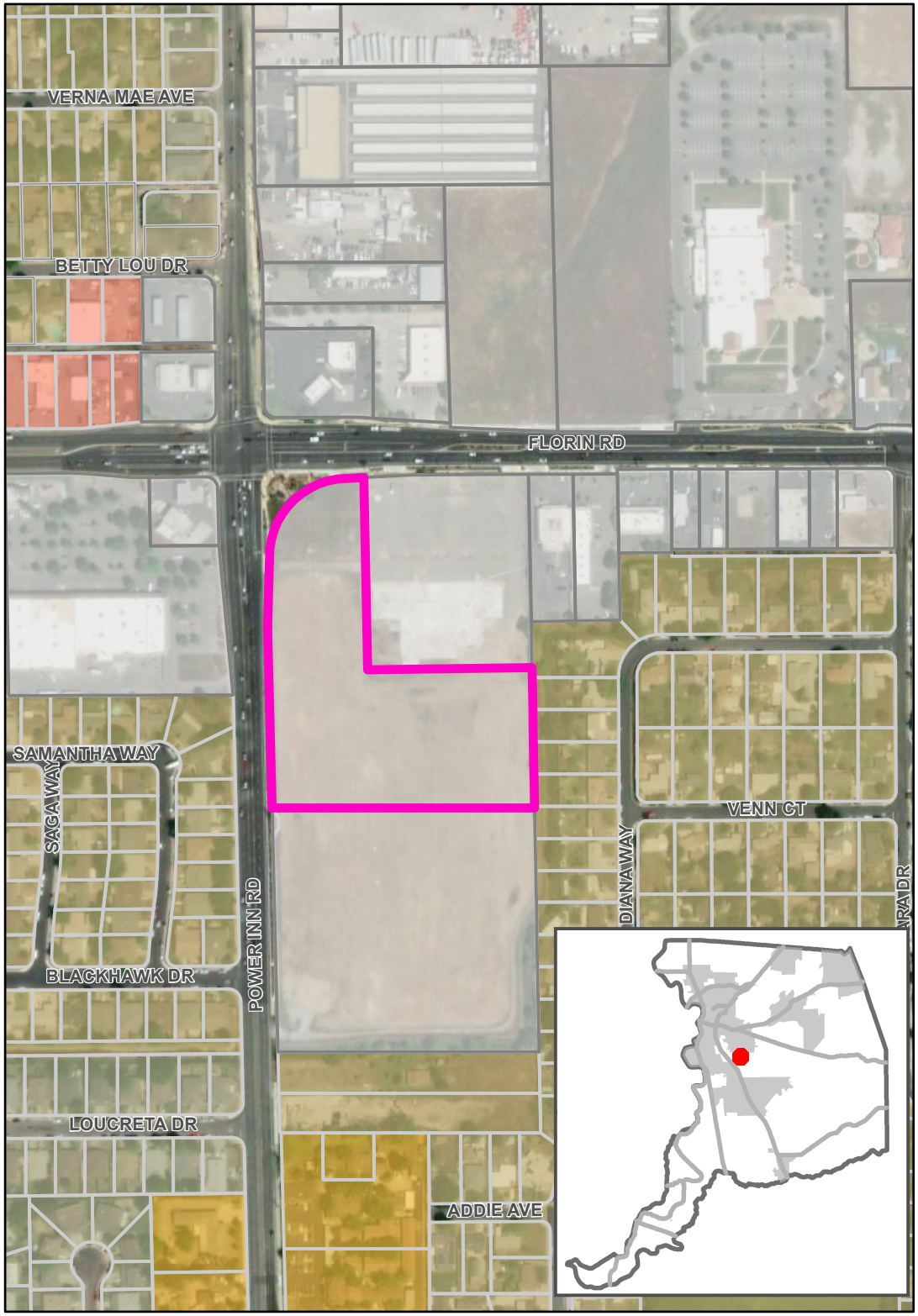
N

0 0.05 0.1 0.2 Miles

Site 81

APN 051-0030-012-0000

Southeast Power Inn Road/Florin Road,
South Sacramento



Legend

- Proposed Rezone Site

Zoning

- LC Light Commercial
- RD-10 Residential
- RD-20 Multiple Family Residential
- RD-5 Residential
- SPA Special Planning Area

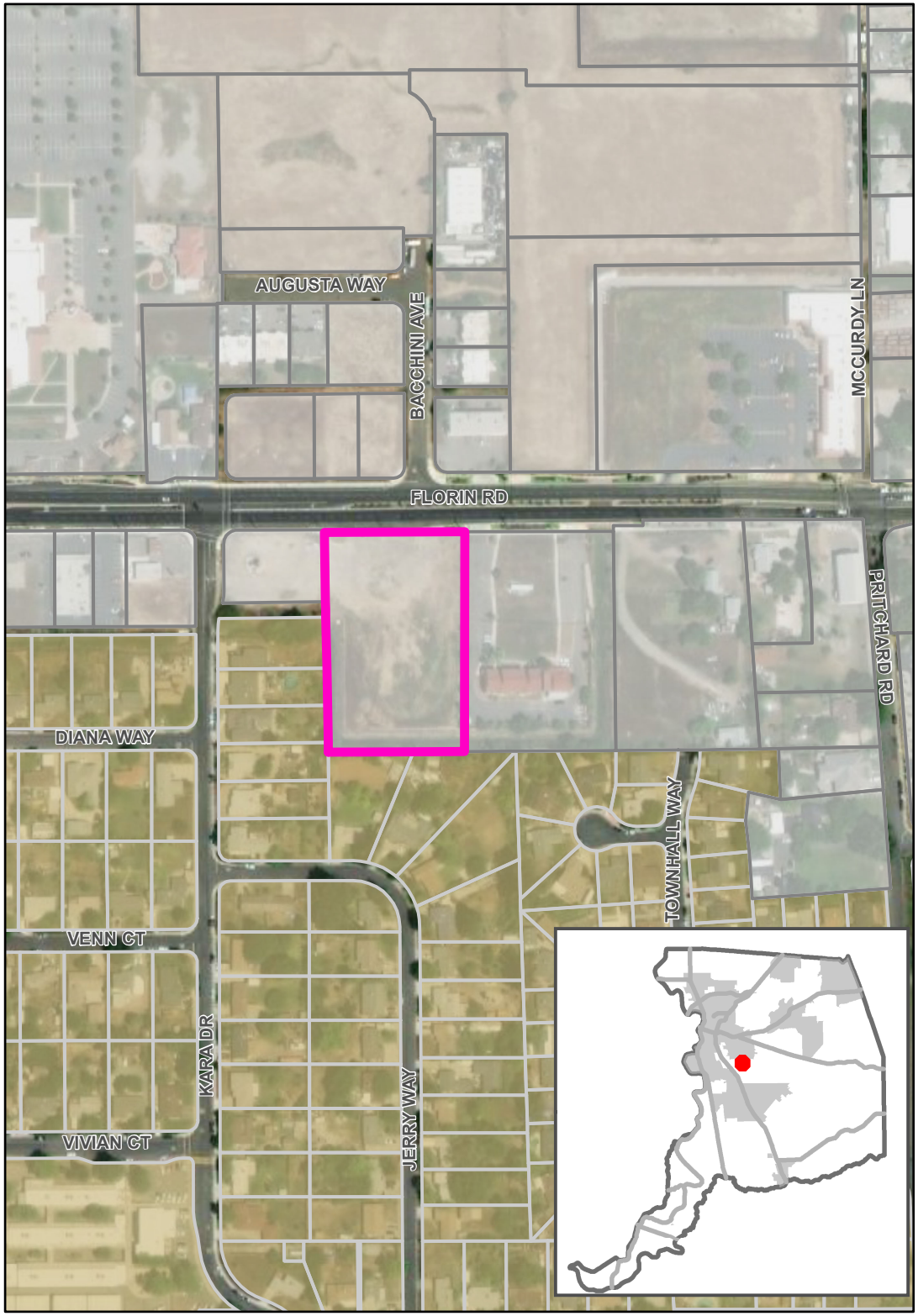
N

0 0.0375 0.075 0.15
Miles

Site 82

APN 051-0061-018-0000

180 feet East of Florin Road/Kara Drive,
South Sacramento



Legend

Proposed Rezone Site

Zoning

RD-5 Residential

SPA Special Planning Area

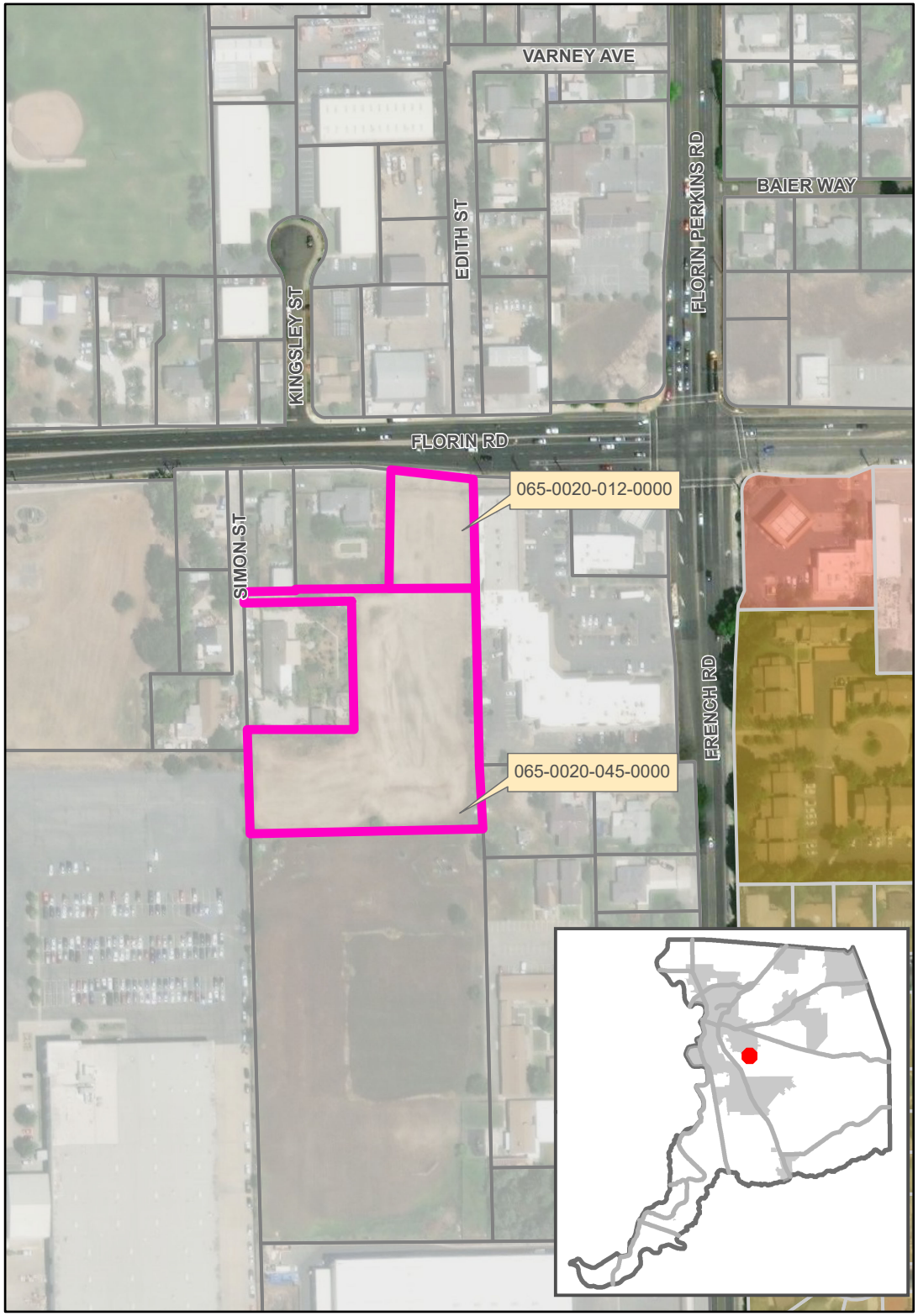
N

0 0.0375 0.075 0.15 Miles

Site 83

APNs 065-0020-012-0000
& 065-0020-045-0000

8475 Florin Road & 180 feet South
of Florin Road/Simon Street,
South Sacramento



Legend

Proposed Rezone Site

Zoning

- GC General Commercial
- LC Light Commercial
- RD-30 Multiple Family Residential
- RD-5 Residential
- SPA Special Planning Area

N

0 0.0375 0.075 0.15 Miles

From: Edmond L
To: Shen. Jessie
Cc: Inman. Joelle; Serafin. Nathan
Subject: RE: ATTENTION: Request for Ability To Serve for PLNP2020-00042 - Sacramento County RHNA Rezone Project
Date: Monday, January 29, 2024 10:45:43 AM
Attachments: image001.png

EXTERNAL EMAIL: If unknown sender, **do not** click links/attachments.
If you have concerns about this email, please report it via the Phish Alert button.

Good Morning Jessie,

The Florin County Water District does have adequate water supply for your Rezone Project. However, would you please add the conditions we spoke about on the phone today. If you need anything else feel free to contact me.

Edmond Leggette
General Manager
Operator #52857

Florin County Water District
7090 McComber Street
Sacramento, CA 95828
Tel (916) 383-0808 Fax (916)383-6149

From: Serafin. Nathan <serafinn@saccounty.gov>
Sent: Tuesday, January 2, 2024 10:03 AM
To: Front Office <office@florincountywd.org>
Cc: Inman. Joelle <inmanj@saccounty.gov>; Shen. Jessie <ShenJ@saccounty.gov>
Subject: RE: ATTENTION: Request for Ability To Serve for PLNP2020-00042 - Sacramento County RHNA Rezone Project

Good morning, Lauren,

Thank you for reaching out to us about this. I have attached a different version of the document here and we'll make sure to update the email in our contacts. Should you have additional concerns or issues, please feel free to let me know.

Best,

Nathan Serafin, Planning Associate
Planning and Environmental Review
827 7th Street, Room 225, Sacramento, CA 95814
916.874-7708 (direct) | serafinn@saccounty.gov

www.per.saccounty.net

SACRAMENTO COUNTY

Planning and Environmental Review has several customer service options available and appointments can be made for most services. Please see our website at planning.saccounty.gov for the most current information on how to obtain services including office and public counter hours.

From: Front Office <office@florincountywd.org>
Sent: Tuesday, January 2, 2024 9:43 AM
To: Serafin. Nathan <serafinn@saccounty.gov>
Subject: RE: ATTENTION: Request for Ability To Serve for PLNP2020-00042 - Sacramento County RHNA Rezone Project

EXTERNAL EMAIL: If unknown sender, **do not** click links/attachments.
If you have concerns about this email, please report it via the Phish Alert button.

Good Morning Nathan,

I was unable to open the attachment included in your email. Would you be able to resend as a PDF or Word Document please?

Also will you please update the email address for Florin County Water District to this email: office@florincountywd.org

Thank you very much.

Lauren Bohanna – Office Assistant
Florin County Water District
7090 McComber Street
Sacramento, CA 95828
916-383-0808
916-383-6149 (fax)

From: Serafin. Nathan <serafinn@saccounty.gov>
Sent: Friday, December 29, 2023 10:38 AM
To: fcwd@sbcglobal.net
Cc: Shen. Jessie <ShenJ@saccounty.gov>; Inman. Joelle <inmanj@saccounty.gov>
Subject: ATTENTION: Request for Ability To Serve for PLNP2020-00042 - Sacramento County RHNA Rezone Project
Importance: High

Dear Edmond Legette,

Please find attached Sacramento County PER's Request for Ability to Serve the Regional Housing Needs Allocation (RHNA) Rezone Project (Control No. PLNP2020-00042).

Full details are included in the attached PDF, which include the request letter and a description of sites within your service area. Please reach out if you have any questions or issues accessing the document.

Best,

Nathan Serafin, Planning Associate
Planning and Environmental Review
827 7th Street, Room 225, Sacramento, CA 95814
916.874-7708 (direct) | serafinn@saccounty.gov
www.per.saccounty.net
SACRAMENTO COUNTY

Planning and Environmental Review has several customer service options available and appointments can be made for most services. Please see our website at planning.saccounty.gov for the most current information on how to obtain services including office and public counter hours.

Todd Smith, Planning Director
Planning and Environmental Review

Troy Givans, Director
Department of Community Development

County of Sacramento

December 29, 2023

Joe Duran, General Manager
Orange Vale Water Company
P.O. Box 620800
Orangevale, CA 95662
jduran@orangevalewater.com

Subject: Request for Ability to Serve the Sacramento County Regional Housing Needs Allocation (RHNA) Rezone Project (Control No. PLNP2020-00042)

Dear Joe Duran,

Planning and Environmental Review (PER) is currently preparing the environmental analysis associated with the Sacramento County Regional Housing Needs Allocation (RHNA) Rezone Project (Project). The Project's revised Notice of Preparation (NOP) was released on December 22, 2023, and may be viewed online at: https://planning.saccounty.gov/PlansandProjectsIn-Progress/Pages/Countywide-Rezone-Program.aspx.

The Sacramento County Housing Element of 2021-2029 identifies a shortfall of 2,884 units for the lower-income category (includes the low, very low, and extremely low income categories; incomes ranging from $0 to $69,050 annually) in the County. Simply, there is insufficient appropriately-zoned sites to accommodate the County's RHNA obligation for the lower-income category. As such, PER is undertaking a rezone of ±248.33 acres comprising 83 candidate rezone sites within the unincorporated County to provide additional lower-income (to fulfill the RHNA obligation and increase the buffer) and moderate income (to increase the buffer) category housing opportunities. The Project does not propose to construct new residential or other development on the ±248.33 acres proposed to be rezoned; rather, it provides capacity for future development of housing units to meet the County's remaining unmet RHNA of 2,884 lower income category units, consistent with State law. The planning horizon year for the Project is 2029.

Attachment 1 lists the 7 candidate rezone sites (Site 25-26 and 64-68) within Orange Vale Water Company's (OVWC's) service area that are proposed to be rezoned with the Project. Information regarding site acreage, existing and proposed zoning designations, and net increase in units are also provided. The net increase in residential units is calculated as the difference between an existing zoning designation's maximum density and the proposed zoning designation's maximum density. For example, a 1-acre site currently zoned RD-20 (maximum density of 20 units per acre) with a proposed zoning of RD-30 (maximum density of 30 units per acre) nets 10 additional units with a rezone. Attachment 2 depicts the locations of these candidate rezone sites within OVWC's service area, as well as individual site maps. In total, the Project is anticipated to result in a net

increase of 163 units (144 lower-income units and 19 moderate-income units) within OVWC's service area.

It is noted that Section 4.6 of the OVWC's 2020 Urban Water Management Plan provides a projection of water use for lower income households. Pursuant to California Water Code §10910 through 10915, PER requests the following information:

1. Whether the projected water demand associated with the Project was include as part of the most recently adopted urban water management plan; and
2. If the Project's water demand was not included as part of the most recently adopted urban water management plan, does OVWC have adequate capacities to serve the Project?

Additionally, PER requests any comments (including conditions of approval or advisories) OVWC may have for the Project. If you have any questions or would like to set up a meeting to further discuss the Project, please contact me at shenj@saccounty.gov or 916.875.3711.

Sincerely,



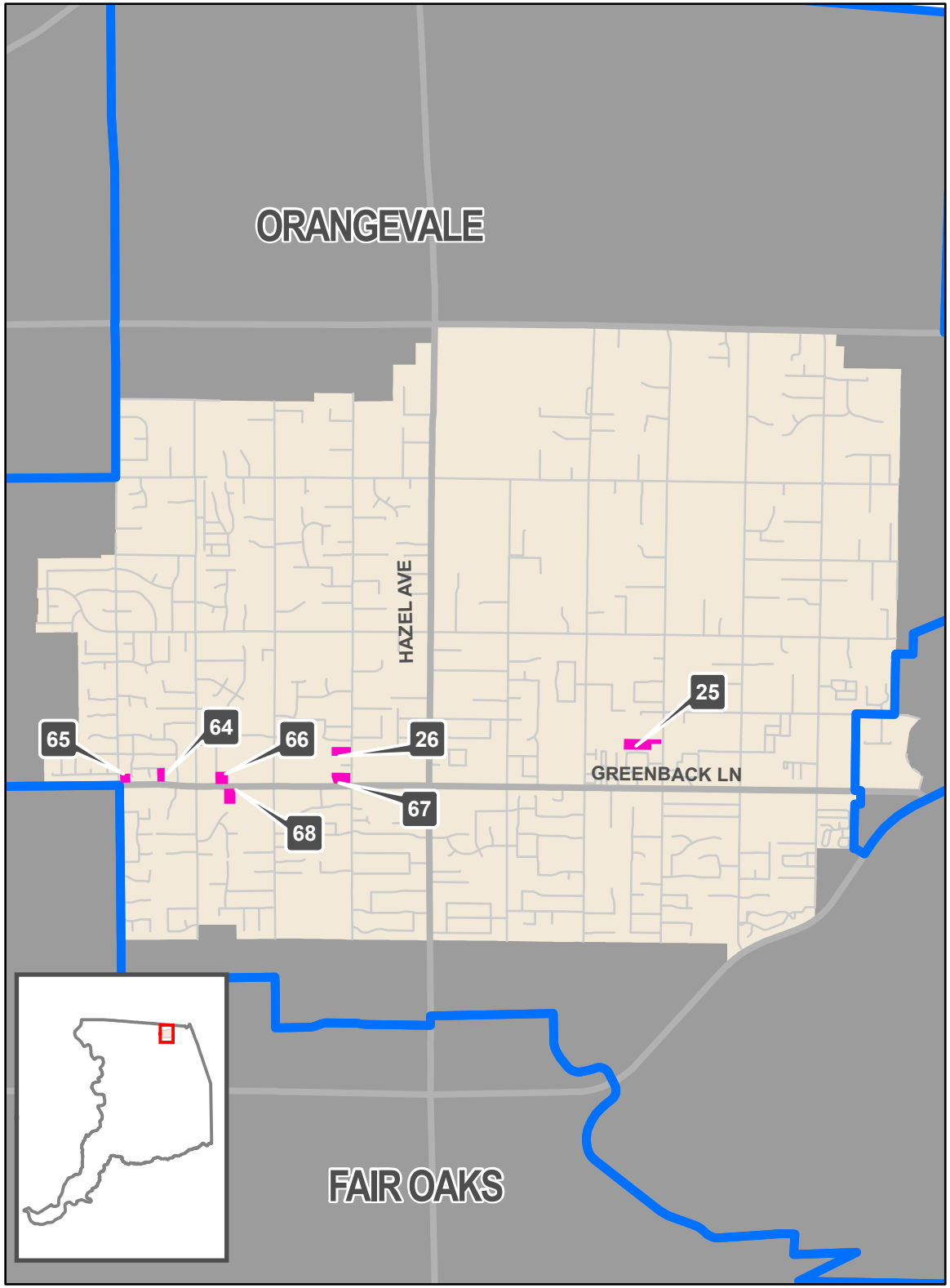
Jessie Shen
Senior Planner

Attachments

Attachment 1 – Orange Vale Water Company List of Candidate Rezone Sites
Attachment 2 – Orange Vale Water Company Map of Candidate Rezone Sites

Site #	APN	Address/Siting Description	Lot size / Portion of Lot Rezoned (net acres)	Zoning Designation/SPA/ Specific or Master Plan Area (Current)	Zoning Designation (Proposed)	Net Increase
25	223-0092-028-0000	6321 Chestnut Avenue	2.18	RD-2	RD-30	61
26	261-0210-013-0000	6245 Beech Avenue	1.05	RD-10	RD-40	32
64	261-0160-018-0000	8553 Greenback Lane	0.68	SPA (Greenback Ln - RD-5)	RD-15	7
65	261-0160-020-0000	NE Greenback Lane/Kenneth Avenue	0.69	SPA (Greenback Ln - RD-2)	RD-10	5
66	261-0160-034-0000	300 feet E of Greenback Lane/Almond Avenue	0.85	SPA (Greenback Ln - RD-2)	RD-10	7
67	261-0210-019-0000	NW Beech Avenue/Greenback Lane	1.31	SPA (Greenback Ln - RD-10)	RD-40	39
68	261-0220-038-0000	8646 Greenback Lane	1.17	SPA (Greenback Ln - BP)	RD-30	12

Orange Vale Water Company



- 25 APN 223-0092-028-0000
- 26 APN 261-0210-013-0000
- 64 APN 261-0160-018-0000
- 65 APN 261-0160-020-0000
- 66 APN 261-0160-034-0000
- 67 APN 261-0210-019-0000
- 68 APN 261-0220-038-0000

Legend

- Proposed Rezone Sites
- Community Boundaries
- Major Roads
- Local Roads

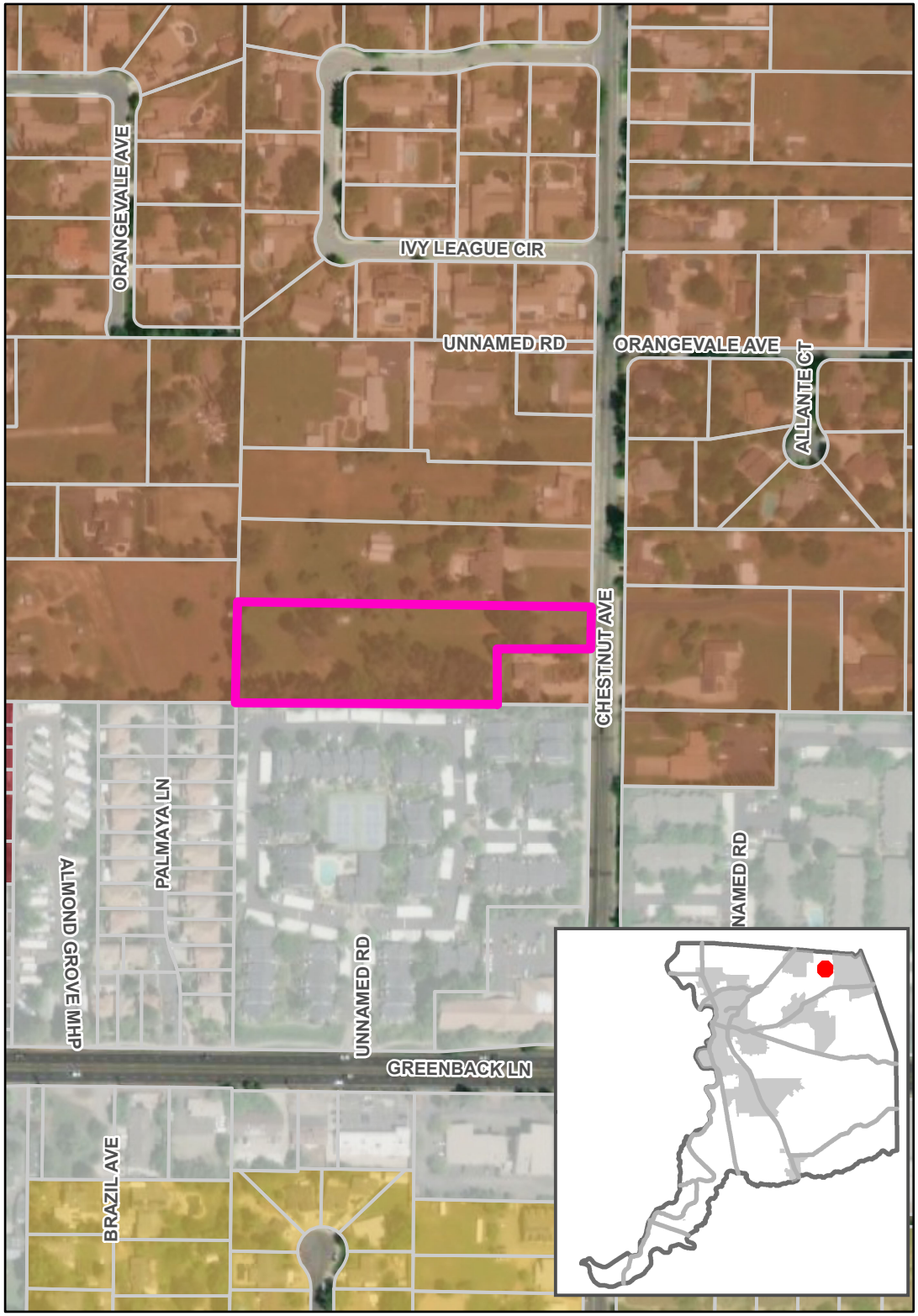
N

0 0.25 0.5 1 Miles

Site 25

APN 223-0092-028-0000

6321 Chestnut Avenue, Orangevale



Legend

- Proposed Rezone Site

Zoning

- BP Business and Professional Office
- RD-2 Residential
- RD-4 Residential
- RD-5 Residential
- SPA Special Planning Area

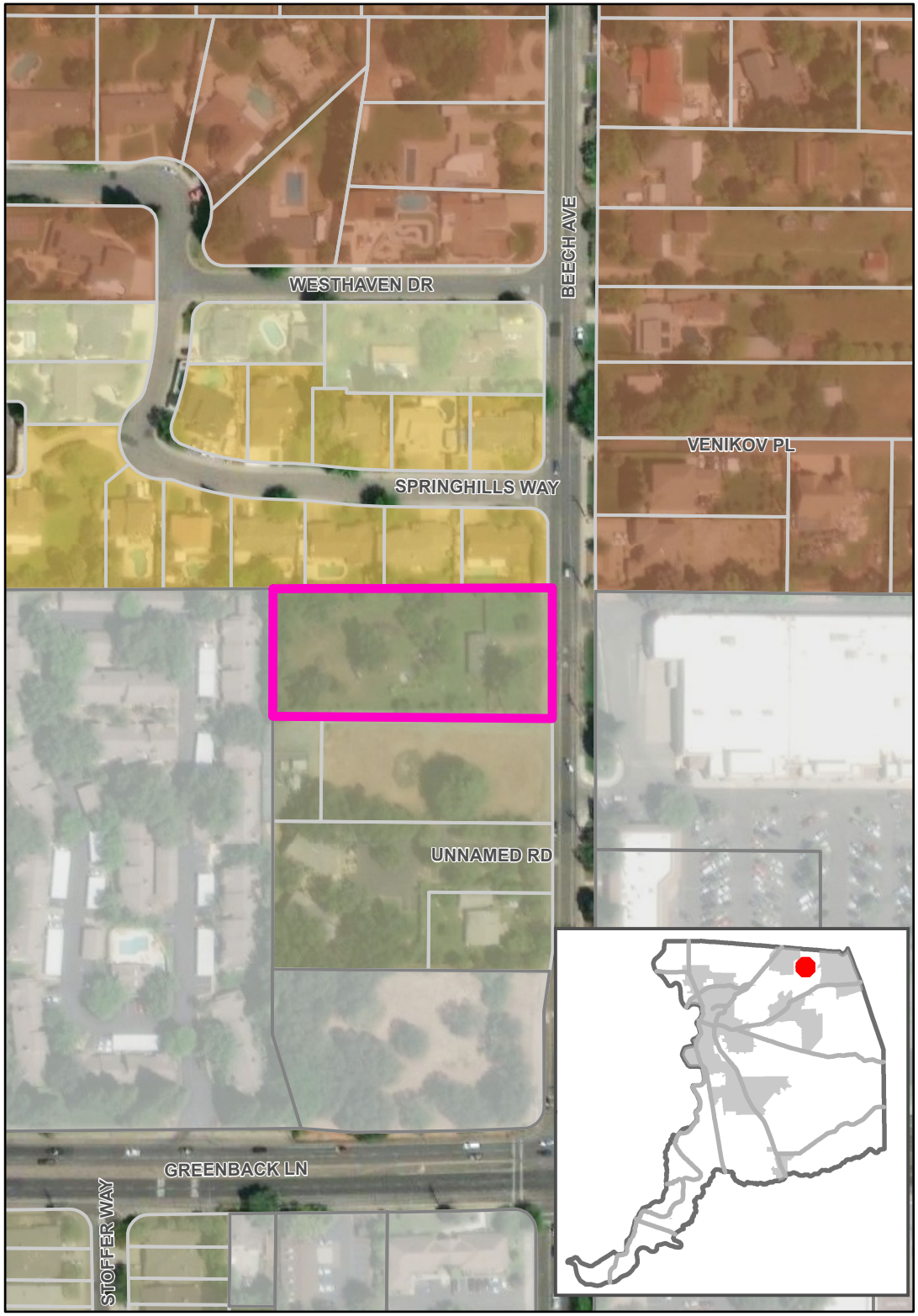
N

0 0.05 0.1 0.2 Miles

Site 26

APN 261-0210-013-0000

6245 Beech Avenue,
Orangevale



Legend

Proposed Rezone Site

Zoning

- RD-2 Residential
- RD-3 Residential
- RD-4 Residential
- RD-5 Residential
- SPA Special Planning Area

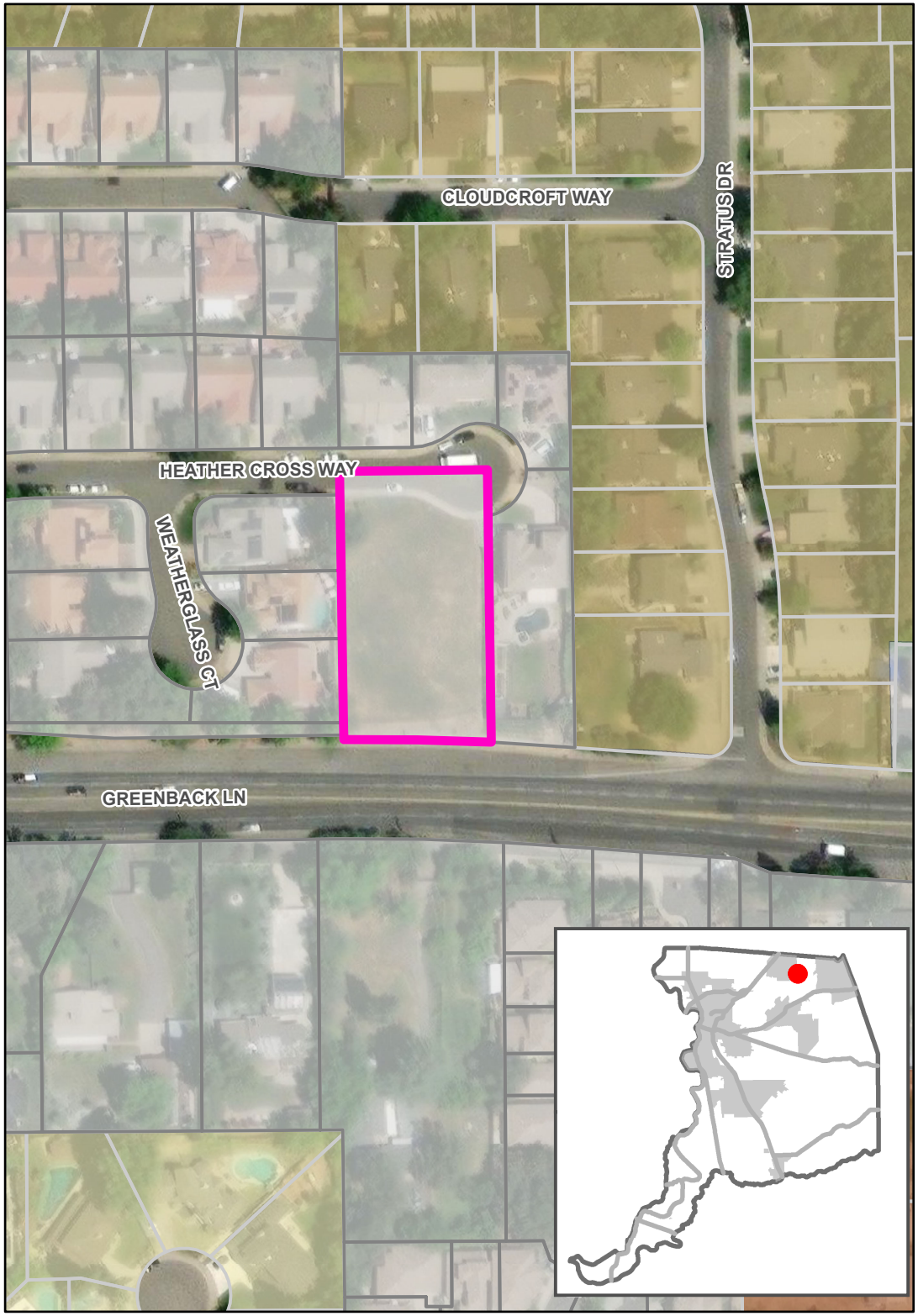
N

0 0.025 0.05 0.1
Miles

Site 64

APN 261-0160-018-0000

8553 Greenback Lane,
Orangevale



Legend

Proposed Rezone Site

Zoning

- RD-2 Residential
- RD-3 Residential
- RD-4 Residential
- RD-5 Residential
- SPA Special Planning Area

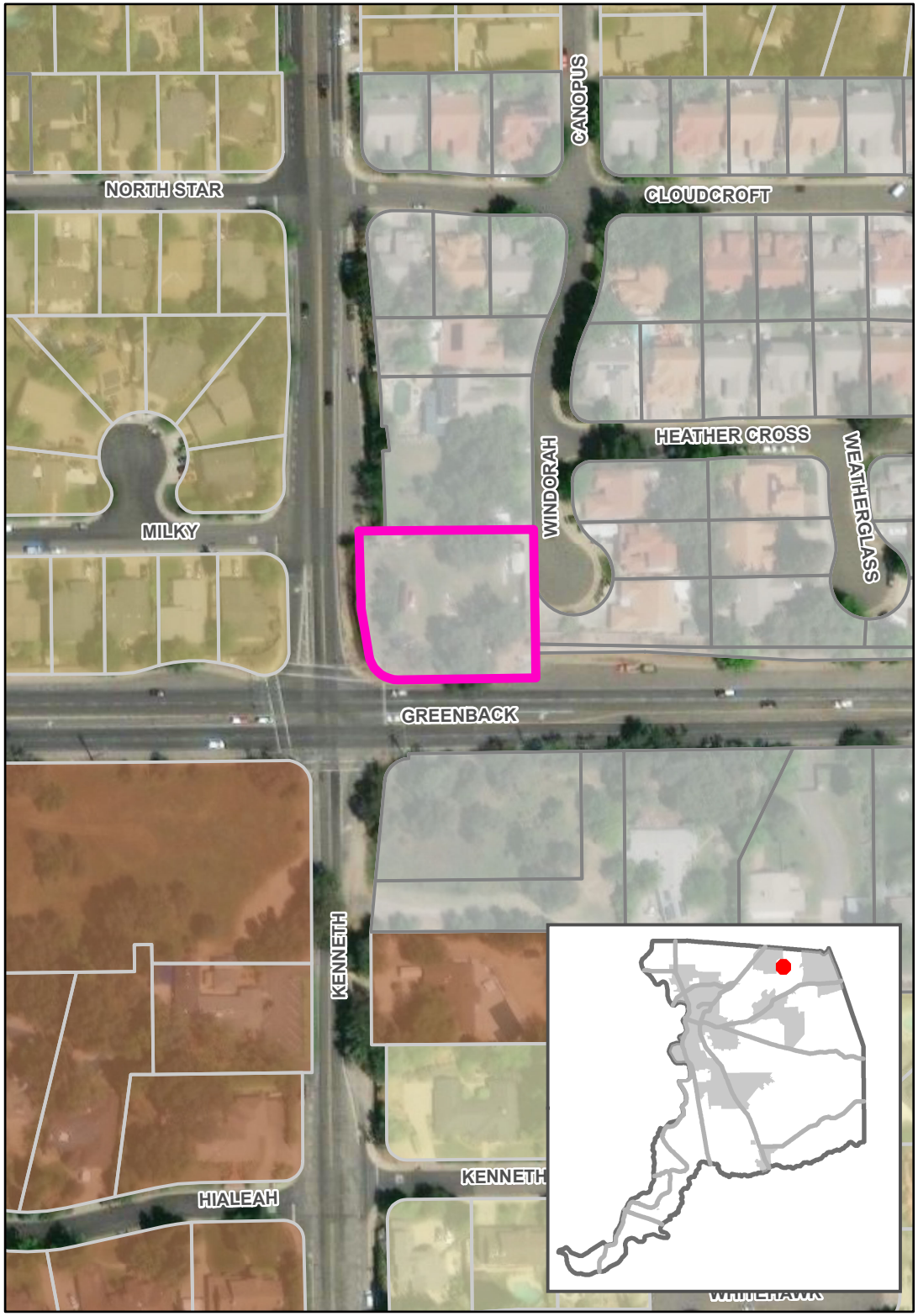
N

0 0.025 0.05 0.1 Miles

Site 65

APN 261-0160-020-0000

NE Greenback Lane/Kenneth Avenue, Orangevale



Legend

- Proposed Rezone Site

Zoning

- RD-2 Residential
- RD-3 Residential
- RD-5 Residential
- SPA Special Planning Area

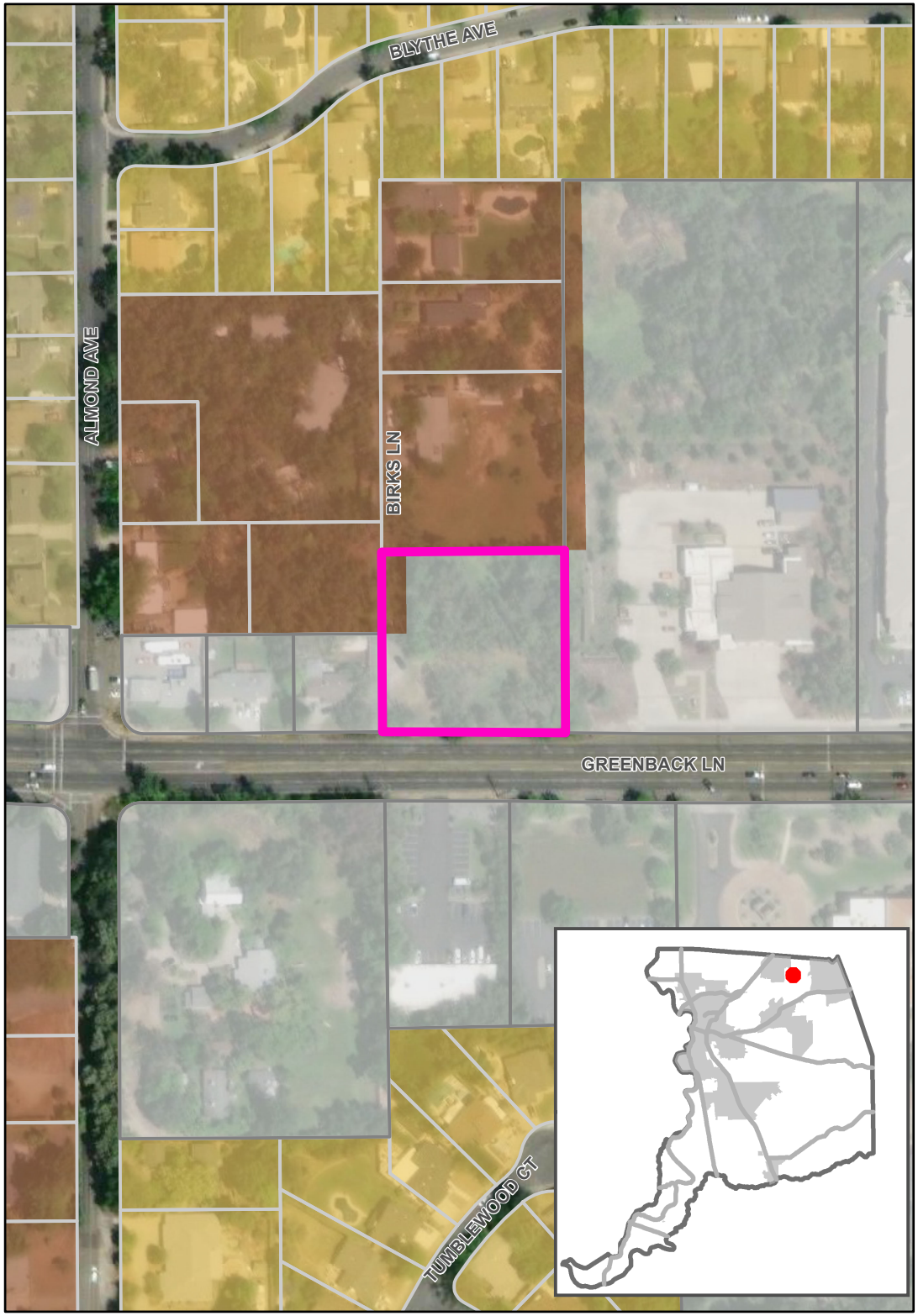
N

0 0.025 0.05 0.1 Miles

Site 66

APN 261-0160-034-0000

300 feet E of Greenback Lane/Almond Avenue, Orangevale



Legend

Proposed Rezone Site

Zoning

- RD-2 Residential
- RD-3 Residential
- RD-4 Residential
- RD-5 Residential
- SPA Special Planning Area

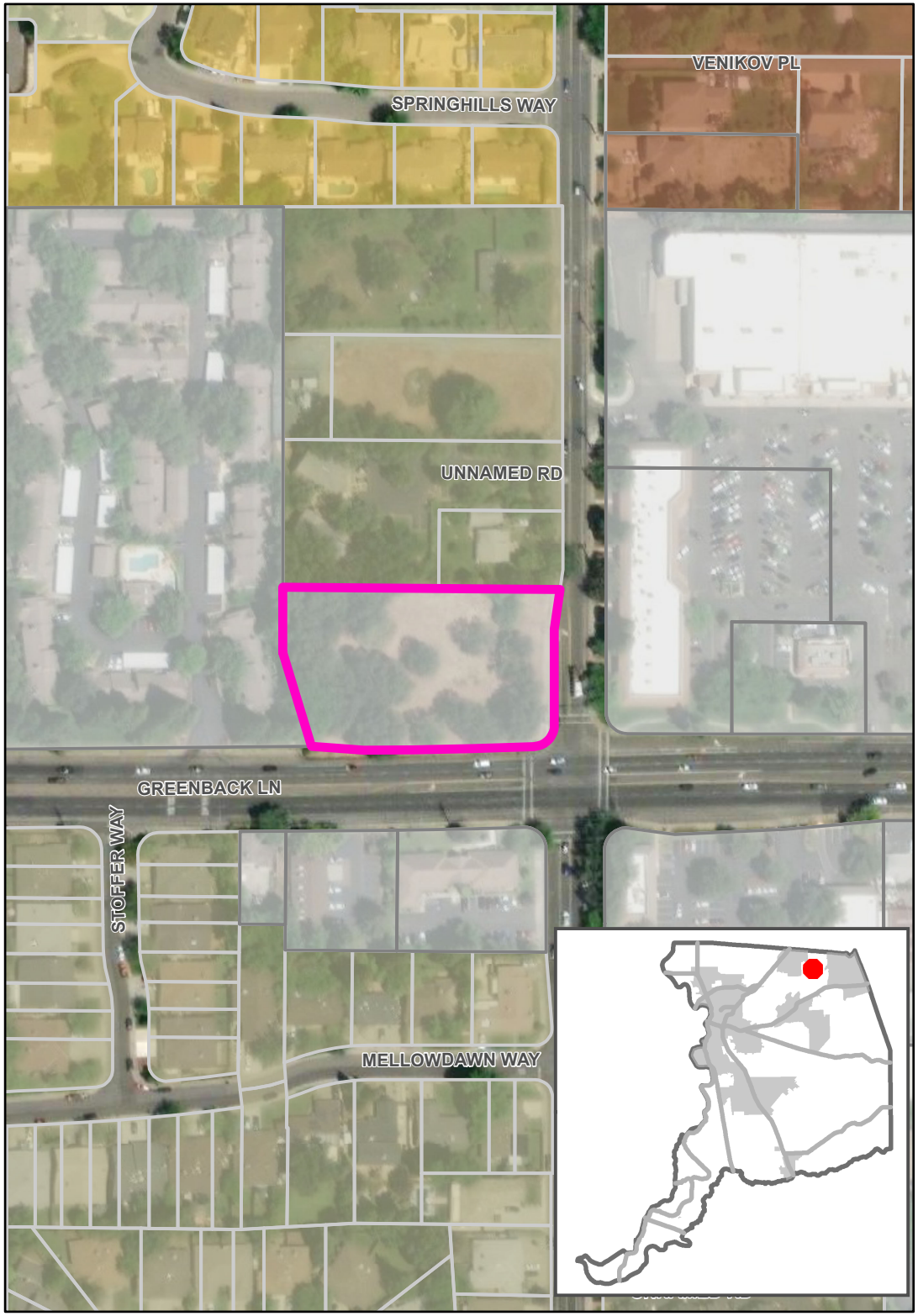
N

0 0.025 0.05 0.1 Miles

Site 67

APN 261-0210-019-0000

Northwest Beech Avenue/Greenback Lane, Orangevale



Legend

Proposed Rezone Site

Zoning

- RD-2 Residential
- RD-3 Residential
- RD-4 Residential
- RD-5 Residential
- SPA Special Planning Area

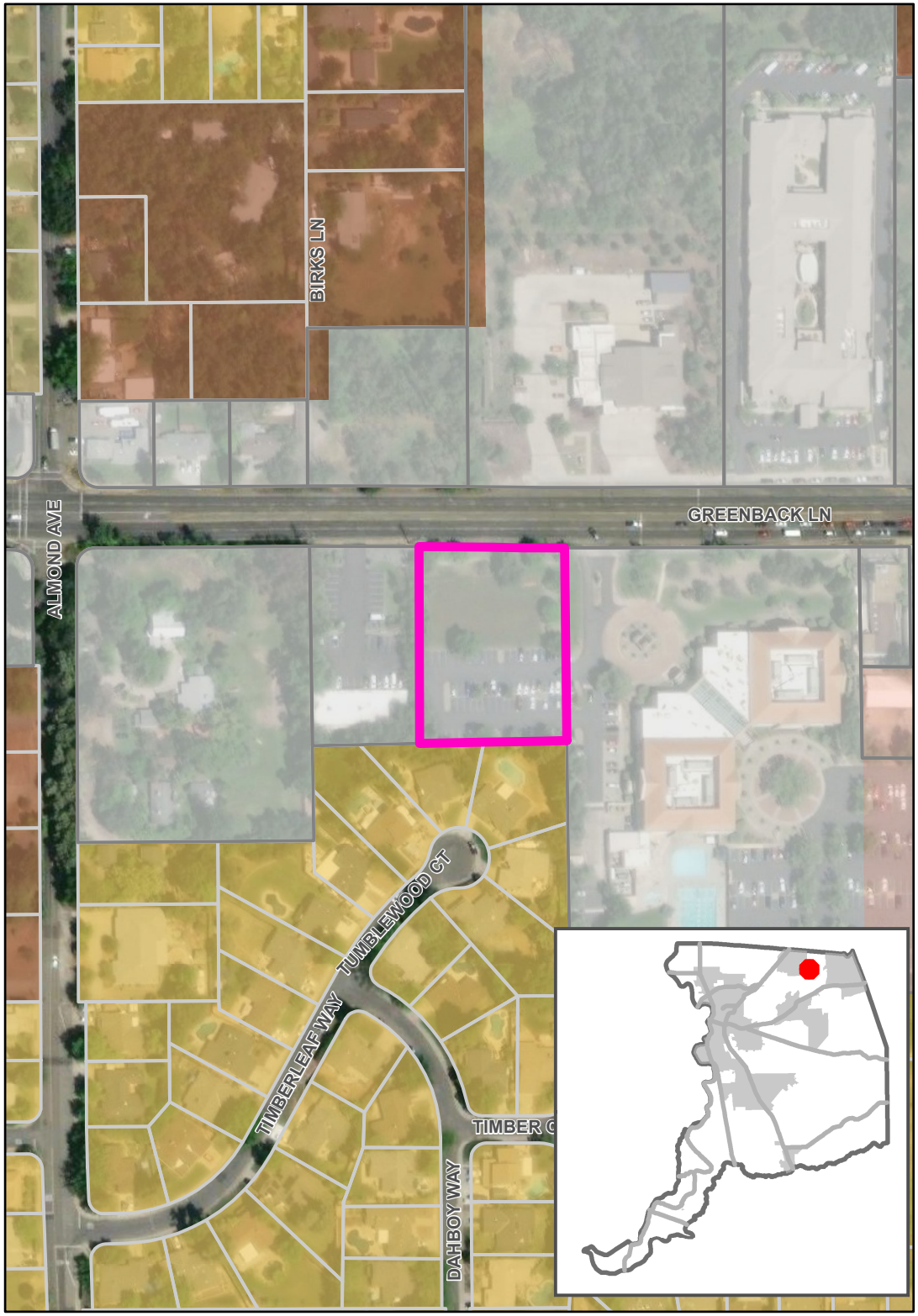
N

0 0.025 0.05 0.1 Miles

Site 68

APN 261-0220-038-0000

8646 Greenback Lane, Orangevale



Legend

- Proposed Rezone Site

Parcel Zone

- GC General Commercial
- RD-2 Residential
- RD-4 Residential
- RD-5 Residential
- SPA Special Planning Area

N

0 0.025 0.05 0.1 Miles

From: Mark Dubose
To: Shen, Jessie
Cc: Mark Dubose; Chris Shepard
Subject: Request for ability to serve RHNA
Date: Monday, January 8, 2024 9:01:47 AM
Attachments: image001.png

EXTERNAL EMAIL: If unknown sender, **do not** click links/attachments.
If you have concerns about this email, please report it via the Phish Alert button.

Good morning Jessie,

I received your request for water availability to serve Sac County's RHNA project. I am not aware if this project was in our Urban Management plan, but I doubt it. We have plenty of capacity to cover all these projects. Our demands have gone down over past years due to metering and conservation efforts.

You may reach out to me directly if you have any other questions. Joe Duran is no longer with the company.

Sincerely,

Mark DuBose
Interim General Manager
Field Superintendent
Orange Vale Water Company
mdubose@orangevalewater.com
(916) 988-1693



Todd Smith, Planning Director
Planning and Environmental Review

Troy Givans, Director
Department of Community Development

County of Sacramento

December 29, 2023

Tim Shaw, General Manager
Rio Linda/Elverta Community Water District
730 L Street
Rio Linda, CA 95673
GM@rlecwd.com

Subject: Request for Ability to Serve the Sacramento County Regional Housing Needs Allocation (RHNA) Rezone Project (Control No. PLNP2020-00042)

Dear Tim Shaw,

Planning and Environmental Review (PER) is currently preparing the environmental analysis associated with the Sacramento County Regional Housing Needs Allocation (RHNA) Rezone Project (Project). The Project's revised Notice of Preparation (NOP) was released on December 22, 2023, and may be viewed online at: https://planning.saccounty.gov/PlansandProjectsIn-Progress/Pages/Countywide-Rezone-Program.aspx.

The Sacramento County Housing Element of 2021-2029 identifies a shortfall of 2,884 units for the lower-income category (includes the low, very low, and extremely low income categories; incomes ranging from $0 to $69,050 annually) in the County. Simply, there is insufficient appropriately-zoned sites to accommodate the County's RHNA obligation for the lower-income category. As such, PER is undertaking a rezone of ±248.33 acres comprising 83 candidate rezone sites within the unincorporated County to provide additional lower-income (to fulfill the RHNA obligation and increase the buffer) and moderate income (to increase the buffer) category housing opportunities. The Project does not propose to construct new residential or other development on the ±248.33 acres proposed to be rezoned; rather, it provides capacity for future development of housing units to meet the County's remaining unmet RHNA of 2,884 lower income category units, consistent with State law. The planning horizon year for the Project is 2029.

Attachment 1 lists the 4 candidate rezone sites (Sites 29-30 and 69-70) within Rio Linda/Elverta Community Water District's (RLECWD's) service area that are proposed to be rezoned with the Project. Information regarding site acreage, existing and proposed zoning designations, and net increase in units are also provided. The net increase in residential units is calculated as the difference between an existing zoning designation's maximum density and the proposed zoning designation's maximum density. For example, a 1-acre site currently zoned RD-20 (maximum density of 20 units per acre) with a proposed zoning of RD-30 (maximum density of 30 units per acre) nets 10 additional units with a rezone. Attachment 2 depicts the locations of these candidate sites within RLECWD's service area, as well as individual site maps. In total, the Project is anticipated to result in a net increase of 118 lower-income units within RLECWD's service area.

It is noted that Section 4.2.4 of the RLECWD's 2020 Urban Water Management Plan provides a projection of water use for lower income households. Pursuant to California Water Code §10910 through 10915, PER requests the following information:

1. Whether the projected water demand associated with the Project was include as part of the most recently adopted urban water management plan; and
2. If the Project's water demand was not included as part of the most recently adopted urban water management plan, does RLECWD have adequate capacities to serve the Project?

Additionally, PER requests any comments (including conditions of approval or advisories) RLECWD may have for the Project. If you have any questions or would like to set up a meeting to further discuss the Project, please contact me at shenj@saccounty.gov or 916.875.3711.

Sincerely,



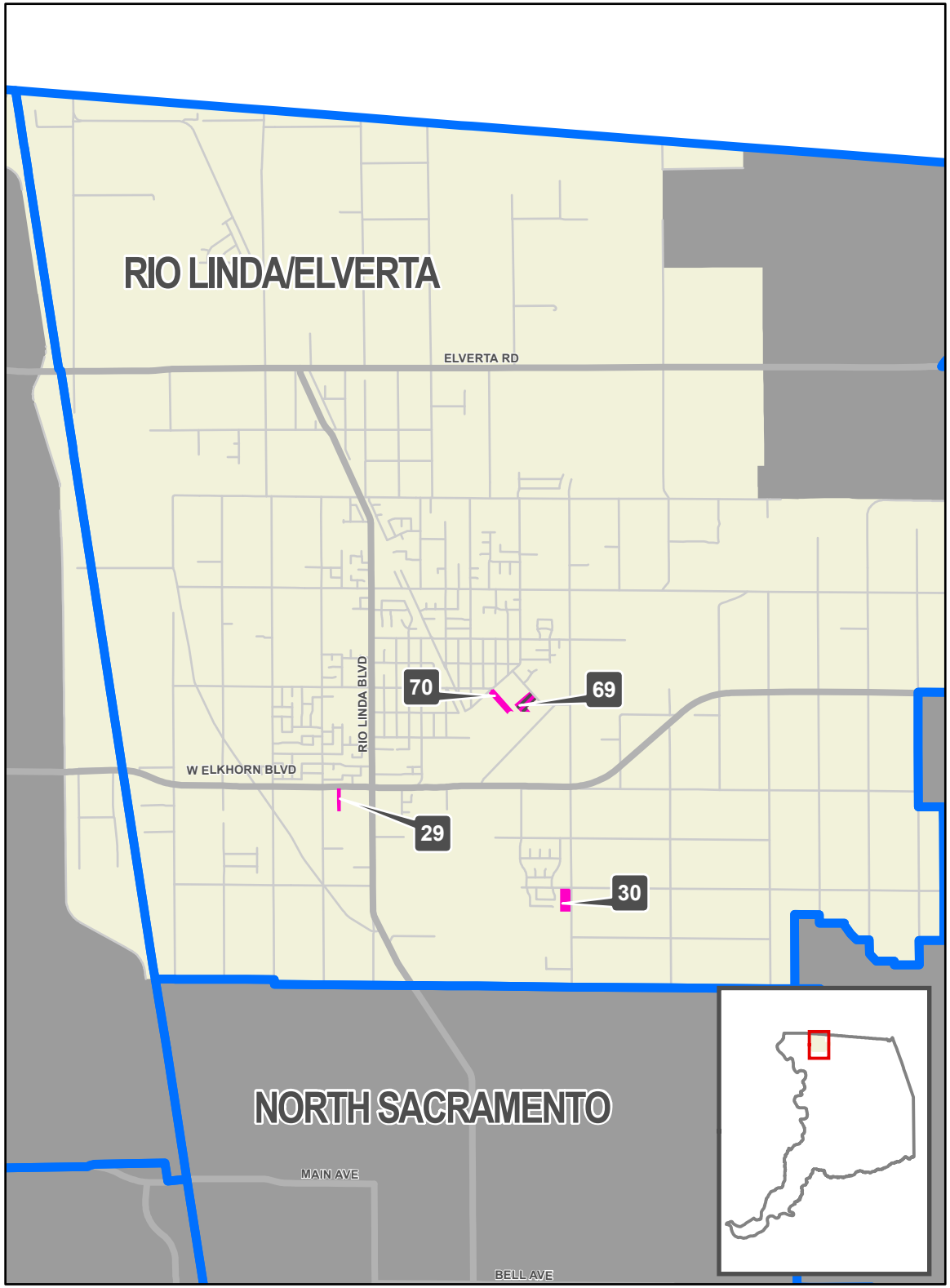
Jessie Shen
Senior Planner

Attachments

Attachment 1 – Rio Linda/Elverta Community Water District List of Candidate Rezone Sites
Attachment 2 – Rio Linda/Elverta Community Water District Map of Candidate Rezone Sites

Site #	APN	Address/Siting Description	Lot size / Portion of Lot Rezoned (net acres)	Zoning Designation/SPA/ Specific or Master Plan Area (Current)	Zoning Designation (Proposed)	Net Increase
29	214-0092-019-0000	232 Elkhorn Boulevard	1.52	RD-20	RD-30	15
30	214-0160-061-0000	5919 Dry Creek Road	3.54	RD-20	RD-30	36
69	207-0141-015-0000	970 Oak Lane	3.70	SPA (Downtown Rio Linda - RD-20/NMU)	RD-30	37
70	207-0300-009-0000	864 Oak Lane	3.00	SPA (Downtown Rio Linda - RD-20/NMU)	RD-30	30

Rio Linda / Elverta Community Water District



29 APN 214-0092-019-0000

30 APN 214-0160-061-0000

69 APN 207-0141-015-0000

70 APN 207-0300-009-0000

Legend

- Proposed Rezone Sites
- Partially Rezoned Site
- Community Boundaries
- Major Roads
- Local Roads

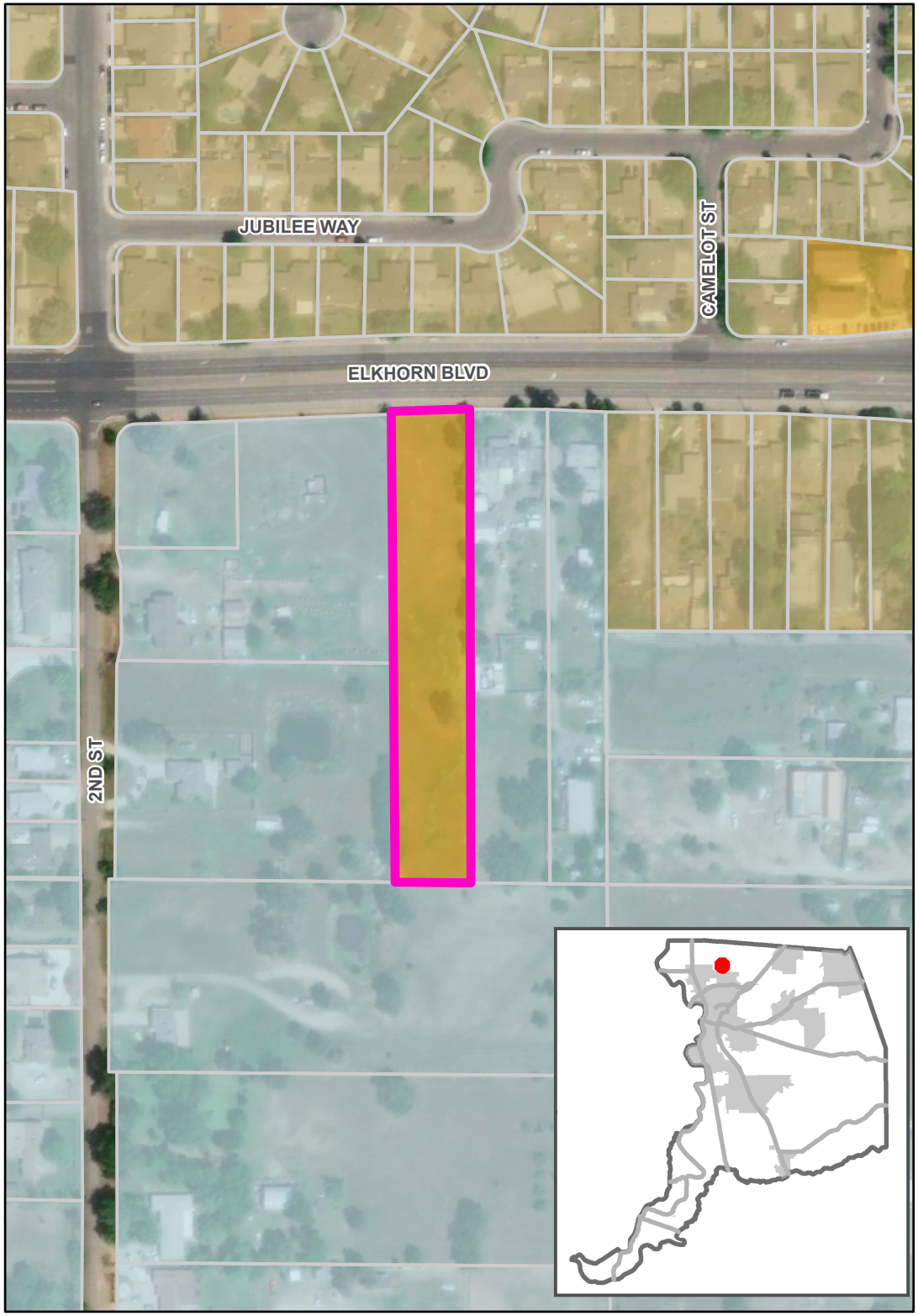
N

0 0.25 0.5 1 1.5 Miles

Site 29

APN 214-0092-019-0000

232 Elkhorn Boulevard,
Rio Linda/Elverta



Legend

Proposed Rezone Site

Zoning

AR-2 Agricultural-Residential - 2 Acres

RD-20 Multiple Family Residential

RD-5 Residential

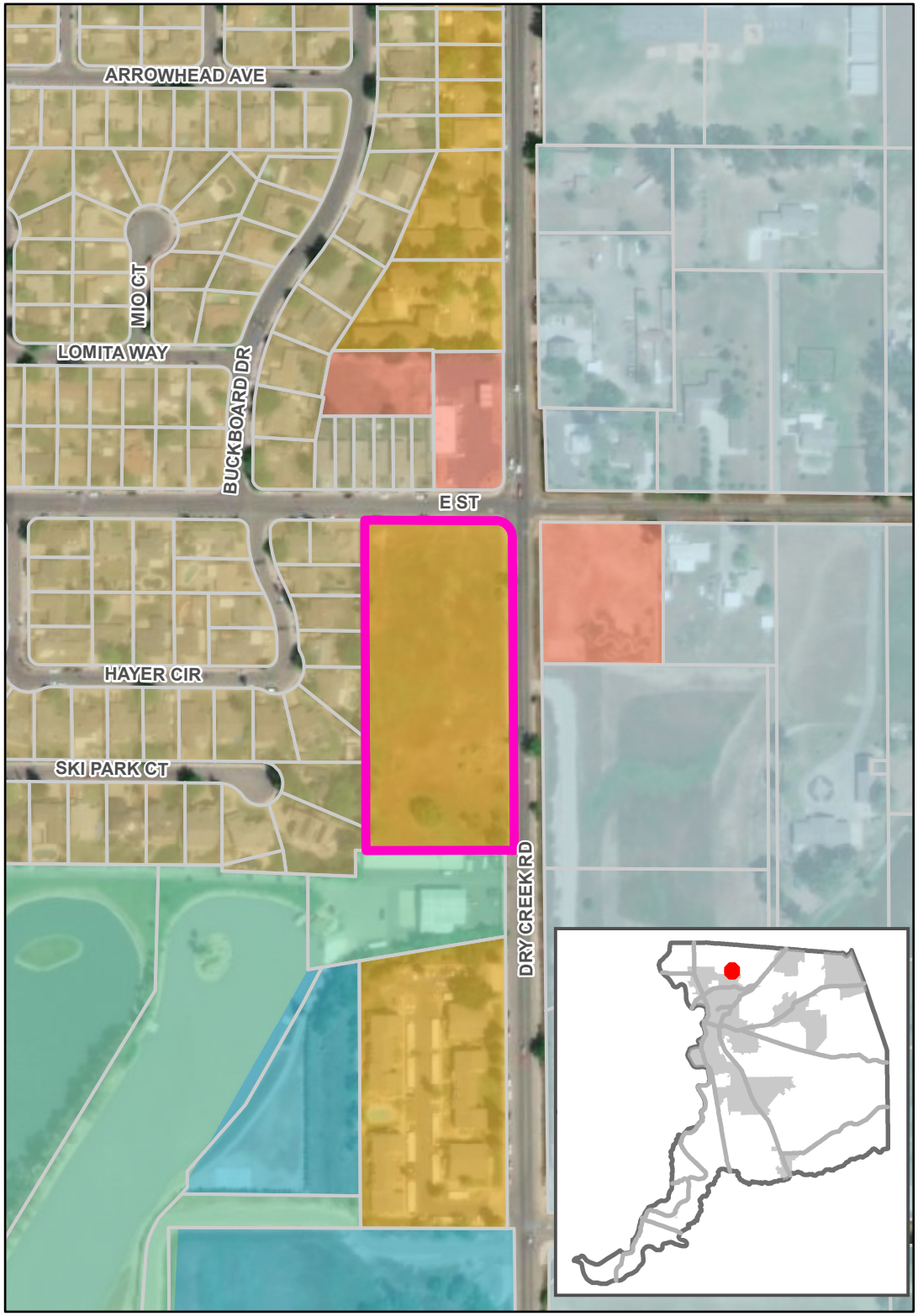
N

0 0.025 0.05 0.1 Miles

Site 30

APN 214-0160-061-0000

5919 Dry Creek Road,
Rio Linda/Elverta



Legend

Proposed Rezone Site

Zoning

- AR-1 Agricultural-Residential - 1 Acre
- AR-2 Agricultural-Residential - 2 Acre
- C-O Commercial Recreation
- LC Light Commercial
- RD-10 Residential
- RD-20 Multiple Family Residential
- RD-5 Residential

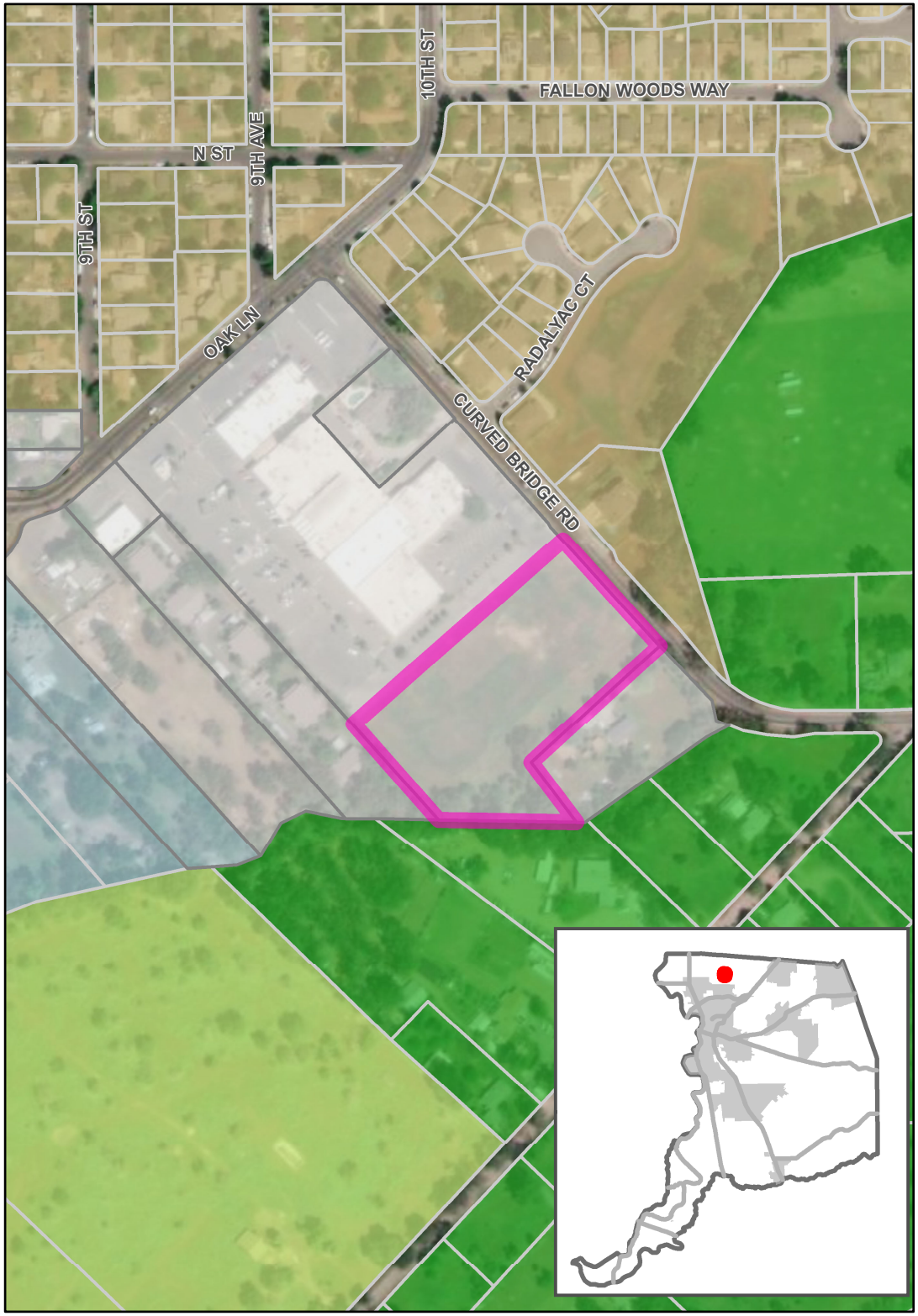
N

0 0.05 0.1 0.2 Miles

Site 69

APN 207-0141-015-0000

970 Oak Lane,
Rio Linda/Elverta



Legend

Proposed Rezone Site

Zoning

- AG-80 Agricultural - 80 Acres
- AR-2 Agricultural-Residential - 2 Acres
- RD-5 Residential
- RR Recreation Reserve
- SPA Special Planning Area

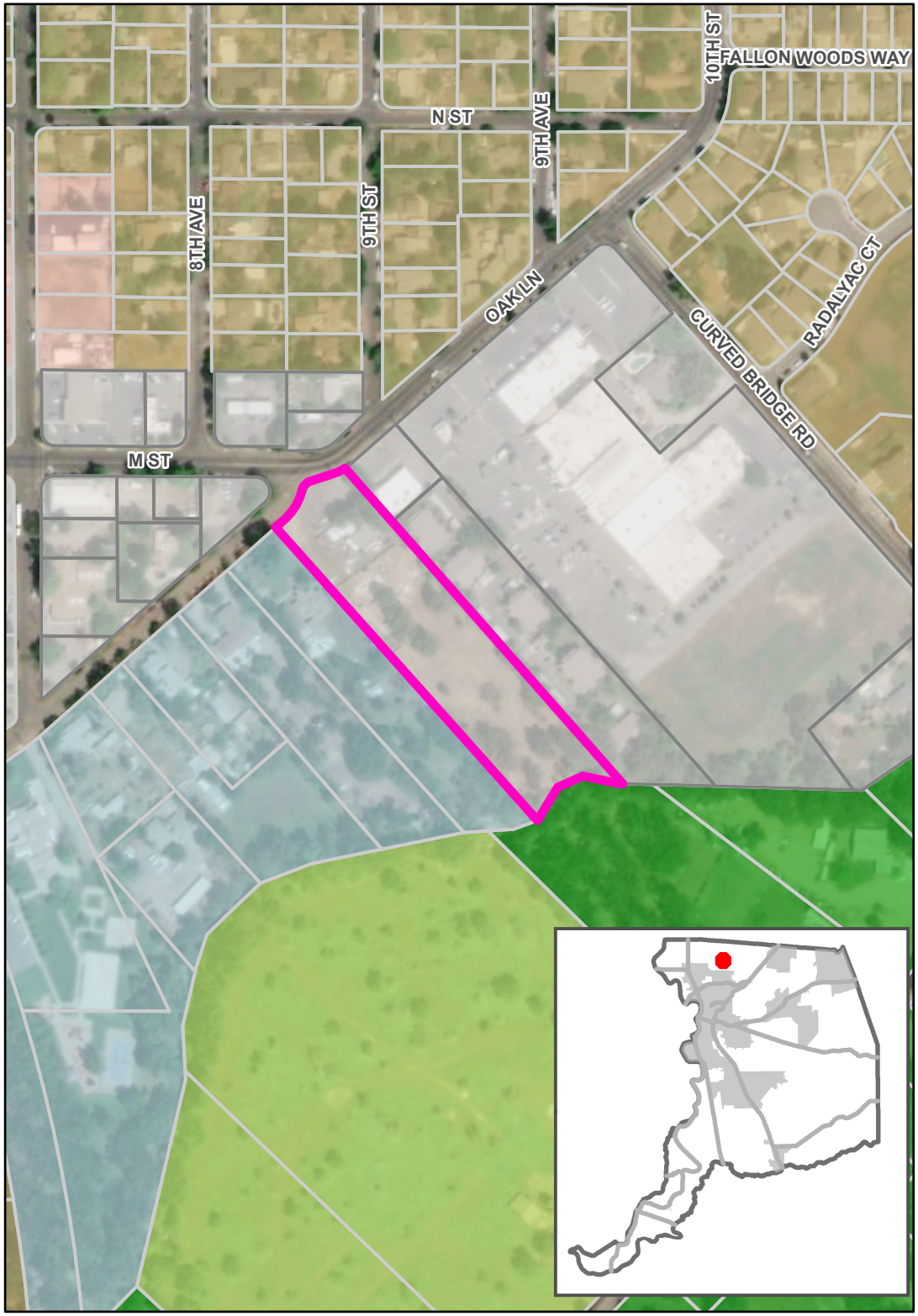
N

0 0.05 0.1 0.2 Miles

Site 70

APN 207-0300-009-0000

864 Oak Lane,
Rio Linda/Elverta



Legend

Parcel Rezone Site

Zoning

- AG-80 Agricultural - 80 Acres
- AR-2 Agricultural-Residential - 2 Acres
- GC General Commercial
- RD-5 Residential
- RR Recreation Reserve
- SPA Special Planning Area

N

0 0.05 0.1 0.2 Miles

From:	Tim Shaw
To:	Serafin. Nathan
Cc:	Shen. Jessie; Inman. Joelle
Subject:	RE: ATTENTION: Request for Ability To Serve the PLNP2020-00042 - Sacramento County RHNA Rezone Project
Date:	Thursday, February 15, 2024 3:27:39 PM
Attachments:	image001.png UWMP Section 4.2.1.2 Planned Development Withing Service Area.pdf RLECWD UWMP Section 4.2.4 Water Use for Lower Income Households.pdf
Importance:	High

EXTERNAL EMAIL: If unknown sender, **do not** click links/attachments.
If you have concerns about this email, please report it via the Phish Alert button.

Nathan and Jesse:

Firstly, thank you for your patience. My response has been delayed due to unscheduled, concerted demands associated with ongoing litigation. The litigation has been in process for eight years, and is now ratcheting up significantly. We are a small agency with limited resource to maintain more than a few spinning plates at the same time.

Secondly, I must apologize that your direct questions do not have correspondingly direct responses. Sometimes the world is not as conveniently black and white as we would like it to be. I have read and understand (I think) your request and the citations therein. In response, I provide the following information:

The attached Section 4.2.4 of the District's UWMP does provide projections. However, section 4.2.4 also stipulates the limitations to planning described in section 4.2.1 (relevant section also attached). Section 4.2.1 explains the severely protracted delay in long-planned residential development coming to fruition. At the center of this protracted delay is a Sacramento County planning document titled "Rio Linda Elverta Community Plan", which includes a restriction (PF-8) on continued use of groundwater. Simply put, the 1998 document stipulates "No net increase in groundwater pumping". Extending that premise, the document prescribes alternative water supplies, e.g. surface water, are needed to enable development.

In 2018, the District was in robust, recurring discussions with Elverta Specific Plan representatives to explore means of complying with the groundwater use restrictions delineated in the Rio Linda Elverta Community Plan. Consistently the Elverta Specific Plan developers were funding the District's participation in a project aimed at procuring surface water facilities. Unfortunately, the developers suddenly ceased financial support for the River Arc project citing "fiscal fatigue". Dialog with the developers acutely evaporated in 2018.

The Water Code sections you've cited in your request include, generally, that the District needs to describe its actions to procure sufficient supplies if such sufficiency does not yet exist. The District has adopted (in 2016) a capacity fee structure to include the projected, substantial costs for surface water facilities. However, those funds in that magnitude will NOT materialize unless and until a substantial number of residential units are constructed with each unit paying a drinking water capacity fee. Any units built on groundwater, with the promise of

future construction of surface water facilities, exposes the potential that home building can stop before sufficient funding is acquired.

In my considerable experience, the above described conundrum is typically assuaged via developers encumbering their land with a community facilities district (Mello-Roos). Such municipal funding methods mitigate the potential for broken promises. Unfortunately, the District inquired with the developers regarding the feasibility of Mello-Roos funding and their response was that their project does NOT have the bonding capacity for drinking water facilities. Expounding, they have so much infrastructure needs requiring bonds that there isn't enough room for water infrastructure funding. To illustrate, the developers conveyed, "if the County does not provide relief on transportation costs, we won't need any water".

Please contact me with any needed clarifications.

Timothy R. Shaw
General Manager
Rio Linda / Elverta Community Water District
(916) 991-8891

From: Tim Shaw
Sent: Friday, January 26, 2024 2:43 PM
To: Serafin. Nathan <serafinn@saccounty.gov>
Cc: Shen. Jessie <ShenJ@saccounty.gov>; Inman. Joelle <inmanj@saccounty.gov>
Subject: RE: ATTENTION: Request for Ability To Serve the PLNP2020-00042 - Sacramento County RHNA Rezone Project

Nathan:

Still working on it. I'm enduring a lot of catch up after the holidays.

Timothy R. Shaw
General Manager
Rio Linda / Elverta Community Water District
(916) 991-8891

From: Serafin. Nathan <serafinn@saccounty.gov>
Sent: Friday, January 26, 2024 1:28 PM
To: Tim Shaw <GM@rlecwd.com>
Cc: Shen. Jessie <ShenJ@saccounty.gov>; Inman. Joelle <inmanj@saccounty.gov>
Subject: RE: ATTENTION: Request for Ability To Serve the PLNP2020-00042 - Sacramento County RHNA Rezone Project

Good afternoon,

I'm following up on my previous email regarding our request for an Ability to Serve the Regional Housing Needs Allocation (RHNA) Rezone Project (Control No. PLNP2020-00042).

I'll be available if you have any questions or issues. Thank you!

Nathan Serafin, Planning Associate
Planning and Environmental Review
827 7th Street, Room 225, Sacramento, CA 95814
916.874-7708 (direct) | serafinn@saccounty.gov
www.per.saccounty.net



Planning and Environmental Review has several customer service options available and appointments can be made for most services. Please see our website at planning.saccounty.gov for the most current information on how to obtain services including office and public counter hours.

From: Serafin. Nathan
Sent: Friday, December 29, 2023 10:51 AM
To: GM@rlecwd.com
Cc: Shen. Jessie <ShenJ@saccounty.gov>; Inman. Joelle <inmanj@saccounty.gov>
Subject: ATTENTION: Request for Ability To Serve the PLNP2020-00042 - Sacramento County RHNA Rezone Project
Importance: High

Dear Tim Shaw,

Please find attached Sacramento County PER's Request for Ability to Serve the Regional Housing Needs Allocation (RHNA) Rezone Project (Control No. PLNP2020-00042).

Full details are included in the attached PDF, which include the request letter and a description of sites within your service area. Please reach out if you have any questions or issues accessing the document.

Best,

Nathan Serafin, Planning Associate
Planning and Environmental Review
827 7th Street, Room 225, Sacramento, CA 95814
916.874-7708 (direct) | serafinn@saccounty.gov
www.per.saccounty.net



Planning and Environmental Review has several customer service options available and appointments can be

made for most services. Please see our website at planning.saccounty.gov for the most current information on how to obtain services including office and public counter hours.



4.2.1.2 *Planned Development Within the Service Area*

The District considered all anticipated growth within the District as a part of its demand projections. In order to verify that the selected growth assumptions appropriately include new developments, known planned developments were inventoried. The Elverta Specific Plan (ESP), which falls under the land use authority of Sacramento County, is currently the only known planned development within the District.[2] The ESP is a proposed 1,756-acre development located in the northeastern portion of the District's service area, consisting of residential, agricultural residential, commercial, office/professional, parks, and school land uses (Figure 3-3). In 2016, the District prepared a Water Supply Assessment (WSA) to support the development planning process. At that time, the demand associated with the project was estimated to be 944 AFY by 2017 and 4,303 AFY at full buildout by 2037 (Affinity Engineering and J. Crowley Group, 2016). However, construction of the ESP has not yet begun, and Sacramento County is in the process of updating the ESP. Since the updated land use plans for the ESP are not currently known, the demands associated with the ESP cannot be estimated at this time, and thus are not included in the District's projected water demands (Table 4-7). However, it is noted, that given the scale of the ESP, it is anticipated that the District will be required to prepare a revised WSA for the updated ESP, which will evaluate the availability of supply to meet all demands for the District, inclusive of the ESP and other anticipated growth. Additionally, it is noted that the District has the right to update its UWMP at any point, including outside of the 5-year regulatory-required update cycle, and that depending on the timing of the revised ESP, the District may opt to update or provide an amendment to the 2020 UWMP.

The annual growth rate of 0.38 percent, used as the basis for the growth in District demands, is anticipated to conservatively account for all anticipated growth within the District, outside of the ESP.

4.2.1.3 *Water Demand Factors*

Water use rates are influenced by a variety of factors, including weather, economic recession, and state and local regulations, among other drivers. Given this, selecting a "representative" baseline is important for developing the land-use based water demand factors to estimate baseline water use by existing customers, which can then be extrapolated and applied to future growth within the District.

Table 4-2 provides current and historical potable water demand and Table 4-1 provides historical water use by sector within the District. It is noted that the most recent water demand, for 2020 and 2021 was consistent with the pre-drought conditions of 2011-2013. However, in addition to climate and weather influences, customer water demands over the recent historical period are also influenced by water rates. In 2016, the District adopted a new water rate structure, that eliminated tiered rates and removed the rate-based incentive for customers to conserve water. In 2022, the District again adopted a

[2] Sacramento County Planning and Environmental Review – Elverta Specific Plan: https://planning.saccounty.net/LandUseRegulationDocuments/Pages/ElvertaSpecificPlan.aspx

4.2.4 Water Use for Lower Income Households

☑ *CWC § 10631.1*

(a) The water use projections required by Section 10631 shall include projected water use for single-family and multifamily residential housing needed for lower income households, as defined in Section 50079.5 of the Health and Safety Code, as identified in the housing element of any city, county, or city and county in the service area of the supplier.

(b) It is the intent of the Legislature that the identification of projected water use for single-family and multifamily residential housing for lower income households will assist a supplier in complying with the requirements under Section 65589.7 of the Government Code to grant a priority for the provision of service to housing units affordable to lower income households.

The water demands presented in Section 4.1.2 include projected future water use by lower income households. Per Health and Safety Code 50079.5, a lower income household is defined as a household with lower than 80 percent of the District's median income.

The water demand for lower income households was based on the number of needed extremely-low, very-low, and low-income units for 2021-2029 housing cycle identified in Sacramento County for the Sacramento Area Council of Governments' (SACOG) 2020 Regional Housing Needs Plan (RHNP). As presented in the Sacramento County Housing Element of 2021-2029, the RHNP identified a need for 2,233 extremely-low income, 2,233 very-low income, and 2,692 low-income units by 2029, or approximately 33 percent of households out of the total planned 21,272 units for unincorporated Sacramento County (Sacramento County, 2022). Since the District falls within the unincorporated Sacramento County area it is therefore assumed that approximately 33 percent of SFR and MFR residential water demands within the District's service area will be associated with lower income households.

The projected water demand for lower income households within the District's service area is presented in Table 4-9 for five-year increments between 2020 and 2040, which is estimated as 33 percent of the projected water demands of the associated sectors presented in Table 4-6. The total water demand for lower income households in 2045 is estimated to be 811 AFY.

Table 4-9 Projected Potable Water Demand for Lower-Income Households

Sector	2025	2030	2035	2040	2045
Single Family	725	746	766	783	798
Multi-Family	12	12	12	13	13
TOTAL	737	758	778	796	811

NOTES:
(a) Volumes are in units of AF.
(b) Per the District's 2021-2029 housing cycle identified in Sacramento County for the Sacramento Area Council of Governments' (SACOG) 2020 Regional Housing Needs Plan (RHNP), 33 percent of housing units served lower income households. It is assumed that approximately 33 percent of the future residential water demand will be associated with lower income households.

Todd Smith, Planning Director
Planning and Environmental Review

Troy Givans, Director
Department of Community Development

County of Sacramento

December 29, 2023

Kerry Schmitz, Division Chief, Water Supply
Sacramento County Water Agency
10151 Florin Road
Sacramento, CA 95829
schmitzk@saccounty.gov

Subject: Request for Ability to Serve the Sacramento County Regional Housing Needs Allocation (RHNA) Rezone Project (Control No. PLNP2020-00042)

Dear Kerry Schmitz,

Planning and Environmental Review (PER) is currently preparing the environmental analysis associated with the Sacramento County Regional Housing Needs Allocation (RHNA) Rezone Project (Project). The Project's revised Notice of Preparation (NOP) was released on December 22, 2023, and may be viewed online at: https://planning.saccounty.gov/PlansandProjectsIn-Progress/Pages/Countywide-Rezone-Program.aspx.

The Sacramento County Housing Element of 2021-2029 identifies a shortfall of 2,884 units for the lower-income category (includes the low, very low, and extremely low income categories; incomes ranging from $0 to $69,050 annually) in the County. Simply, there is insufficient appropriately-zoned sites to accommodate the County's RHNA obligation for the lower-income category. As such, PER is undertaking a rezone of ±248.33 acres comprising 83 candidate rezone sites within the unincorporated County to provide additional lower-income (to fulfill the RHNA obligation and increase the buffer) and moderate income (to increase the buffer) category housing opportunities. The Project does not propose to construct new residential or other development on the ±248.33 acres proposed to be rezoned; rather, it provides capacity for future development of housing units to meet the County's remaining unmet RHNA of 2,884 lower income category units, consistent with State law. The planning horizon year for the Project is 2029.

Attachment 1 lists the 5 candidate rezone sites (Sites 45-47 and 60-61) within Sacramento County Water Agency's (SCWA's) service area that are proposed to be rezoned with the Project. Information regarding site acreage, existing and proposed zoning designations, and net increase in units are also provided. The net increase in residential units is calculated as the difference between an existing zoning designation's maximum density and the proposed zoning designation's maximum density. For example, a 1-acre site currently zoned RD-20 (maximum density of 20 units per acre) with a proposed zoning of RD-30 (maximum density of 30 units per acre) nets 10 additional units with a rezone. Attachment 2 depicts the locations of these candidate rezone sites within SCWA's service area, as well as individual site maps. In total, the Project is anticipated to result in a net increase of 347 lower-income units within SCWA's service area.

It is noted that Section 4.6 of the SCWA's 2020 Urban Water Management Plan provides a projection of water use for lower income households. Pursuant to California Water Code §10910 through 10915, PER requests the following information:

1. Whether the projected water demand associated with the Project was include as part of the most recently adopted urban water management plan; and
2. If the Project's water demand was not included as part of the most recently adopted urban water management plan, does SCWA have adequate capacities to serve the Project?

Additionally, PER requests any comments (including conditions of approval or advisories) Sacramento County Water Agency may have for the Project. If you have any questions or would like to set up a meeting to further discuss the Project, please contact me at shenj@saccounty.gov or 916.875.3711.

Sincerely,



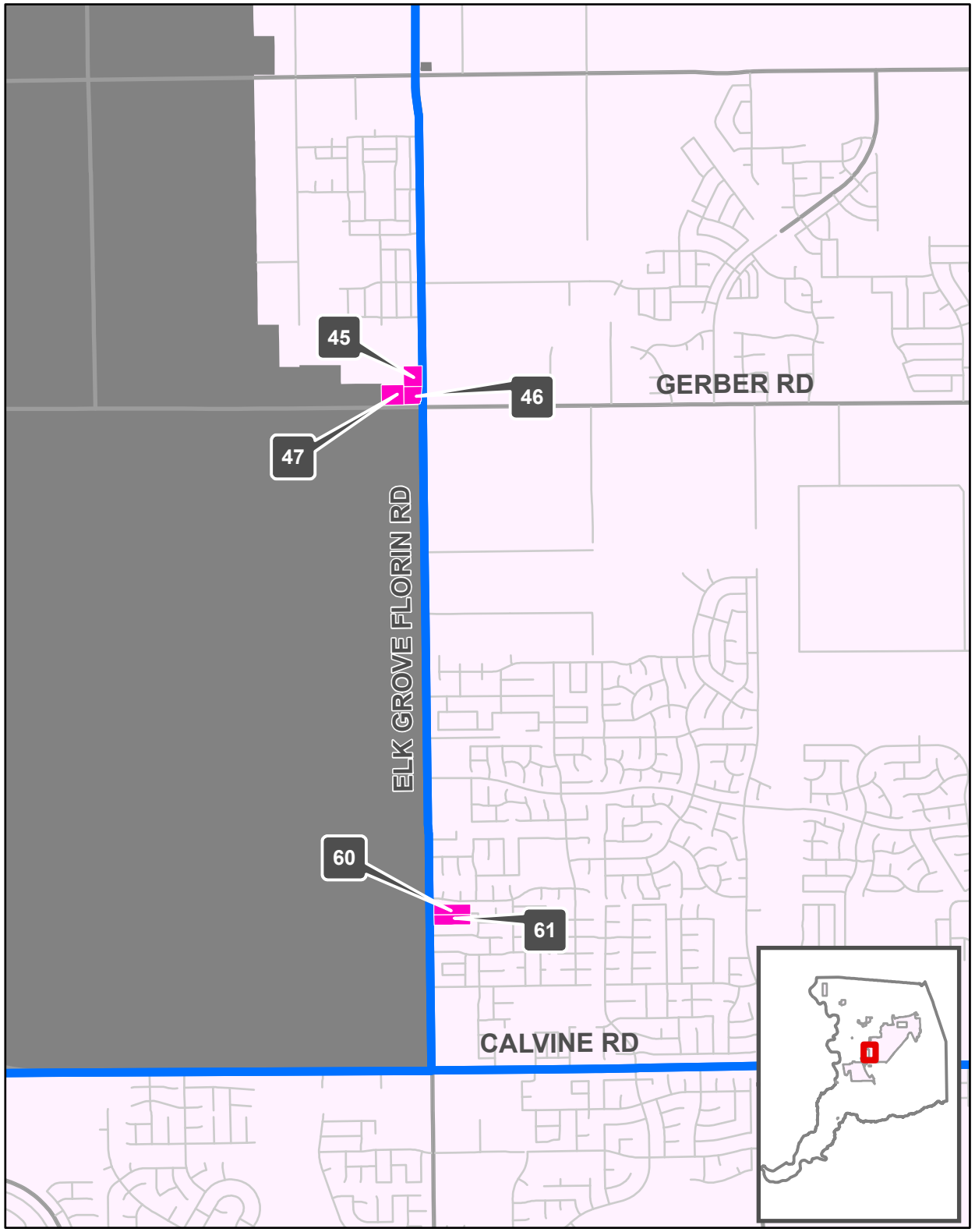
Jessie Shen
Senior Planner

Attachments

Attachment 1 – Sacramento County Water Agency List of Candidate Rezone Sites
Attachment 2 – Sacramento County Water Agency Map of Candidate Rezone Sites

Site #	APN	Address/Siting Description	Lot size / Portion of Lot Rezoned (net acres)	Zoning Designation/SPA/ Specific or Master Plan Area (Current)	Zoning Designation (Proposed)	Net Increase
45	065-0070-009-0000	7572 Elk Grove Florin Road	2.31	A-10	RD-30	68
46	065-0070-010-0000	7590 Elk Grove Florin Road	1.99	A-10	RD-30	58
47	065-0070-011-0000	8831 Gerber Road	2.71	A-10	RD-30	80
60	121-0120-001-0000	8207 Elk Grove Florin Road	2.42	UR	RD-30	71
61	121-0120-002-0000	8225 Elk Grove Florin Road	2.39	UR	RD-30	70

Sacramento County Water Agency



- 45 APN 065-0070-009-0000
- 46 APN 065-0070-010-0000
- 47 APN 065-0070-011-0000
- 60 APN 121-0120-001-0000
- 61 APN 121-0120-002-0000

Legend

- Proposed Rezone Sites
- Community Boundaries
- Local Roads
- Major Roads

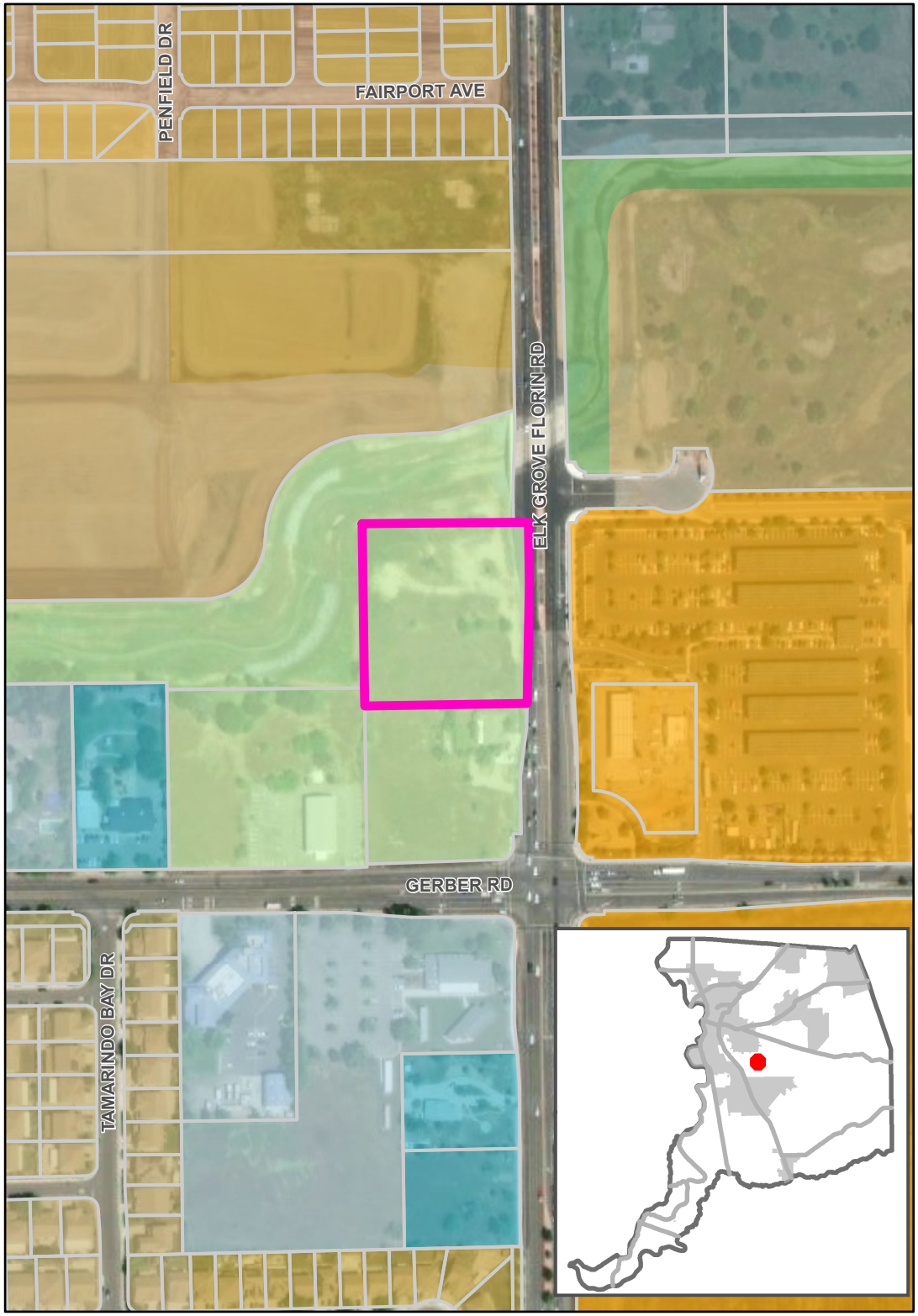
N

0 0.25 0.5 1 Miles

Site 45

APN 065-0070-009-0000

7572 Elk Grove Florin Road,
South Sacramento



Legend

Proposed Rezone Site

Zoning

- A-10 Agricultural Holding Zone
- AR-1 Agricultural-Residential - 1 Acre
- AR-2 Agricultural-Residential - 2 Acres
- AR-5 Agricultural-Residential - 5 Acres
- O Recreation
- RD-4 Residential
- RD-5 Residential
- RD-7 Residential
- SC Shopping Center

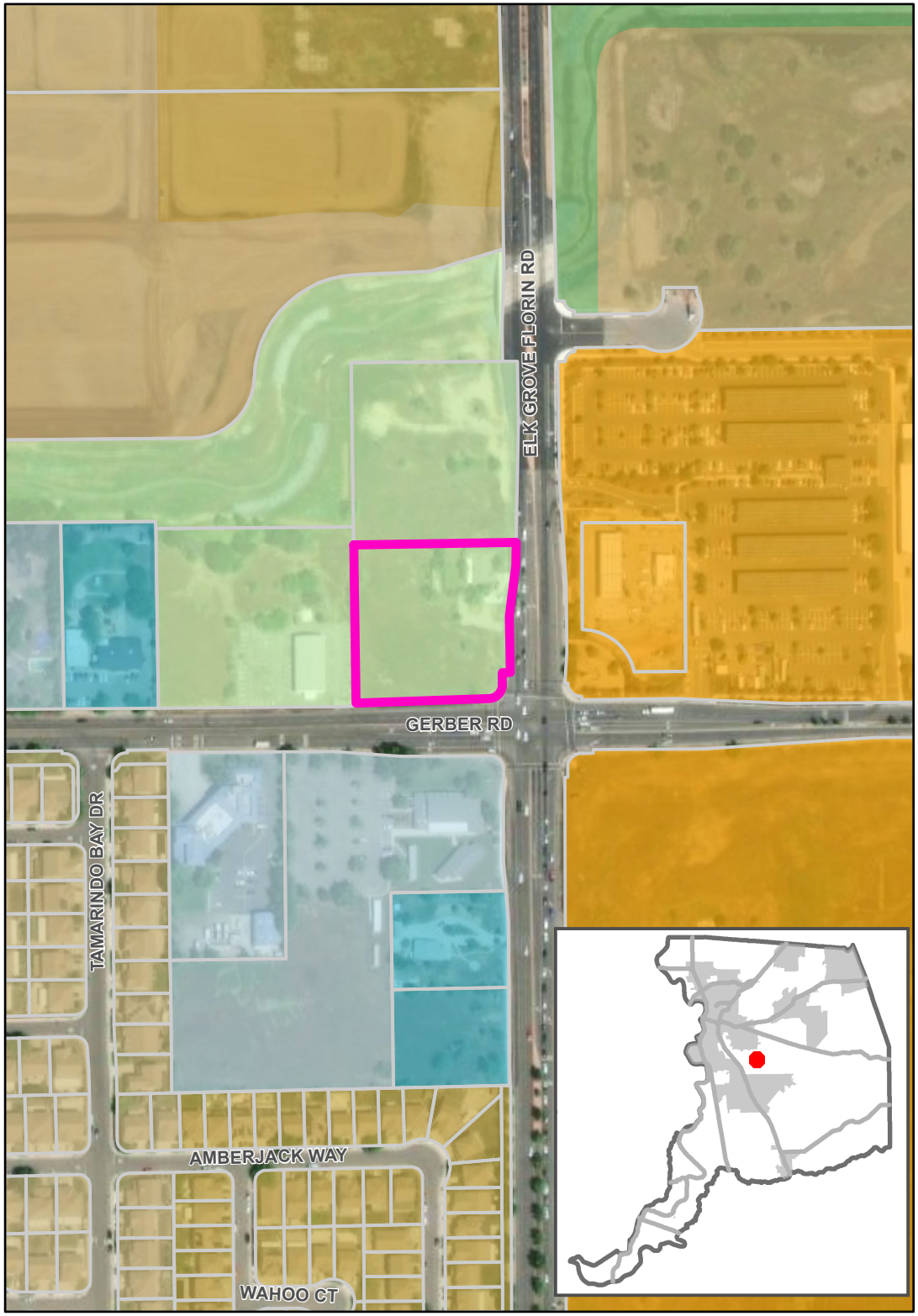
N

0 0.0375 0.075 0.15
Miles

Site 46

APN 065-0070-010-0000

7590 Elk Grove Florin Road,
South Sacramento



Legend

Proposed Rezone Site

Zoning

- A-10 Agricultural Holding Zone
- AR-1 Agricultural-Residential - 1 Acre
- AR-2 Agricultural-Residential - 2 Acres
- O Recreation
- RD-5 Residential
- RD-7 Residential
- SC Shopping Center

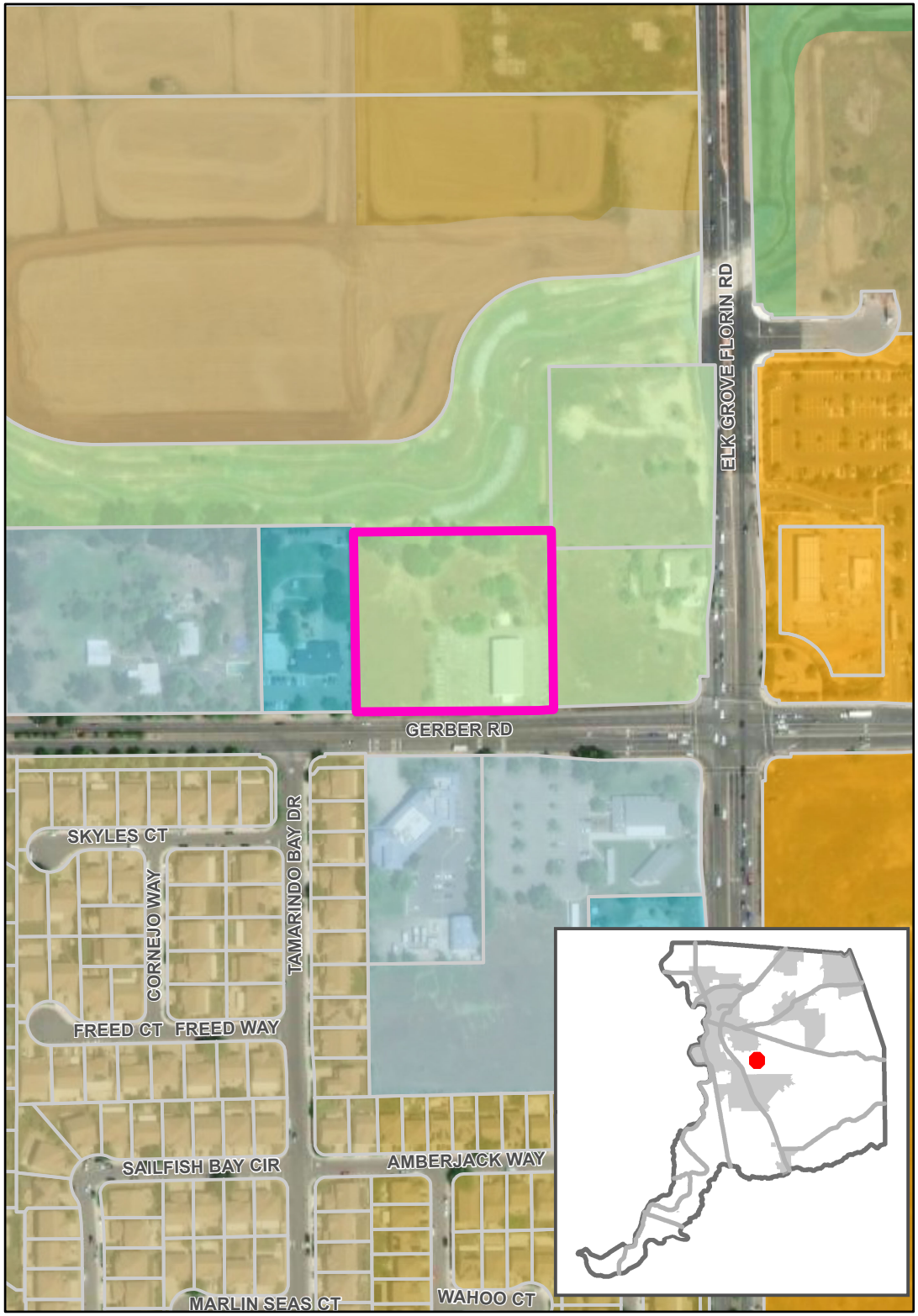
N

0 0.0375 0.075 0.15 Miles

Site 47

APN 065-0070-011-0000

8831 Gerber Road,
South Sacramento



Legend

Proposed Rezone Site

Zoning

- A-10 Agricultural Holding Zone
- AR-1 Agricultural-Residential - 1 Acre
- AR-2 Agricultural-Residential - 2 Acres
- AR-5 Agricultural-Residential - 5 Acres
- O Recreation
- RD-4 Residential
- RD-5 Residential
- RD-7 Residential
- SC Shopping Center

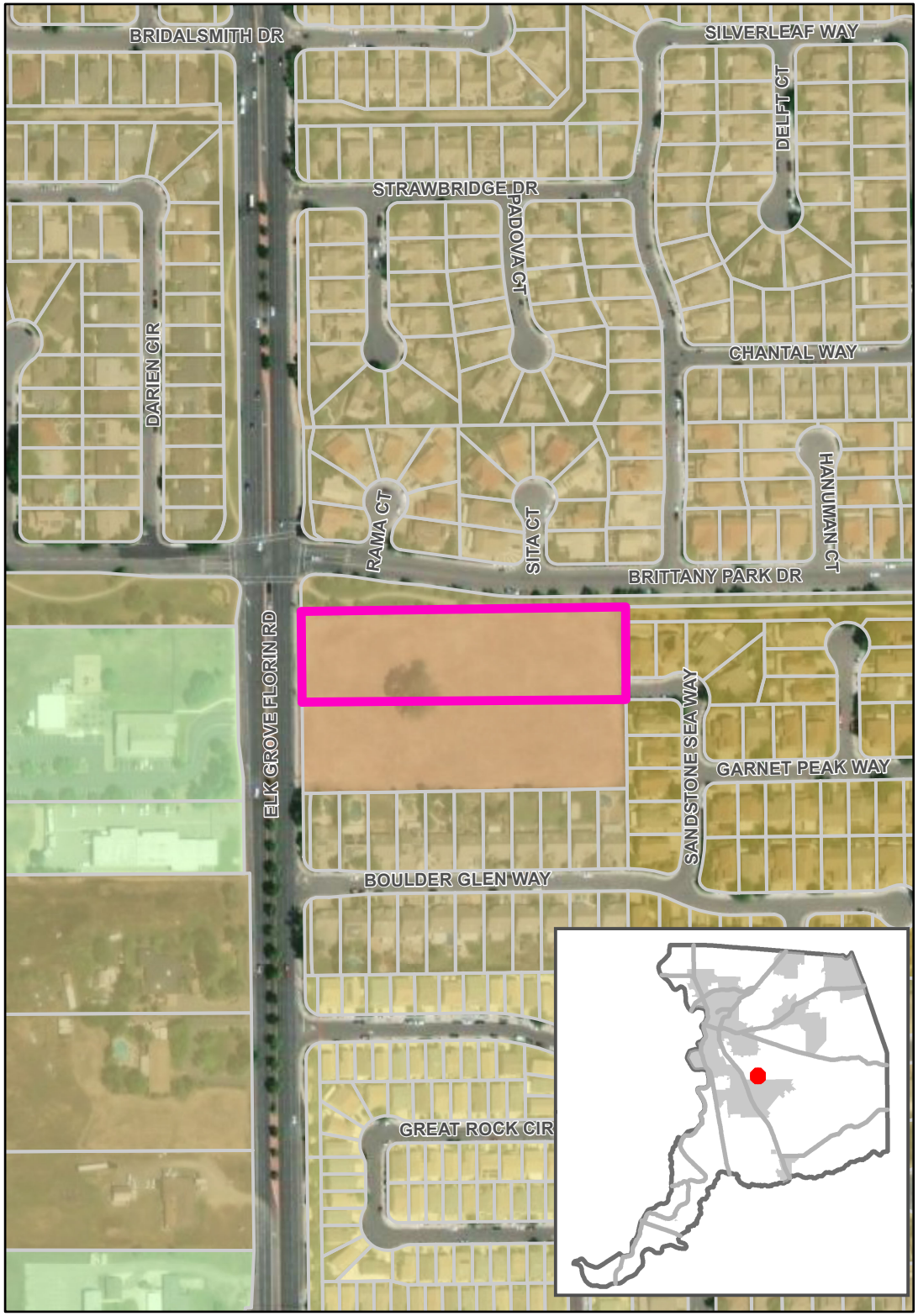
N

0 0.0375 0.075 0.15 Miles

Site 60

APN 121-0120-001-0000

8207 Elk Grove Florin Road, Vineyard



Legend

- Proposed Rezone Site

Zoning

- A-10 Agricultural Holding Zone
- RD-15 Multiple Family Residential
- RD-5 Residential
- RD-7 Residential
- UR Urban Reserve

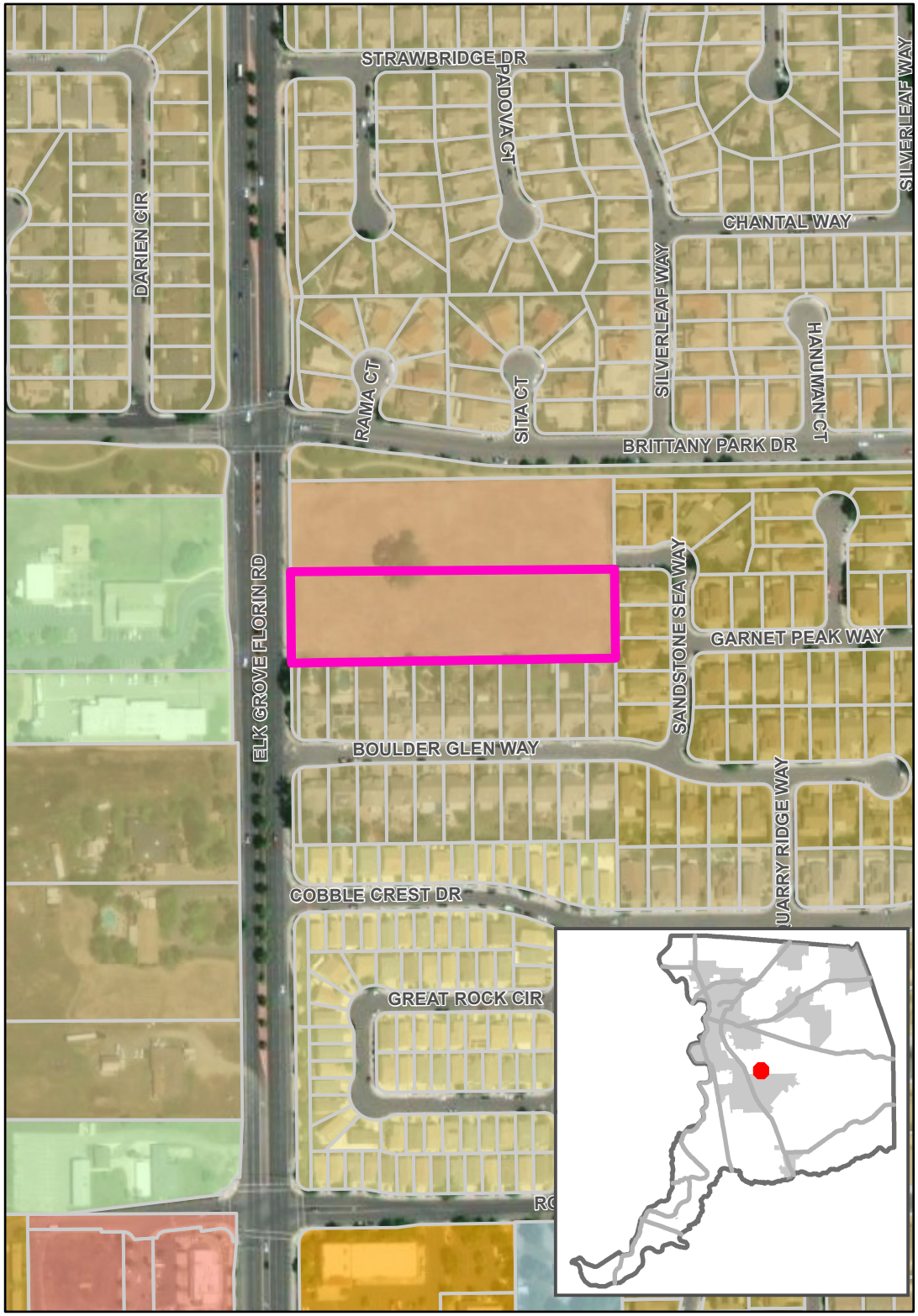
N

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Site 61

APN 121-0120-002-0000

8225 Elk Grove Florin Road, Vineyard



Legend

- Proposed Rezone Site

Zoning

- A-10 Agricultural Holding Zone
- AR-2 Agricultural-Residential - 2 Acres
- LC Light Commercial
- RD-15 Multiple Family Residential
- RD-20 Multiple Family Residential
- RD-5 Residential
- RD-7 Residential
- SC Shopping Center
- UR Urban Reserve

N

0 0.0375 0.075 0.15 Miles

From:	Grinstead. Michael
To:	Shen. Jessie
Cc:	Steeg. Bob; Kinyua. Esther; Inman. Joelle
Subject:	RE: Regional Housing Need Allocation (RHNA) Countywide Rezone Scoping Meeting and Request for Conditions of Approval
Date:	Wednesday, February 28, 2024 2:38:14 PM
Attachments:	FW ATTENTION Request for Ability To Serve the PLNP2020-00042 - Sacramento County RHNA Rezone Project.msg image001.png image002.png

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Jessie,

The attached email still stands. With three of the five parcels removed the following is still true:

“The 2020 UWMP predicts an increase in the number of connections (and therefore water used) and does not tie that increase to any specific project much less any specific APN. The UWMP also predicts an increase in overall demands due to growth that is lower than what the WSIP predicts. Long story short, the 2020 UWMP predicted an increase in connections that is below what has occurred and predicts a new level of demand that is lower than what our WSIP predicts. So, the increase in DUs associated with this change in zoning, while not explicitly studied in any planning document, would fit within the growth analyzed in the 2020 UWMP and SCWA will have adequate water supplies to serve the project. “

Please continue to work with Bob Steeg on condition language.

Thank you,

Mike Grinstead
Sacramento County Water Agency
827 7th Street Room 301
Sacramento, CA 95814
Office – 916 875 7276
Cell – 916 215 8046

From: Shen. Jessie <ShenJ@saccounty.gov>
Sent: Wednesday, February 28, 2024 1:55 PM
To: Grinstead. Michael <GrinsteadM@saccounty.gov>
Cc: Steeg. Bob <steegb@saccounty.gov>; Kinyua. Esther <KinyuaE@saccounty.gov>; Inman. Joelle <inmanj@saccounty.gov>
Subject: RE: Regional Housing Need Allocation (RHNA) Countywide Rezone Scoping Meeting and Request for Conditions of Approval

Hi Mike,

Apologies for the delay in circling back on the email below - since we last connected in mid-January, we dropped 3 sites from this current rezone package. This means there are now only 2 sites resulting in a net increase of 141 lower-income multifamily units within SCWA’s service boundaries for the

current rezone package. These two sites are:

1. APN 121-0120-001 / 8207 Elk Grove Florin Road, 2.42 acres, existing UR zoning, proposed RD-30 zoning, net increase of 71 units
2. APN 121-0120-002 / 8225 Elk Grove Florin Road, 2.39 acres, existing UR zoning, proposed RD-30 zoning, net increase of 70 units

Based on SCWA's 2020 UWMP, on page 4-20, the multifamily residential demand factor is 0.17 af/du = 0.15 af/du for indoor + 0.02 sf/du for outdoor. The increase in water demand for 141 multifamily units would be 23.97 afy = 141 du * 0.17 af/du. Note this is the type of analysis we need to include in the EIR. Based on previous correspondence, SWCA indicated adequate water supplies to serve the project when it consisted of 5 rezone sites. Can you please confirm this is still the case now that there are only 2 rezone sites?

Hi Bob – apologies in the delay in connecting with you re: SCWA conditions for these sites. In a nutshell, our project is proposing to rezone the 2 sites listed above to create additional capacity for lower-income category units (to meet our Regional Housing Needs Assessment obligations). The project does not propose any actual development on these sites and you will see plans for actual development when a developer comes in for non-discretionary design review.

At this point, if SCWA would like to include conditions on the rezone, your standard conditions look pretty good as a starting point. Attached are SCWA conditions – I mined three entitlement projects (PLNP2021-00149, Gerber Creek Unit 2; PLNP2019-00020, Spring Gardens; and PLNP2022-00144, Chandon 13) and revised slightly for our Rezone Project (note future development on rezone sites will not likely include maps and if future maps were proposed, these would be subject to a future discretionary entitlement SWCA would review and condition). Please let me know if you'd like these conditions added for SCWA's two parcels, and if you have any edits - thank you!

Jessie Shen, Senior Planner
Planning and Environmental Review
827 7th Street, Room 225, Sacramento, CA 95814
916.875.3711 (direct) | shenj@saccounty.gov
www.per.saccounty.net

Planning and Environmental Review has several customer service options available and appointments can be made for most services. Please see our website at planning.saccounty.gov for the most current information on how to obtain services including office and public counter hours.

From: Grinstead. Michael <GrinsteadM@saccounty.gov>
Sent: Thursday, January 18, 2024 6:51 AM
To: Shen. Jessie <ShenJ@saccounty.gov>
Cc: Steeg. Bob <steegb@saccounty.gov>; Kinyua. Esther <KinyuaE@saccounty.gov>
Subject: Re: Regional Housing Need Allocation (RHNA) Countywide Rezone Scoping Meeting and Request for Conditions of Approval

Yes. You can also work Bob Steeg (ccd along with his supervisor) to craft the language. Bob has been conditioning projects for decades and is a real resource. He has a long list of standard conditions to choose from as well as the ability to suggest new ones.

He would benefit from the parcel list. Would start with SCWA parcels and then move on to the rest. We will need to thing about two points of connection to the water system, upsizing any existing pipes, following standards, etc.

Thanks,

Mike

From: Shen. Jessie <ShenJ@saccounty.gov>
Sent: Wednesday, January 17, 2024 10:30:18 PM
To: Schmitz. Kerry <schmitzk@saccounty.gov>
Cc: Grinstead. Michael <GrinsteadM@saccounty.gov>
Subject: RE: Regional Housing Need Allocation (RHNA) Countywide Rezone Scoping Meeting and Request for Conditions of Approval

Thank you, Kerry!

Mike – since you've already provided a response to our letter, we're all good on any needs from SCWA at this time. Do you have any thoughts on conditions SCWA would like to put on the candidate rezone properties? My supervisor and I were considering drafting some standard conditions for water districts (i.e., obtain will-serve letters prior to improvement plan approval) to review and consider if they'd like added to the rezone sites within their jurisdiction. Is that something you'd be interested in taking a look at? Let me know and I can share when drafted, thanks!

Jessie Shen, Senior Planner
Planning and Environmental Review
827 7th Street, Room 225, Sacramento, CA 95814
916.875.3711 (direct) | shenj@saccounty.gov
www.per.saccounty.net

Planning and Environmental Review has several customer service options available and appointments can be made for most services. Please see our website at planning.saccounty.gov for the most current information on how to obtain services including office and public counter hours.

From: Schmitz. Kerry <schmitzk@saccounty.gov>
Sent: Friday, January 12, 2024 11:47 AM
To: Shen. Jessie <ShenJ@saccounty.gov>
Cc: Grinstead. Michael <GrinsteadM@saccounty.gov>
Subject: RE: Regional Housing Need Allocation (RHNA) Countywide Rezone Scoping Meeting and

Request for Conditions of Approval

Hi Jessie – please add Mike Grinstead to the distribution. He'll be covering this for Sacramento County Water Agency. Thanks!

Kerry Schmitz, Water Supply Division Chief
Sacramento County Water Agency
Office - (916) 874-4681
Cell – (916) 764-1768

From: Shen. Jessie <ShenJ@saccounty.gov>
Sent: Friday, January 12, 2024 11:02 AM
To: Mezentsev. Dimitry <mezentsevd@saccounty.gov>; Johnson. Michael <johnsonm@saccounty.gov>; Rodriguez. Luis <RodriguezLu@saccounty.gov>; Durkee. Michael <durkeem@saccounty.gov>; Holt. Ashley <holta@saccounty.gov>; Alba. Leonardo <albal@saccounty.gov>; Evawere. Kelvin <evawerek@saccounty.gov>; Schmitz. Kerry <schmitzk@saccounty.gov>; Satow. Matt <satowma@saccounty.gov>; Peterson. Todd <petersont@saccounty.gov>; DEP-Virgil. Alyssa <virgila@saccounty.gov>; lucasje@saccounty.gov
Cc: Inman. Joelle <inmanj@saccounty.gov>; Smith. Todd <smithtodd@saccounty.gov>
Subject: Regional Housing Need Allocation (RHNA) Countywide Rezone Scoping Meeting and Request for Conditions of Approval

Hello Water Resources,

I wanted to reach out to see if we could schedule a virtual meeting with Water Resources staff the week of 1.23 or 1.29 to discuss the Project, primarily to answer any questions you may have in crafting conditions of approval/advisories for the Project. Apologies for the long list persons on this email – I haven't been as involved in PRC initial/condition review for a while, so am not familiar with who from Water Resources generally staffs these meetings.

If you are able to identify the Water Resources staff that would be involved in reviewing/conditioning this Project and can provide a few days/times of availability the week of 1.23 or 1.29, I can get the meeting scheduled – thank you so much!

Jessie Shen, Senior Planner
Planning and Environmental Review
827 7th Street, Room 225, Sacramento, CA 95814
916.875.3711 (direct) | shenj@saccounty.gov
www.per.saccounty.net

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From: Shen. Jessie <ShenJ@saccounty.gov>

Sent: Friday, January 12, 2024 10:32 AM
To: Inman. Joelle <inmanj@saccounty.gov>; Smith. Todd <smithtodd@saccounty.gov>; Defanti. David <defantid@saccounty.gov>; Givans. Troy <GivansT@saccounty.gov>; Vicari. Ron <vicarir@saccounty.gov>; Darrow. Matthew <DarrowM@saccounty.gov>; Shew. Cameron <ShewC@saccounty.gov>; Wade. Claudia <wadec@saccounty.gov>; Lieberman. Vanessa <liebermanv@saccounty.gov>; Zaragoza. Javier <zaragozaj@saccounty.gov>; Scarpa. Jon <scarpaj@saccounty.gov>; Schmitz. Kerry <schmitzk@saccounty.gov>; Satow. Matt <satowma@saccounty.gov>; Peterson. Todd <petersont@saccounty.gov>; Grinstead. Michael <GrinsteadM@saccounty.gov>; Bethke. Crystal <BethkeC@saccounty.gov>; Bowman. Chelsea <bowmanch@saccounty.gov>; Rickelton. Glen <RickeltonG@saccounty.gov>; Philley. Paul <pphilley@airquality.org>; Hudson. Kim <hudsonk@saccounty.gov>; Monasterio. Jennea <MonasterioJ@saccounty.gov>
Cc: projectreview@airquality.org; Plane Noise Info <PlaneNoiseInfo@saccounty.gov>; Mezentsev. Dimitry <mezentsevd@saccounty.gov>; Johnson. Michael <johnsonm@saccounty.gov>; Rodriguez. Luis <RodriguezLu@saccounty.gov>; Durkee. Michael <durkeem@saccounty.gov>; Holt. Ashley <holta@saccounty.gov>; Alba. Leonardo <albal@saccounty.gov>; Evawere. Kelvin <evawerek@saccounty.gov>; TRD. Plan <trdplan@saccounty.gov>; TRD. TIS <trdtis@saccounty.gov>; TRD. CSA1 <trdcsa1@saccounty.gov>; Floyd. Megan <FloydM@saccounty.gov>; Nguyen. Leana <NguyenL@saccounty.gov>; Hicks. James (SacSheriff) <jahicks@sacsheriff.com>; Cortes. James <CortesJa@saccounty.gov>; Byrum. Jimmy <byrumj@saccounty.gov>; wbonner@shra.org; Weichert. Christine <CWeichert@SHRA.org>; Armstrong. Robert <armstrongro@sacsewer.com>; SacSewer Interceptor Development Services <InterceptorDevServices@sacsewer.com>; PER-Long Range <PER-LongRange@saccounty.gov>; PER-Principals <PER-Principals@saccounty.gov>; Romo. Jose (romoj@SacCounty.NET) <romoj@saccounty.net>; Hashigami. Jody <hashigamij@saccounty.gov>; Richard Muzzy <RMuzzy@airquality.org>; Cullison. James <cullisonj@saccounty.gov>; DEP-Virgil. Alyssa <virgila@saccounty.gov>; lucasje@saccounty.gov; Gasperi. Gary <GasperiG@saccounty.gov>; Fung. Leslie <FungL@saccounty.gov>; Kokkinis. Pete <kokkinisp@saccounty.gov>; Nguyen. Danny <nguyendann@saccounty.gov>; Ramirez. Ashley <RamirezAs@saccounty.gov>; Almaraz. Jeff <AlmarazJ@saccounty.gov>; rainsm@saccounty.net; Middleton. Michael <MiddletonM@saccounty.gov>; Grassick. Joe <grassickj@saccounty.gov>; Pimentel. Dawn <pimenteld@saccounty.gov>; entitlements@smud.org; Kacey.Koons@smud.org; crrd. staff <crrdstaff@metrofire.ca.gov>; Nygren. Amy <Nygren.Amy@metrofire.ca.gov>; Schmidt. Diana <Schmidt.Diana@metrofire.ca.gov>; Hicks. James (SacSheriff) <jahicks@sacsheriff.com>; King. Vince <vking@southgaterecandpark.net>; Pham Saechao in Facilities <psaechao@egusd.net>
Subject: RE: Regional Housing Need Allocation (RHNA) Countywide Rezone Scoping Meeting and Request for Conditions of Approval

Hello,

Thank you to the agencies/departments that attended the Project's scoping meeting last Thursday, 1.4.24. For those who were unable to attend, a recording of the scoping meeting is available for on the Project's website (highlighted in yellow below).

As mentioned at the scoping meeting, we will be distributing Project materials (list of the 83 candidate rezone sites in a spreadsheet and maps) for your agency/department's review/use in

formulating conditions of approval and advisories for the Project. These materials will be provided in a subsequent email. If your agency/department has issues accessing/downloading, or would like us to tailor information specific to your needs, please reach out to Nathan (serafinn@saccounty.gov).

I will be reaching out to each agency/department to schedule 1-on-1 meetings so we keep the ball rolling on formulating conditions of approval and advisories for the Project (due Friday, March 1, 2024). Thanks all!

Jessie Shen, Senior Planner
Planning and Environmental Review
827 7th Street, Room 225, Sacramento, CA 95814
916.875.3711 (direct) | shenj@saccounty.gov
www.per.saccounty.net

Planning and Environmental Review has several customer service options available and appointments can be made for most services. Please see our website at planning.saccounty.gov for the most current information on how to obtain services including office and public counter hours.

From: Inman. Joelle <inmanj@saccounty.gov>
Sent: Thursday, December 28, 2023 12:14 PM
To: Smith. Todd <smithtodd@saccounty.gov>; Defanti. David <defantid@saccounty.gov>; Givans. Troy <GivansT@saccounty.gov>; Vicari. Ron <vicarir@saccounty.gov>; Darrow. Matthew <DarrowM@saccounty.gov>; Shew. Cameron <ShewC@saccounty.gov>; Wade. Claudia <wadec@saccounty.gov>; Lieberman. Vanessa <liebermanv@saccounty.gov>; Zaragoza. Javier <zaragozaj@saccounty.gov>; Scarpa. Jon <scarpaj@saccounty.gov>; Schmitz. Kerry <schmitzk@saccounty.gov>; Satow. Matt <satowma@saccounty.gov>; Peterson. Todd <petersont@saccounty.gov>; Grinstead. Michael <GrinsteadM@saccounty.gov>; Bethke. Crystal <BethkeC@saccounty.gov>; Bowman. Chelsea <bowmanch@saccounty.gov>; Rickelton. Glen <RickeltonG@saccounty.gov>; Philley. Paul <pphilley@airquality.org>; Hudson. Kim <hudsonk@saccounty.gov>; Monasterio. Jennea <MonasterioJ@saccounty.gov>
Cc: projectreview@airquality.org; Plane Noise Info <PlaneNoiseInfo@saccounty.gov>; Mezentsev. Dimitry <mezentsevd@saccounty.net>; Johnson. Michael <johnsonm@saccounty.gov>; Rodriguez. Luis <RodriguezLu@saccounty.gov>; Durkee. Michael <durkeem@saccounty.gov>; Holt. Ashley <holta@saccounty.gov>; Alba. Leonardo <albal@saccounty.gov>; Evawere. Kelvin <evawerek@saccounty.gov>; TRD. Plan <trdplan@saccounty.gov>; TRD. TIS <trdtis@saccounty.gov>; TRD. CSA1 <trdcsa1@saccounty.gov>; Floyd. Megan <FloydM@saccounty.gov>; Nguyen. Leana <NguyenL@saccounty.gov>; Hicks. James (SacSheriff) <jahicks@sacsheriff.com>; Cortes. James <CortesJa@saccounty.gov>; Byrum. Jimmy <byrumj@saccounty.gov>; wbonner@shra.org; Weichert. Christine <CWeichert@SHRA.org>; Armstrong. Robert <armstrongro@sacsewer.com>; SRCSD Development Services <srcsddevservices@SacCounty.NET>; Shen. Jessie <ShenJ@saccounty.gov>; PER-Long Range <PER-LongRange@saccounty.gov>; PER-Principals <PER-Principals@saccounty.gov>; Romo. Jose (romoj@SacCounty.NET) <romoj@saccounty.net>; Hashigami. Jody <hashigamij@saccounty.gov>
Subject: Regional Housing Need Allocation (RHNA) Countywide Rezone Scoping Meeting and Request for Conditions of Approval

Importance: High

Hello,

Planning and Environmental Review (PER) is currently processing the Sacramento County Regional Housing Needs Allocation (RHNA) Rezone Project to address the County's shortfall of lower income category units. A Notice of Preparation of an environmental document for the Project was originally issued in June 2023; however, given Project refinements, specifically the decrease in acreages proposed for rezone, there is a need to reissue the NOP. The revised NOP is available for review at the link below.

As currently proposed, PER is undertaking a rezone of ±248.33 acres comprising of 83 candidate rezone sites within the unincorporated County to provide additional lower-income (to fulfill the RHNA obligation and increase the buffer) and moderate income (to increase the buffer) category housing opportunities. The Project itself would not construct any housing units, but would allow for additional housing units to be constructed.

During the 30-day NOP comment period, PER will hold one scoping meeting tailored to agencies for the Project on Thursday, January 4, 2024 from 10:00 AM to 12:00 PM (noon) virtually via Zoom (https://saccounty-net.zoomgov.com/j/1615249340?pwd=K3pLbE1LOFV0dTRsM0c0c2tGbUZTQT09). PER encourages your agency's/department's attendance at the meeting to further understand the Project to be able to provide conditions of approval and advisories tailored to the Project on your agency's/department's behalf.

Pertinent Project information, including the NOP and scoping meeting information, may be viewed online at: https://planning.saccounty.gov/PlansandProjectsIn-Progress/Pages/Countywide-Rezone-Program.aspx.

Agencies/departments with specific questions about the Project should contact Jessie Shen, Senior Planner, at 916.875.3711 or shenj@saccounty.gov.

Joelle Inman, Principal Planner
Long Range Planning
Planning and Environmental Review
827 7th Street, Room 225, Sacramento, CA 95814 | (916) 874-7575 (direct)
For zoning inquiries, e-mail: *sacplan@saccounty.net*
www.per.saccounty.net/



Planning and Environmental Review has several customer service options available and appointments can be made for most services. Please see our website at planning.saccounty.gov for the most current information on how to obtain services including office and public counter hours.

From:	Grinstead. Michael
To:	Serafin. Nathan
Cc:	Schmitz. Kerry; Shen. Jessie; Inman. Joelle
Subject:	FW: ATTENTION: Request for Ability To Serve the PLNP2020-00042 - Sacramento County RHNA Rezone Project
Date:	Friday, January 12, 2024 11:36:00 AM
Attachments:	PLNP2020-00042_Ability to Serve Letter_SCWA.pdf image001.png Copy of UWMP Demands_Land Use Changes.xlsx
Importance:	High

Nathan,

Given that the changes PER is seeking to make with the rezoning are new, they are not contemplated explicitly in any SCWA planning document. The attached spreadsheet shows that the difference in demands between what is proposed in the letter and what was planned for show an increase in use for the specific APN acreage than what had been projected, although this is based upon an internal planning document called the Water System Infrastructure Plan (WSIP.)

The 2020 UWMP predicts an increase in the number of connections (and therefore water used) and does not tie that increase to any specific project much less any specific APN. The UWMP also predicts an increase in overall demands due to growth that is lower than what the WSIP predicts. Long story short, the 2020 UWMP predicted an increase in connections that is below what has occurred and predicts a new level of demand that is lower than what our WSIP predicts. So, the increase in DUs associated with this change in zoning, while not explicitly studied in any planning document, would fit within the growth analyzed in the 2020 UWMP and SCWA will have adequate water supplies to serve the project.

SCWA will need to include the updated demands in a build out model to determine if any changes to infrastructure (i.e. if pipes need to be bigger in the location of the projects.) We do not at this point know if there will be some changes to pipe diameters associated with the project. This will be accomplished over the next two years as the update to the Master Plan is completed. That update is slated to begin mid-2024.

Please let me know if you have any questions,

Mike Grinstead
Sacramento County Water Agency
827 7th Street Room 301
Sacramento, CA 95814
Office – 916 875 7276
Cell – 916 215 8046

Mike Grinstead
Sacramento County Water Agency
827 7th Street Room 301
Sacramento, CA 95814
Office – 916 875 7276

Cell – 916 215 8046

From: Schmitz. Kerry <schmitzk@saccounty.gov>
Sent: Tuesday, January 2, 2024 8:11 AM
To: Kinyua. Esther <KinyuaE@saccounty.gov>; Grinstead. Michael <GrinsteadM@saccounty.gov>
Subject: FW: ATTENTION: Request for Ability To Serve the PLNP2020-00042 - Sacramento County RHNA Rezone Project
Importance: High

Kerry Schmitz, Water Supply Division Chief
Sacramento County Water Agency
Office - (916) 874-4681
Cell – (916) 764-1768

From: Serafin. Nathan <serafinn@saccounty.gov>
Sent: Friday, December 29, 2023 10:55 AM
To: Schmitz. Kerry <schmitzk@saccounty.gov>
Cc: Shen. Jessie <ShenJ@saccounty.gov>; Inman. Joelle <inmanj@saccounty.gov>
Subject: ATTENTION: Request for Ability To Serve the PLNP2020-00042 - Sacramento County RHNA Rezone Project
Importance: High

Dear Kerry Schmitz,

Please find attached Sacramento County PER's Request for Ability to Serve the Regional Housing Needs Allocation (RHNA) Rezone Project (Control No. PLNP2020-00042).

Full details are included in the attached PDF, which include the request letter and a description of sites within your service area. Please reach out if you have any questions or issues accessing the document.

Best,

Nathan Serafin, Planning Associate
Planning and Environmental Review
827 7th Street, Room 225, Sacramento, CA 95814
916.874-7708 (direct) | serafinn@saccounty.gov
www.per.saccounty.net



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1 multi-family connection = 10-15 dwelling units
RD-30 = 30 dwelling units per acre

WSIP Zone 40 Demands through 2045 (ac-ft/yr)	Updated WSIP Zone 40 Demands through 2045 (ac-ft/yr)	UWMP Zone 40 Demands through 2045 (ac-ft/yr)	Updated UWMP Zone 40 Demands through 2045 (ac-ft/yr)	Year 2025 UWMP Connection Projections (Zone 40)	Actual Connections in Zone 40
90,400	90,437	84,796	84,834	9,096	5,006

UWMP Factor 1.70 af
connection

* The UWMP's connection projections for the year 2025 are much greater than the actual number of connections to-date (the UWMP projects connections in 5-year increments).
It therefore appears that the increased demands due to the proposed changes in land use types for the parcels in question, can be met.

Parcel Number	Acres	Maximum Dwelling units	Connections @ 10 DU	Connections @ 15 DU	Demands based on UWMP (10 DU) factors (ac-ft/yr)	Demands based on UWMP (15 DU) factors (ac-ft/yr)	Demands based on WSIP (ac-ft/yr)
065-0700-009	2.3	69	7	5	11.73	7.82	7.66
065-0070-010	1.8	54	5	4	9.18	6.12	5.99
065-0070-011	2.7	81	8	5	13.77	9.18	8.99
121-0120-001	2.2	66	7	4	11.22	7.48	7.33
121-0120-002	2.2	66	7	4	11.22	7.48	7.33

APPENDIX UTIL-2: CALIFORNIA AMERICAN WATER COMPANY CORRESPONDENCE AND WATER SUPPLY ASSESSMENT

THESE CORRESPONDENCES INCLUDED FOUR ADDITIONAL SITES THAT ARE LONGER INCLUDED IN THE PROJECT. ADDITIONALLY, NUMBERING OF THE CANDIDATE REZONE SITES HAVE BEEN MODIFIED SINCE THE OCCURRENCE OF THESE CORRESPONDENCES.

Todd Smith, Planning Director
Planning and Environmental Review

Troy Givans, Director
Department of Community Development

County of Sacramento

December 29, 2023

Audie Foster, General Manager
California American Water
4701 Beloit Drive
Sacramento, CA 95838
audie.foster@amwater.com

Subject: Request for a Water Supply Assessment for the Sacramento County Regional Housing Needs Allocation (RHNA) Rezone Project (Control No. PLNP2020-00042)

Dear Audie Foster,

Planning and Environmental Review (PER) is currently preparing the environmental analysis associated with the Sacramento County Regional Housing Needs Allocation (RHNA) Rezone Project (Project). The Project's revised Notice of Preparation (NOP) was released on December 22, 2023, and may be viewed online at: https://planning.saccounty.gov/PlansandProjectsIn-Progress/Pages/Countywide-Rezone-Program.aspx.

The Sacramento County Housing Element of 2021-2029 identifies a shortfall of 2,884 units for the lower-income category (includes the low, very low, and extremely low income categories; incomes ranging from $0 to $69,050 annually) in the County. Simply, there is insufficient appropriately-zoned sites to accommodate the County's RHNA obligation for the lower-income category. As such, PER is undertaking a rezone of ±248.33 acres comprising 83 candidate rezone sites within the unincorporated County to provide additional lower-income (to fulfill the RHNA obligation and increase the buffer) and moderate income (to increase the buffer) category housing opportunities. The Project does not propose to construct new residential or other development on the ±248.33 acres proposed to be rezoned; rather, it provides capacity for future development of housing units to meet the County's remaining unmet RHNA of 2,884 lower income category units, consistent with State law. The planning horizon year for the Project is 2029.

Attachment 1 lists the 33 candidate rezone sites (Sites 5, 8, 16-17, 23, 27-28, 31, 33-42, 44, 48-59, and 62-23) within California American Water's service area that are proposed to be rezoned with the Project. Information regarding site acreage, existing and proposed zoning designations, and net increase in units are also provided. The net increase in residential units is calculated as the difference between an existing zoning designation's maximum density and the proposed zoning designation's maximum density. For example, a 1-acre site currently zoned RD-20 (maximum density of 20 units per acre) with a proposed zoning of RD-30 (maximum density of 30 units per acre) nets 10 additional units with a rezone. Attachment 2 depicts the locations of these candidate rezone sites within California American Water's service area, as well as individual site maps. In total, the Project is anticipated to result in a net increase of 2,105 units (1,990 lower-income units and 115 moderate-income units) within California American Water's service area.

It is noted that Section 4.5 2 of California American Water's 2020 Urban Water Management Plan for the Sacramento Mian District provides a projection of water use for lower income households. Pursuant to California Water Code §10910 through 10915, PER requests the following information:

1. Whether the projected water demand associated with the Project was include as part of the most recently adopted urban water management plan; and
2. If the Project's water demand was not included as part of the most recently adopted urban water management plan, since the Project would result in a net increase of more than 500 dwelling units within California American Water's service area, please provide a water supply assessment (WSA) for the Project.

California Water Code §10910(c) identifies that the WSA shall include a discussion regarding whether the public water system's total projected water supplies available during normal, single dry, and multiple dry water years during a 20-year projection will meet the projected water demand associated with a proposed project, in addition to the public water system's existing and planned future uses, including agricultural and manufacturing uses.

Additionally, PER requests any comments (including conditions of approval or advisories) California American Water may have for the Project. If you have any questions or would like to set up a meeting to further discuss the Project, please contact me at shenj@saccounty.gov or 916.875.3711.

Sincerely,



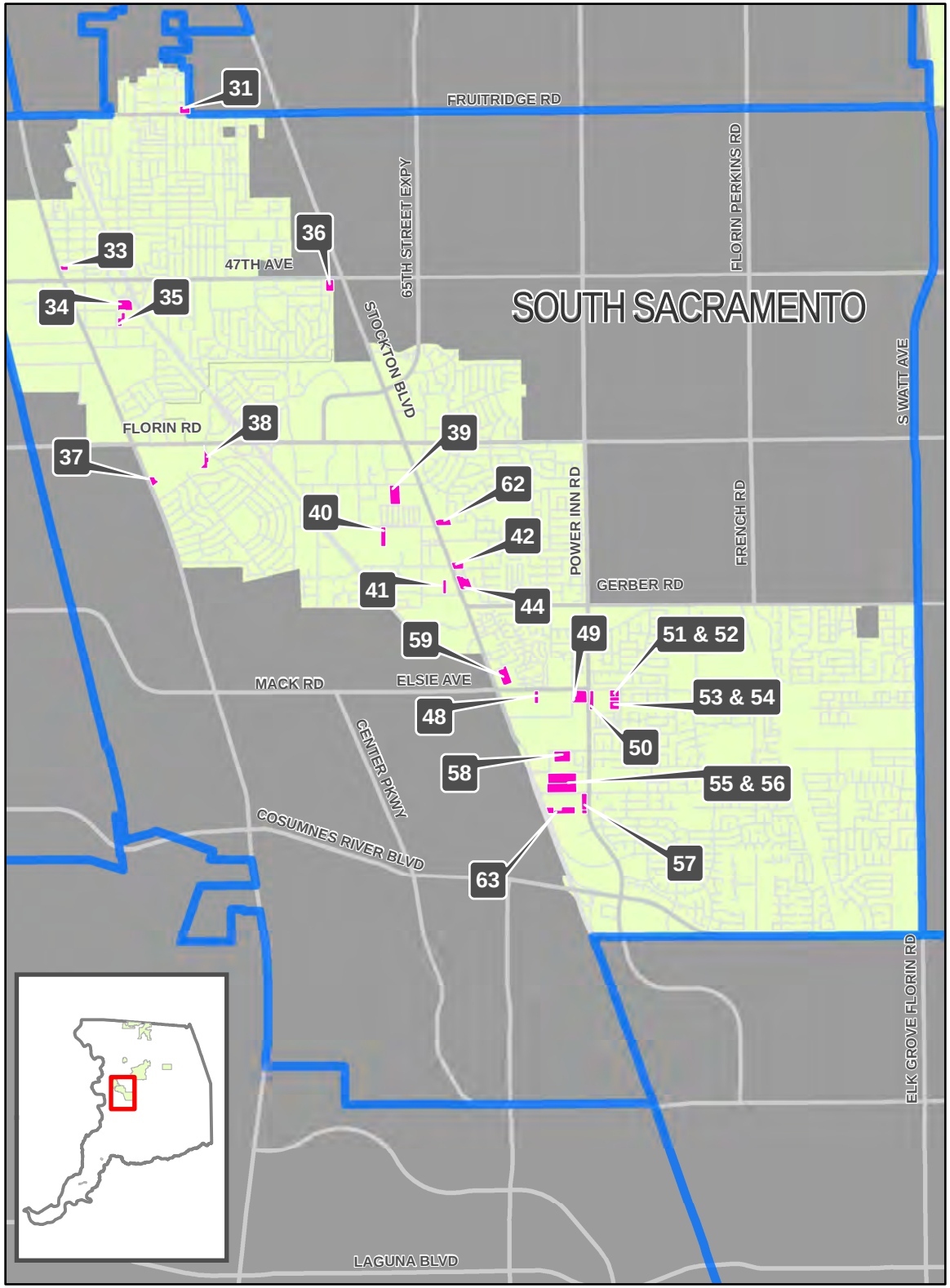
Jessie Shen
Senior Planner

Attachments

Attachment 1 – California American Water List of Candidate Rezone Sites

Attachment 2 – California American Water Maps of Candidate Rezone Sites

Site #	APN	Address/Siting Description	Lot size / Portion of Lot Rezoned (net acres)	Zoning Designation/SPA/ Specific or Master Plan Area (Current)	Zoning Designation (Proposed)	Net Increase
5	209-0720-027-0000	370 feet N Roseville Road/Antelope Road	5.28	MP	RD-40	211
8	220-0311-019-0000	5804 Garfield Avenue	0.89	RD-20	RD-30	9
16	075-0020-015-0000	9425 Folsom Boulevard	11.45	RD-20/O	RD-40/O	229
17	075-0440-024-0000	450 feet NE Folsom Boulevard/Paseo Rio Way	2.45	RD-20(PC)	RD-40	49
23	222-0024-001-0000 & 222-0024-041-0000	E Roseville Road/Elkhorn Boulevard overpass	9.96	RD-10	RD-30	79
27	203-0080-021-0000	120 feet W of Elverta Road/Bellingrath Drive	1.15	RD-5	RD-30	29
28	203-0080-027-0000	480 feet W of Elverta Road/Bellingrath Drive	5.86	AR-5	RD-30	174
31	022-0252-018-0000	4541 Fruitridge Road	1.77	RD-20	RD-30	18
33	037-0242-027-0000 & 037-0242-028-0000	SE 45th Avenue/Franklin Boulevard & 6301 Franklin Boulevard	1.73	LC	RD-30	0
34	039-0054-001-0000	4001 48th Avenue	3.51	RD-20	RD-30	35
35	039-0072-016-0000	NE 49th Avenue/Wesley Avenue	1.39	RD-20	RD-30	14
36	039-0241-001-0000	240 feet W of 47th Avenue/Stockton Boulevard	2.14	RD-20	RD-30	22
37	050-0010-076-0000	180 feet SE of Franklin Boulevard/Meadowgate Drive	1.05	GC	RD-40	11
38	050-0010-077-0000	7236 E Parkway	2.08	RD-20	RD-30	21
39	050-0311-028-0000	630 feet W of 66th Avenue/Stockton Boulevard	4.39	RD-20	RD-40	88
40	050-0331-003-0000	6130 Orange Avenue	2.35	RD-5	RD-30	59
41	050-0391-006-0000	6707 Stacy Avenue	1.10	RD-5	RD-30	28
42	051-0160-014-0000	NE Stockton Boulevard/Walter Avenue	1.68	RD-20	RD-40	34
44	051-0630-021-0000	NE Stockton Boulevard/Whitewillow Drive	3.21	RD-20	RD-40	64
48	115-0061-007-0000	7604 Elsie Avenue	1.22	RD-5	RD-15	12
49	115-0062-026-0000	7825 Robinette Road	3.08	RD-5	RD-40	108
50	115-0073-001-0000	SE Elsie Avenue/Power Inn Road	1.78	RD-5	RD-15	18
51	115-0073-010-0000	SW Elsie Avenue/Iona Way	0.73	RD-5	RD-15	7
52	115-0073-011-0000	140 feet W of Elsie Avenue/Iona Way	0.84	RD-5	RD-15	8
53	115-0073-012-0000	220 feet S of Elsie Avenue/Iona Way	0.94	RD-5	RD-15	10
54	115-0073-013-0000	350 feet S of Elsie Avenue/Iona Way	1.87	RD-5	RD-15	19
55	115-0201-012-0000	7901 Stevenson Avenue	6.51	RD-5	RD-30	163
56	115-0201-018-0000	7516 Rangeview Lane	6.98	RD-5	RD-40	245
57	115-0202-018-0000 & 115-0202-019-0000	8016 Stevenson Avenue & 540 feet S of Stevenson Avenue/Power Inn Road	2.65	RD-5	RD-30	66
58	115-0210-010-0000	540 feet W of Lenhart Road/Power Inn Road	4.13	RD-5	RD-15	41
59	115-1980-003-0000	7333 Elsie Avenue	3.64	RD-20	RD-40	73
62	051-0640-049-0000	NE Stockton Boulevard/Orange Avenue	2.26	RD-20/NPA (Stockton Blvd)	RD-40	45
63	115-0202-002-0000 & 115-0202-005-0000	8095 E Stockton Boulevard & 8099 E Stockton Boulevard	4.66	RD-5/NPA (Victory Avenue)	RD-30	116



California American Water, Part A

- 31 APN 022-0252-018-0000
- 33 APNs 037-0242-027-0000 & 037-0242-028-0000
- 34 APN-039-0054-001-0000
- 35 APN 039-0072-016-0000
- 36 APN 039-0241-001-0000
- 37 APN 050-0010-076-0000
- 38 APN 050-0010-077-0000
- 39 APN 050-0311-028-0000
- 40 APN 050-0331-003-0000
- 41 APN 050-0391-006-0000
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- 44 APN 051-0630-021-0000
- 48 APN 115-0061-007-0000
- 49 APN 115-0062-026-0000
- 50 APN 115-0073-001-0000
- 51 APN 115-0073-010-0000
- 52 APN 115-0073-011-0000
- 53 APN 115-0073-012-0000
- 54 APN 115-0073-013-0000
- 55 APN 115-0201-012-0000
- 56 APN 115-0201-018-0000
- 57 APNs 115-0202-018-0000 & 115-0202-019-0000
- 58 APN 115-0210-010-0000
- 59 APN 115-1980-003-0000
- 62 APN 051-0640-049-0000
- 63 APNs 115-0202-002-0000 & 115-0202-005-0000

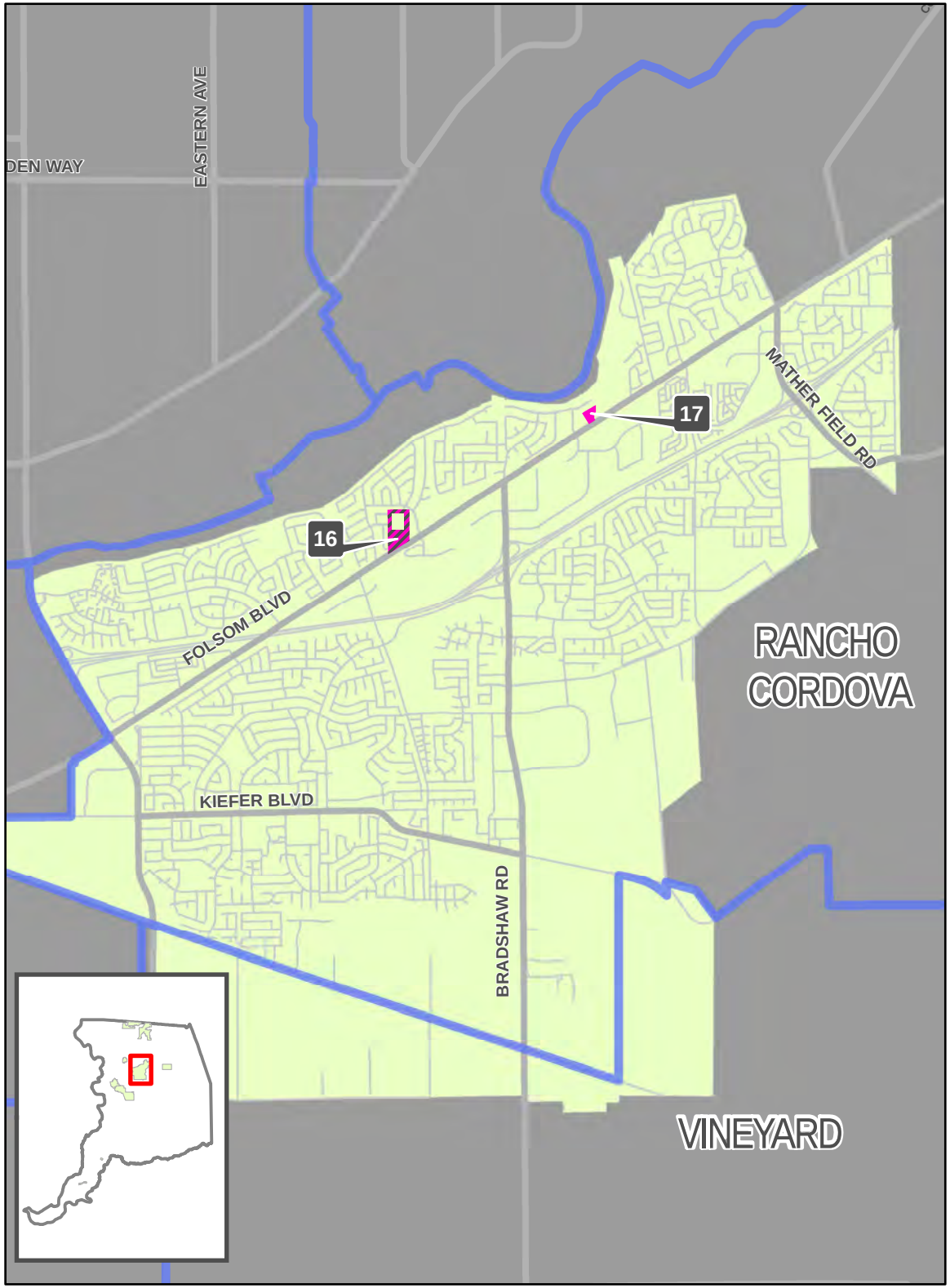
Legend

- Proposed Rezone Sites
- Community Boundaries
- Major Roads
- Local Roads

N

0 0.25 0.5 1 1.5 Miles

California American Water, Part B



16 APN 075-0020-015-0000

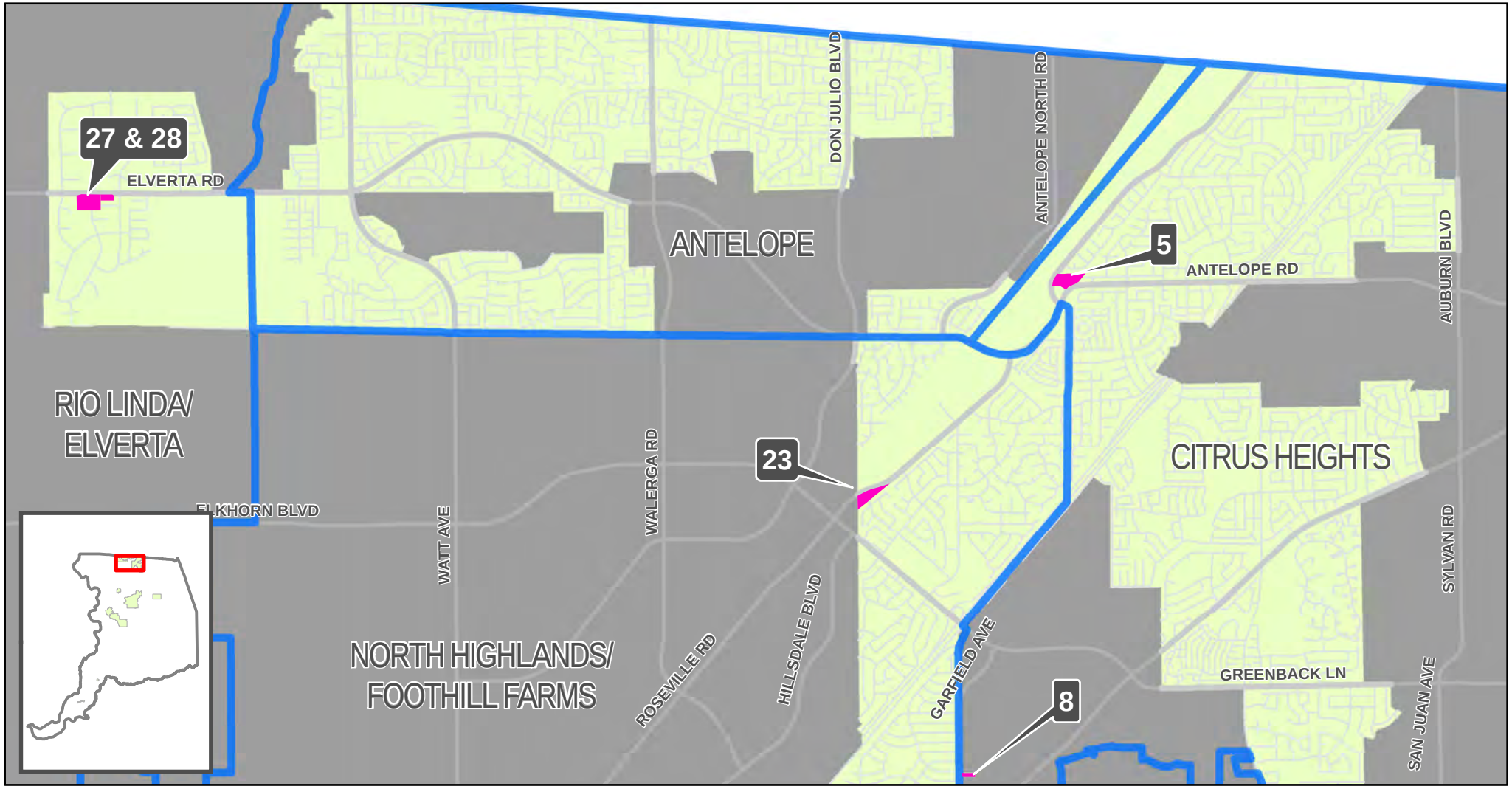
17 APN 075-0440-024-0000

Legend

- Proposed Rezone Sites
- Partially Rezoned Parcels
- Community Boundaries
- Major Roads
- Local Roads

N

0 0.25 0.5 1 Miles



California American Water, Part C

Legend

- Proposed Rezoning Sites
- Community Boundaries
- Major Roads
- Local Roads

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0 0.5 1 2 Miles

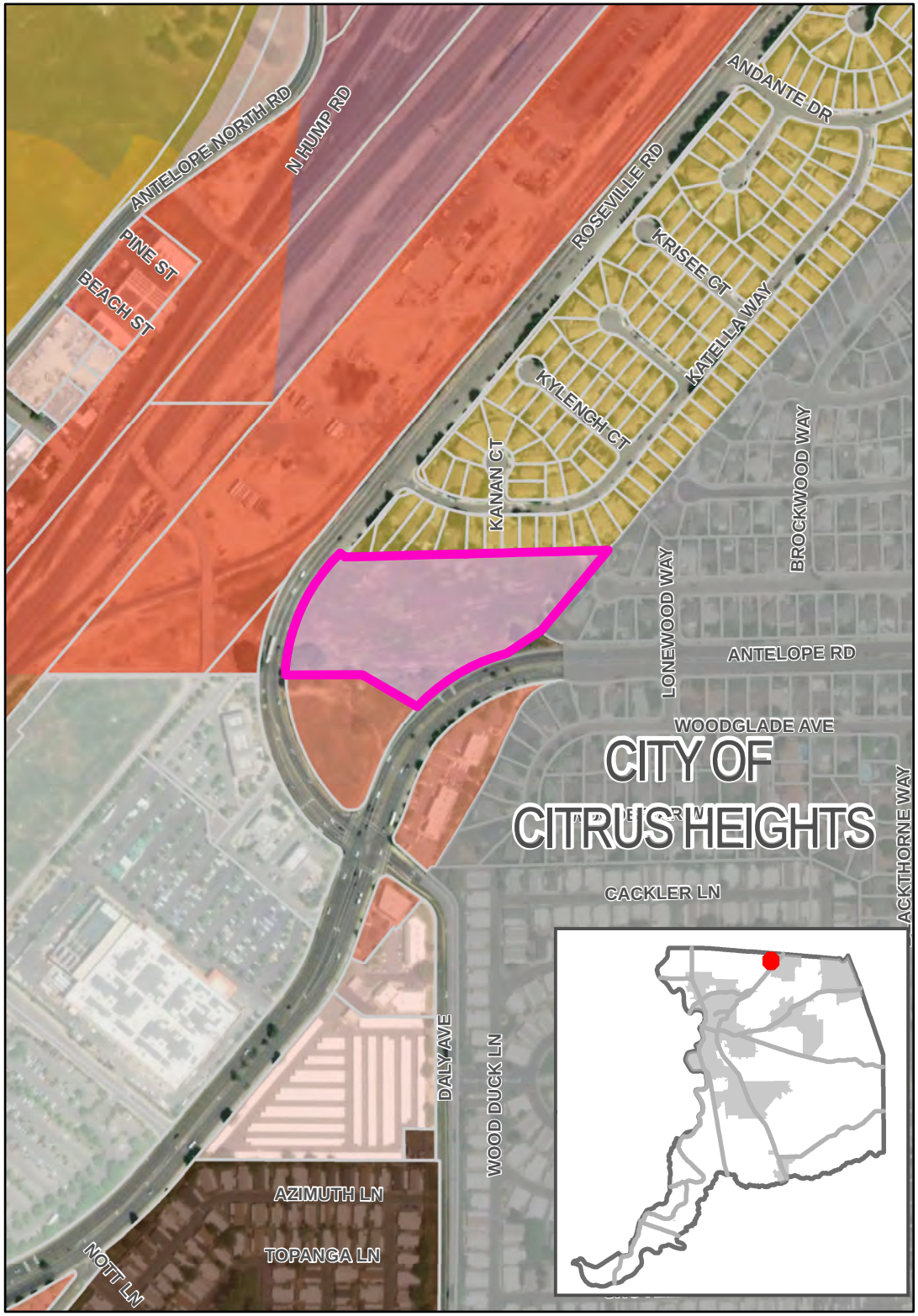
- 5 APN 209-0720-027-0000
- 8 APN 220-0311-019-0000
- 23 APN 222-0024-041-0000*
- 27 APN 203-0080-021-0000
- 28 APN 203-0080-027-0000

*Overlaps with Sacramento Suburban Water District

Site 5

APN 209-0720-027-0000

370 feet North of Roseville Road/Antelope Road, Antelope



Legend

- Proposed Rezone Site

Zoning

- AR-2 Agricultural-Residential - 2 Acres
- GC General Commercial
- IR Interim-Agricultural Reserve
- LC Light Commercial
- M-1 Light Industrial
- M-2 Heavy Industrial
- MP Industrial - Office Park
- RD-20 Multiple Family Residential
- RD-7 Residential
- RM-1 Mobile Home Subdivision
- SPA Special Planning Area

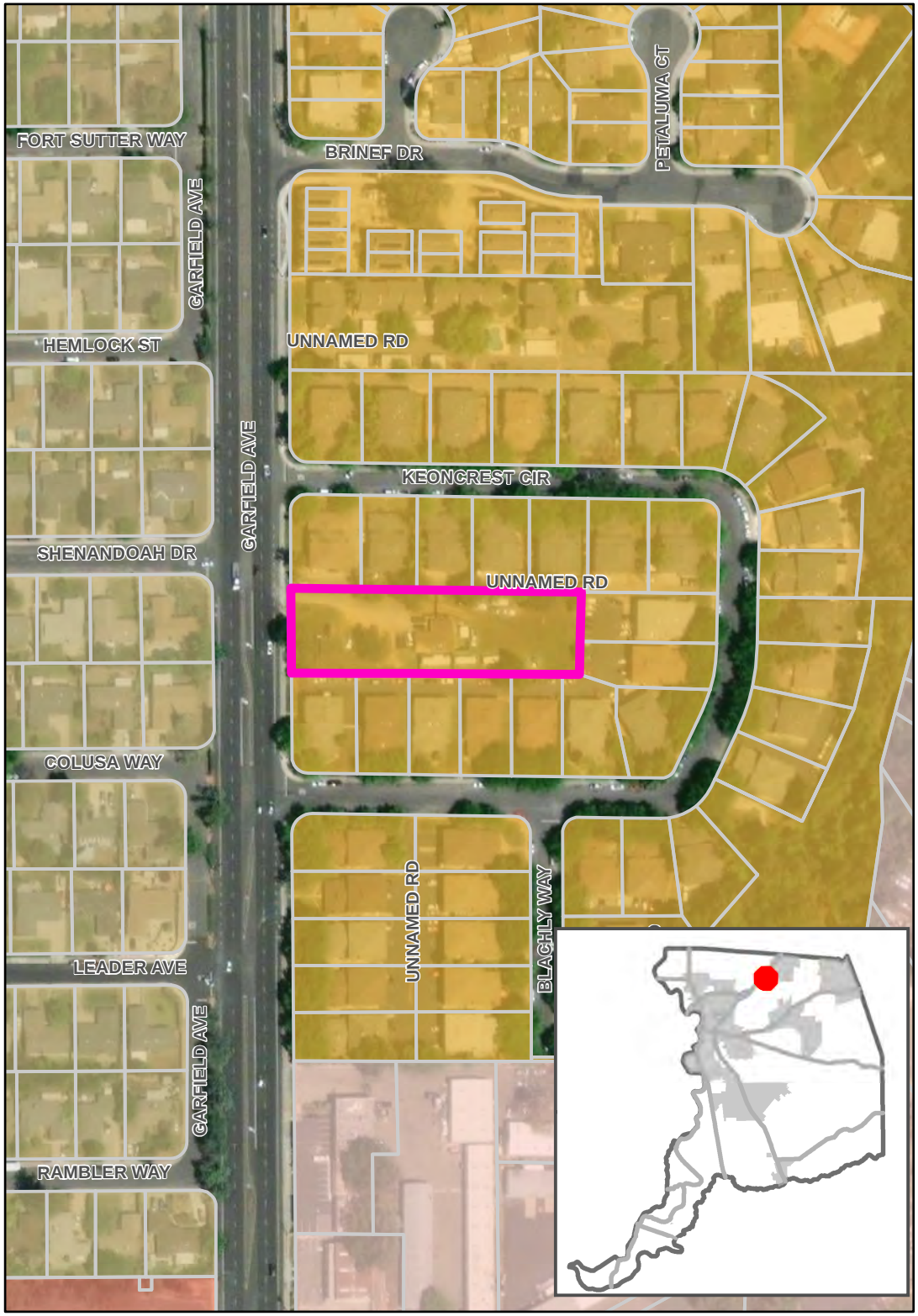
N

0 0.05 0.1 0.2 Miles

Site 8

APN 220-0311-019-0000

5804 Garfield Avenue,
Carmichael/Old Foothill Farms



Legend

Proposed Rezone Site

Zoning

- GC General Commercial
- LC Light Commercial
- RD-20 Multiple Family Residential
- RD-5 Residential

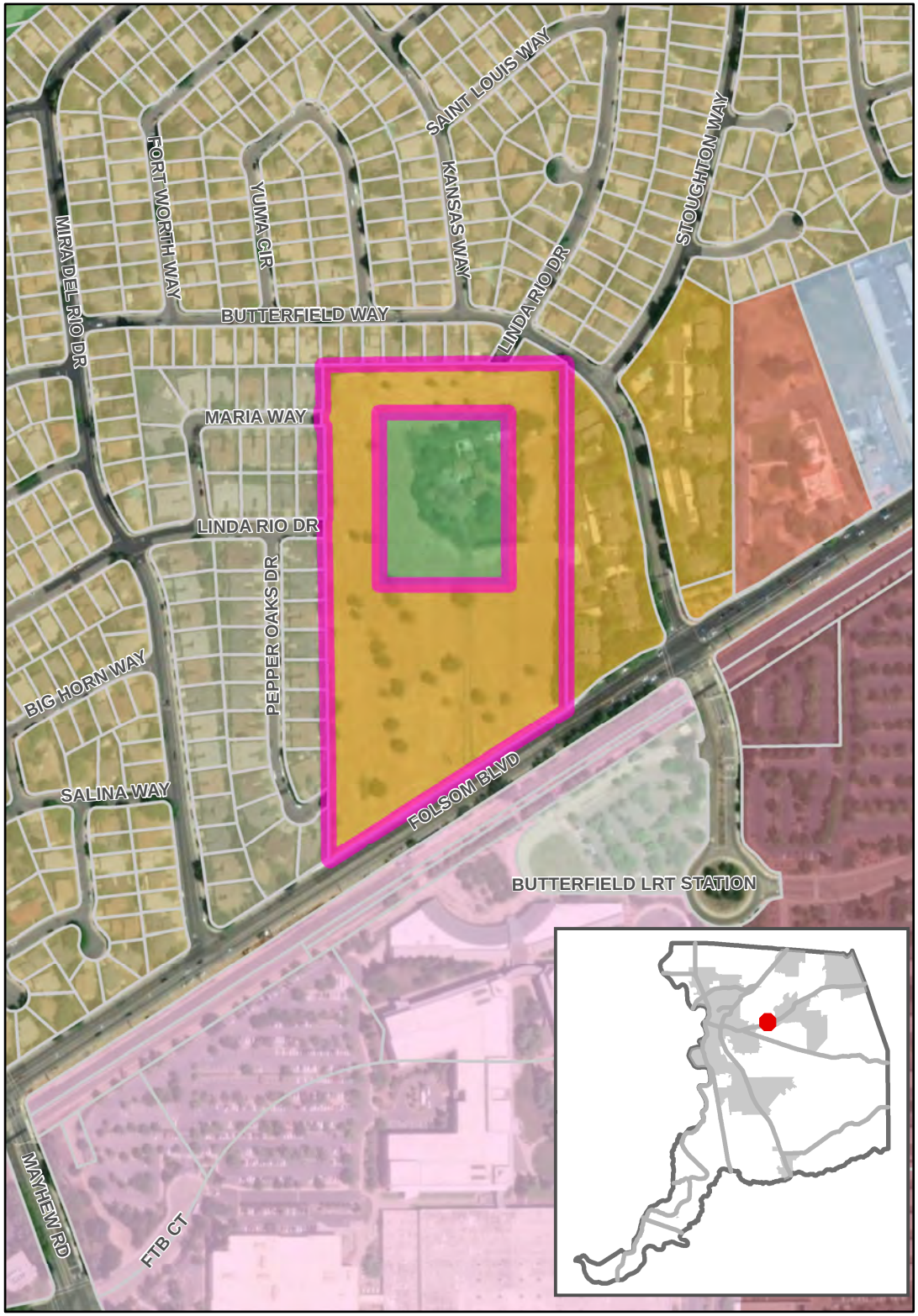
N

0 0.025 0.05 0.1 Miles

Site 16

APN 075-0020-015-0000

9425 Folsom Boulevard, Cordova



Legend

Proposed Rezone Site

Zoning

- LC Light Commercial
- M-2 Heavy Industrial
- MP Industrial - Office Park
- O Recreation
- RD-10 Residential
- RD-20 Multiple Family Residential
- RD-5 Residential
- SPA Special Planning Area
- TC Highway Travel Commercial

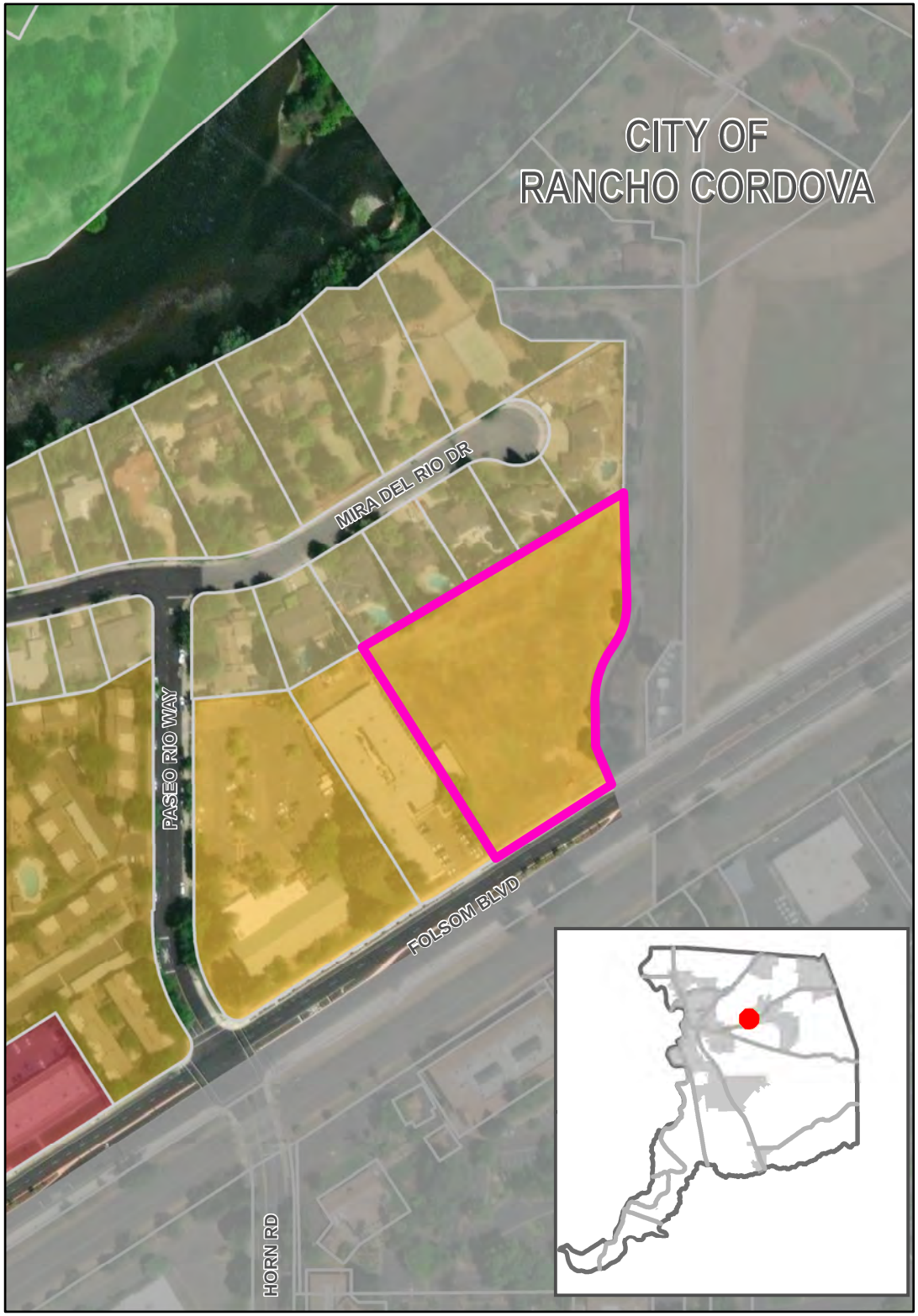
N

0 0.05 0.1 0.2 Miles

Site 17

APN 075-0440-024-0000

450 feet Northeast of Folsom Boulevard/Paseo Rio Way, Cordova



Legend

Proposed Rezone Site

Zoning

- BP Business and Professional Office
- O Recreation
- RD-20 Multiple Family Residential
- RD-30 Multiple Family Residential
- RD-5 Residential

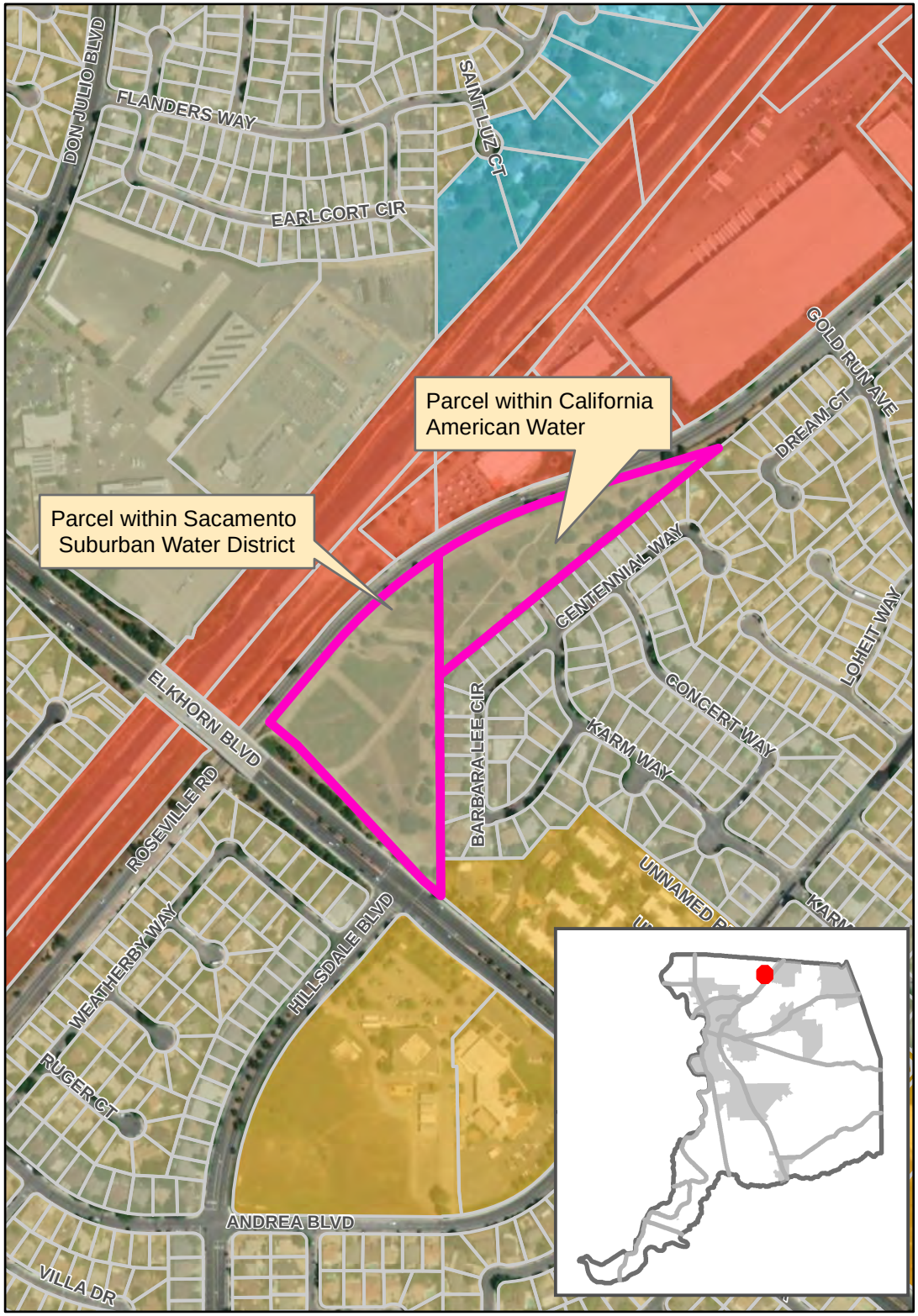
N

0 0.025 0.05 0.1 Miles

Site 23

APNs 222-0024-001-0000
& 222-0024-041-0000

East Roseville Road/Elkhorn Boulevard Overpass, North Highlands



Legend

- Proposed Rezone Site

Zoning

- AR-1 Agricultural-Residential - 1 Acre
- M-1 Light Industrial
- RD-10 Residential
- RD-20 Multiple Family Residential
- RD-5 Residential
- SC Shopping Center

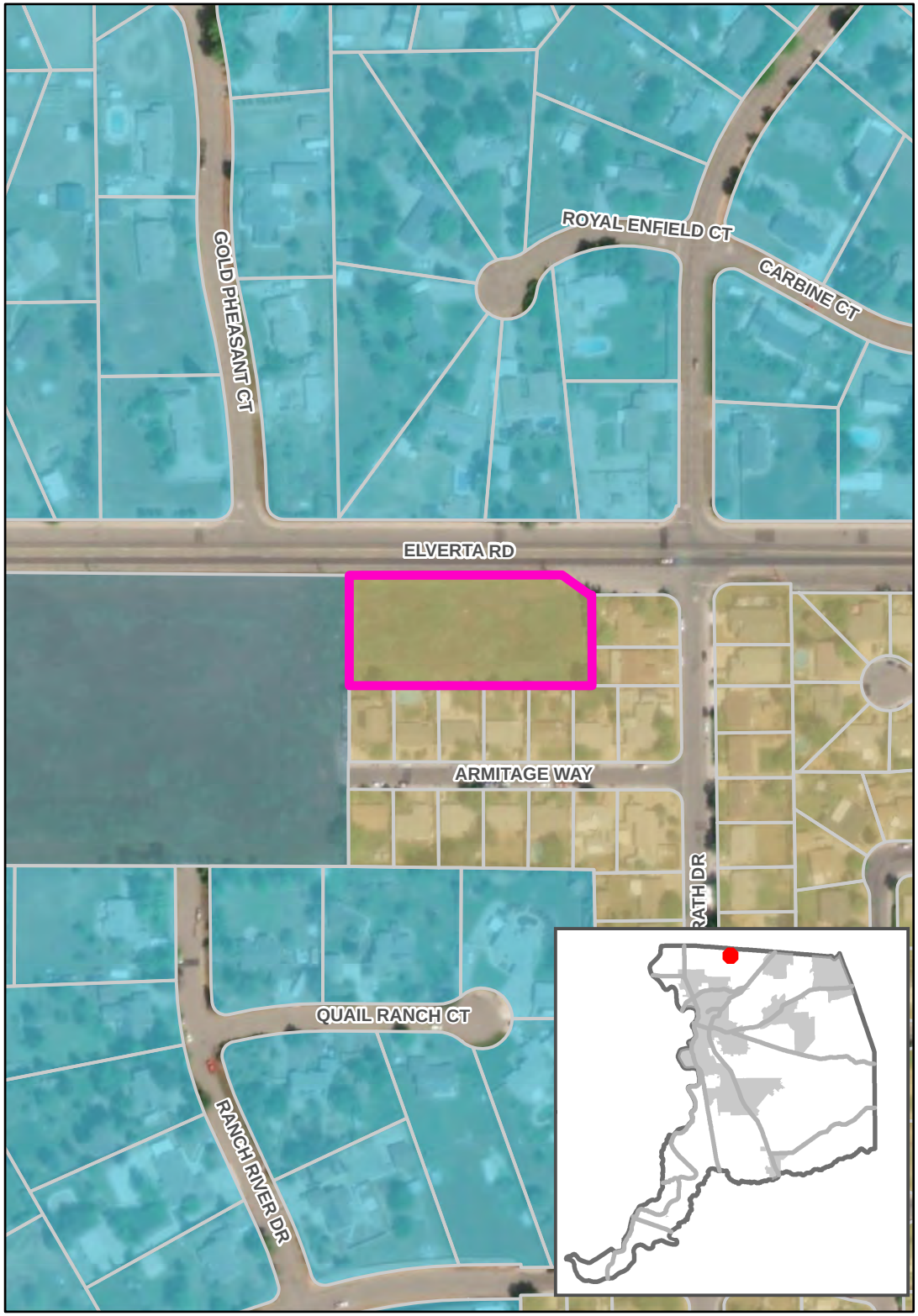
N

0 0.05 0.1 0.2 Miles

Site 27

APN 203-0080-021-0000

120 Feet West of Elverta Road/ Bellingrath Drive, Rio Linda/ Elverta



Legend

Proposed Rezone Site

Zoning

- AR-1 Agricultural-Residential - 1 Acre
- AR-5 Agricultural-Residential - 5 Acres
- RD-5 Residential

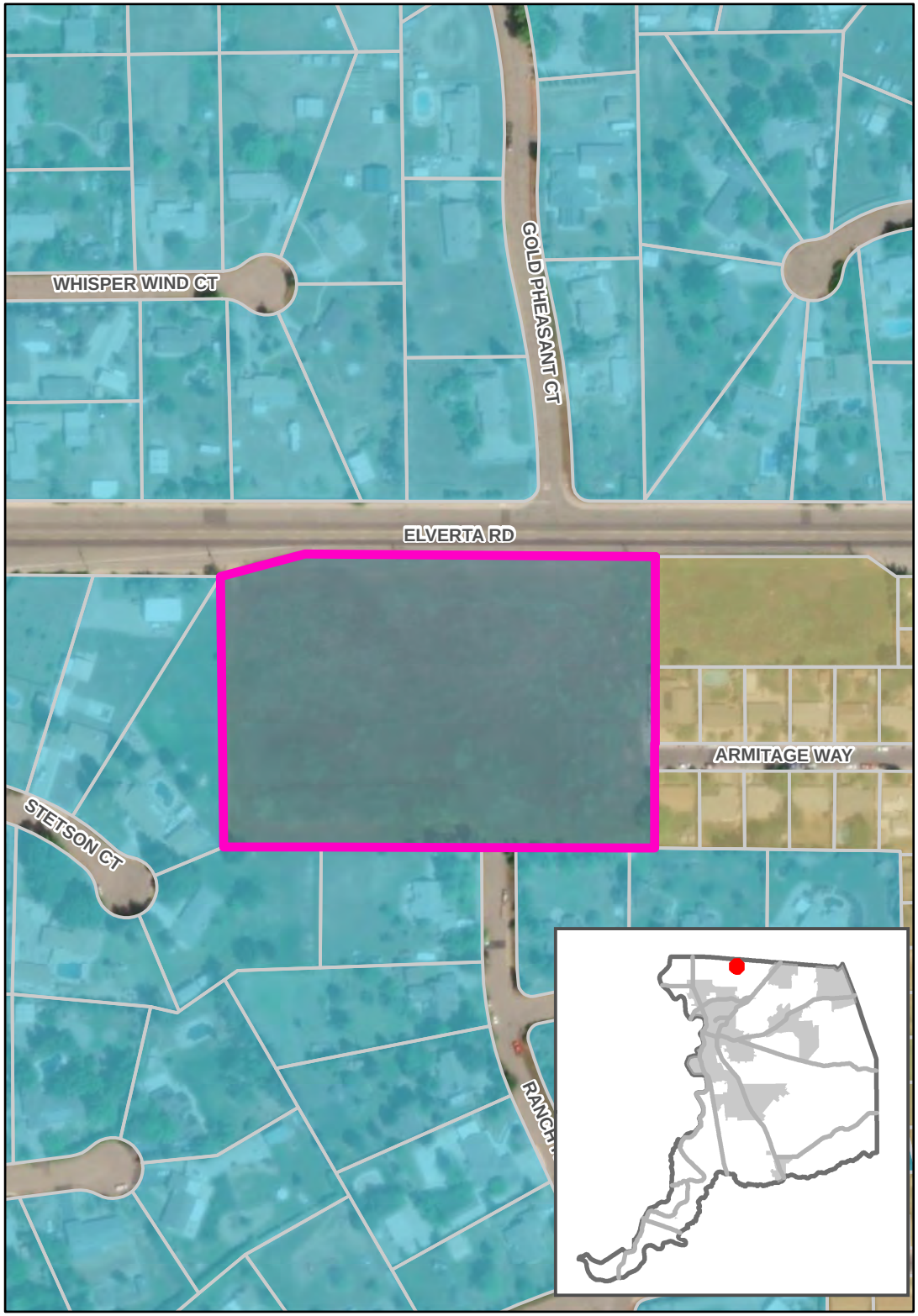
N

0 0.025 0.05 0.1 Miles

Site 28

APN 203-0080-027-0000

480 Feet West of Elverta Road/
Bellingrath Drive, Rio Linda/
Elverta



Legend

Proposed Rezone Site

Zoning

- AR-1 Agricultural-Residential - 1 Acre
- AR-5 Agricultural-Residential - 5 Acres
- RD-5 Residential

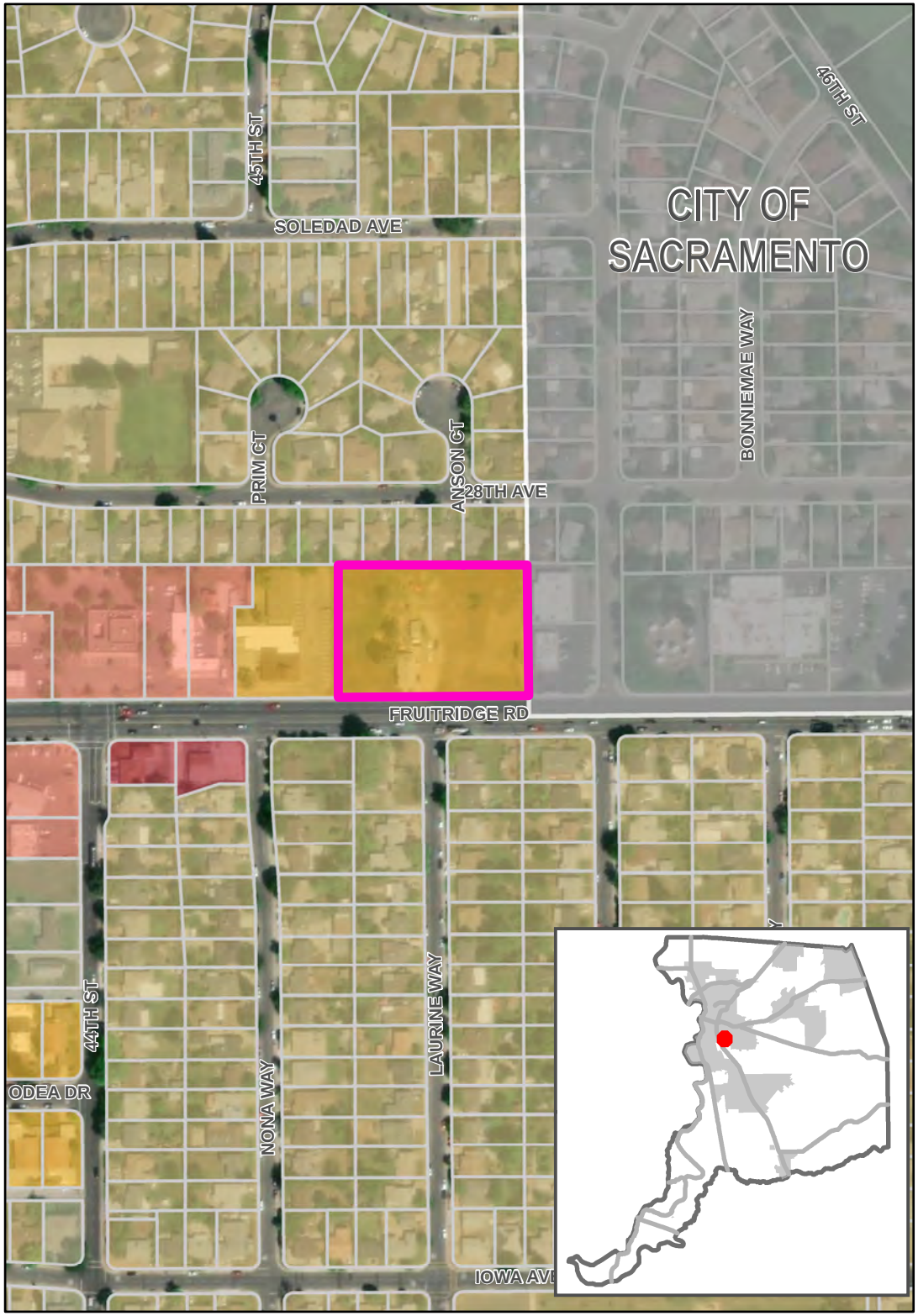
N

0 0.0375 0.075 0.15 Miles

Site 31

APN 022-0252-018-0000

4541 Fruitridge Road,
South Sacramento



Legend

- Proposed Rezone Site

Zoning

- BP Business and Professional Office
- LC Light Commercial
- RD-10 Residential
- RD-20 Multiple Family Residential
- RD-5 Residential

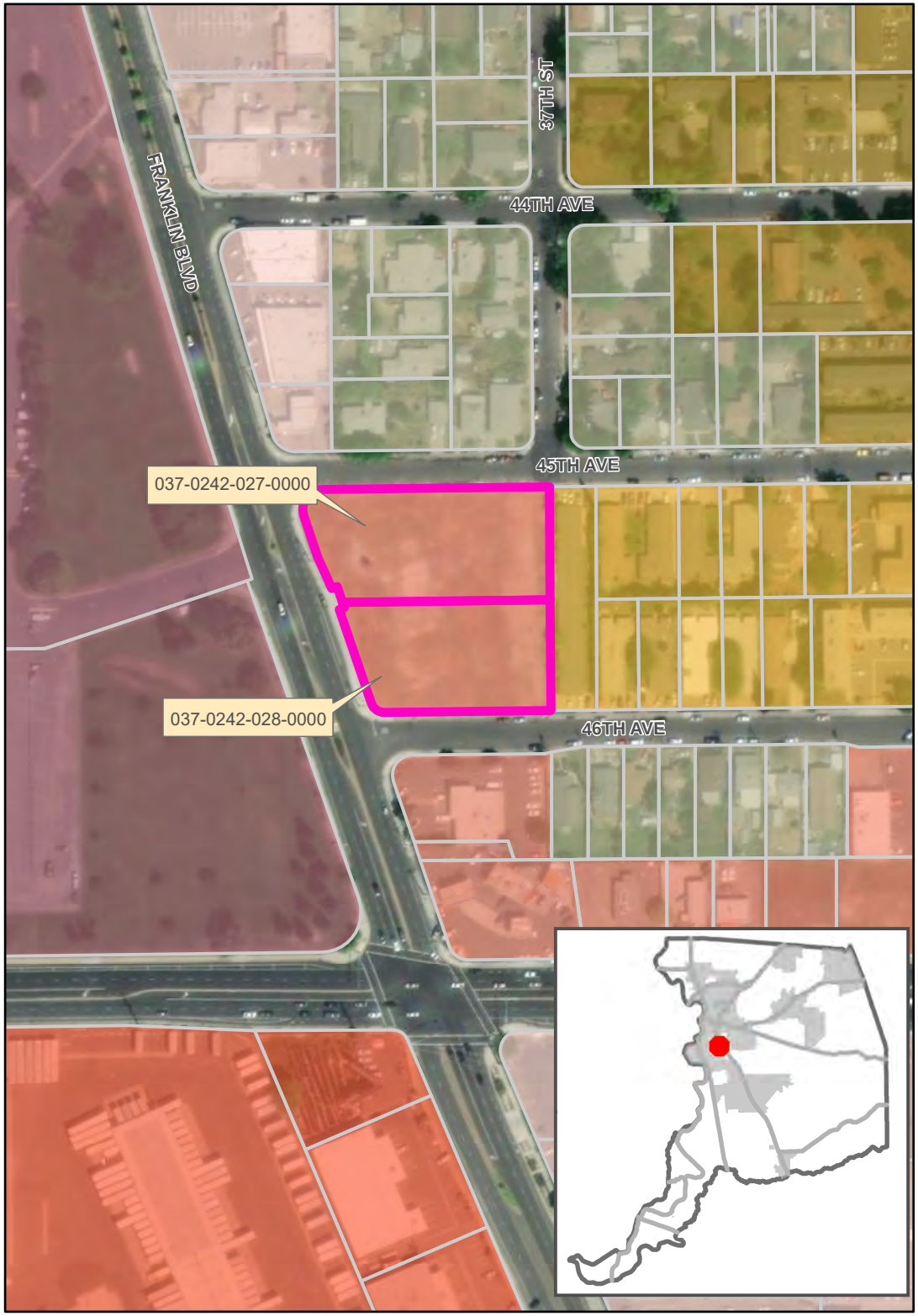
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0 0.0375 0.075 0.15 Miles

Site 33

APNs 037-0242-027-0000
& 037-0242-028-0000

Southeast 45th Avenue/Franklin Boulevard
& 6301 Franklin Boulevard,
South Sacramento



Legend

Proposed Rezone Site

Zoning

- GC General Commercial
- LC Light Commercial
- M-1 Light Industrial
- M-2 Heavy Industrial
- RD-10 Residential
- RD-20 Multiple Family Residential
- RD-30 Multiple Family Residential

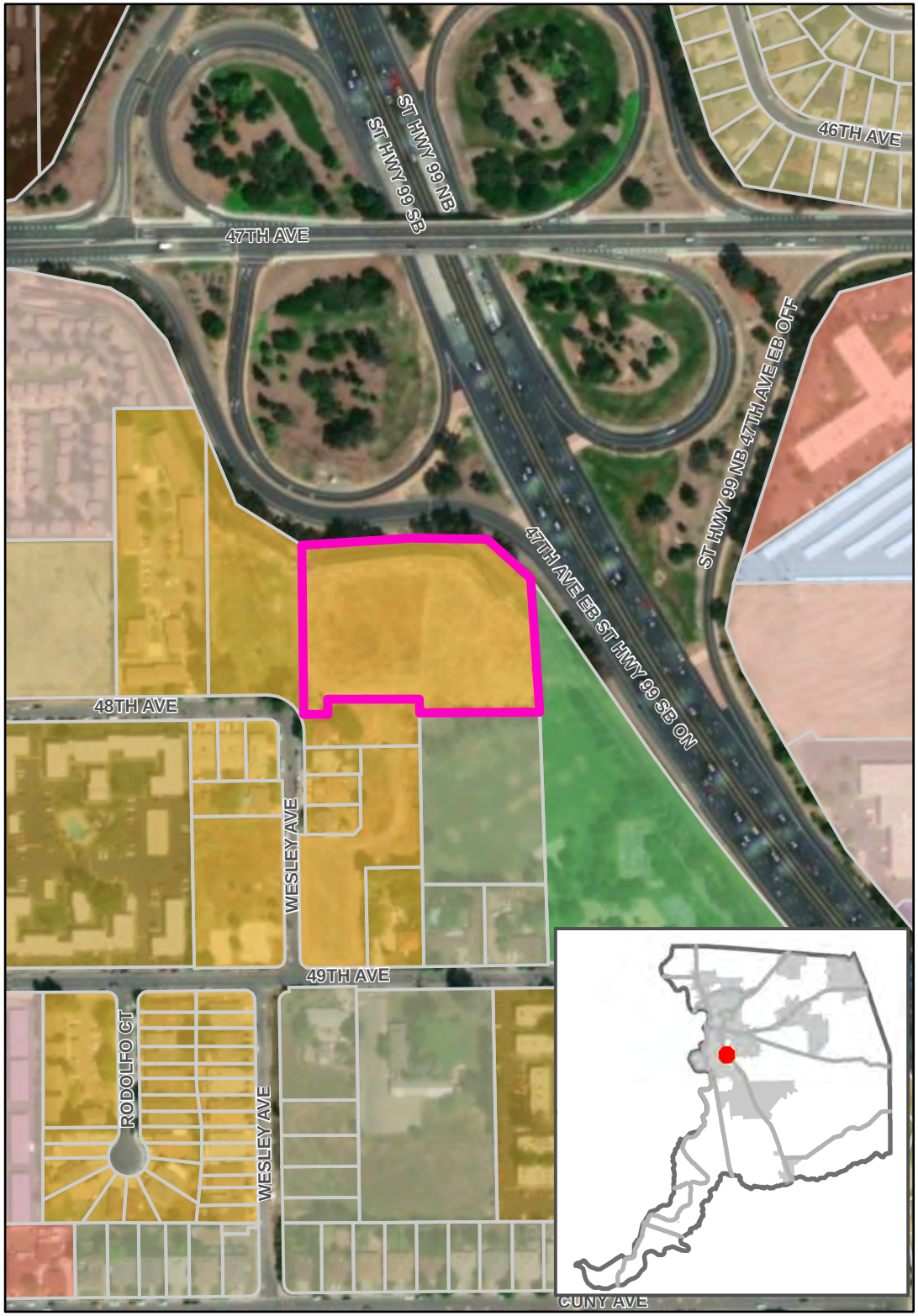
N

0 0.025 0.05 0.1 Miles

Site 34

APN 039-0054-001-0000

4001 48th Avenue,
South Sacramento



Legend

Proposed Rezone Site

Zoning

- GC General Commercial
- LC Light Commercial
- MP Industrial - Office Park
- O Recreation
- RD-10 Residential
- RD-20 Multiple Family Residential
- RD-30 Multiple Family Residential
- RD-5 Residential
- RM-1 Mobile Home Subdivision
- TC Highway Travel Commercial

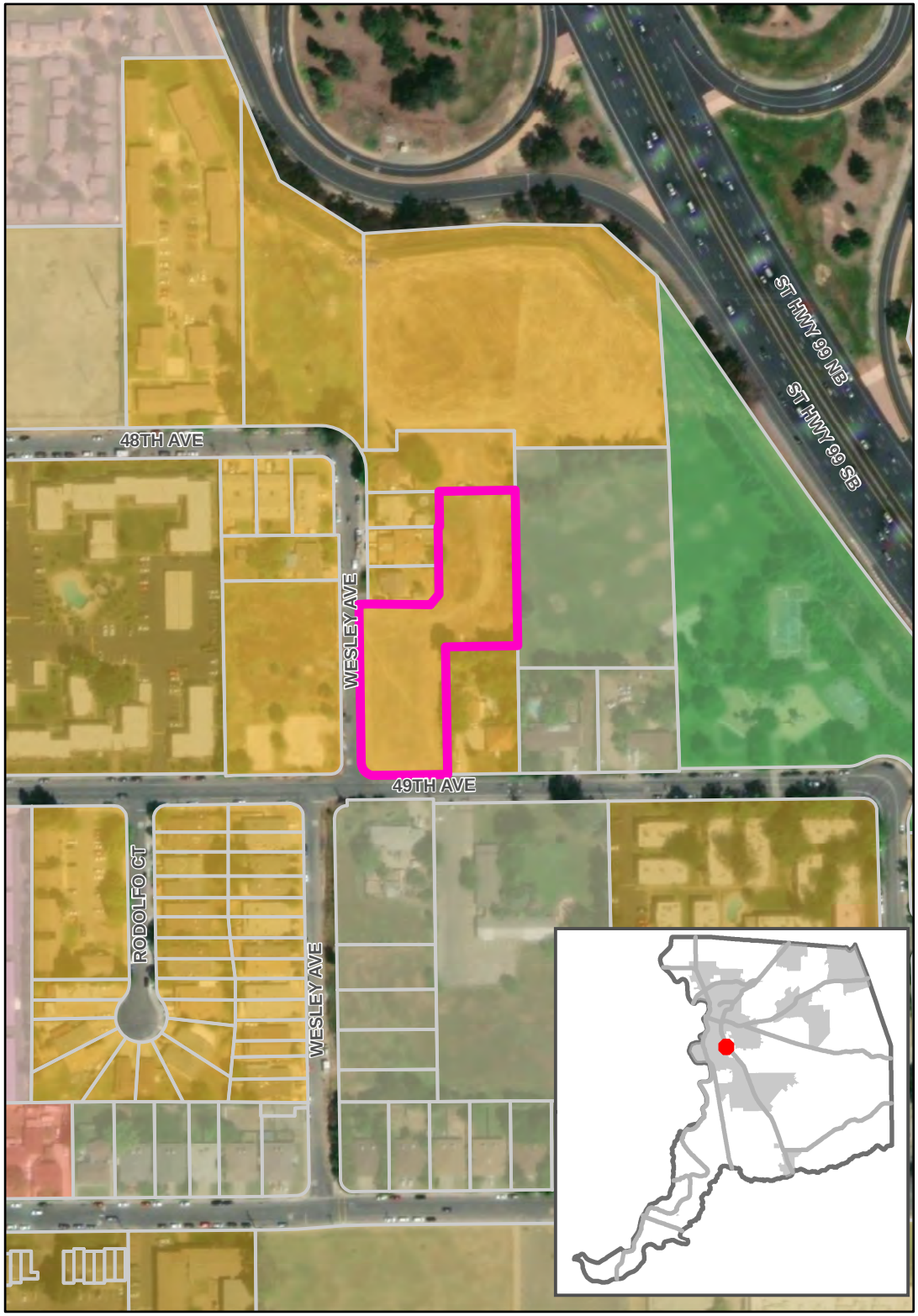
N

0 0.0375 0.075 0.15 Miles

Site 35

APN 039-0072-016-0000

NE 49th Avenue/Wesley Avenue,
South Sacramento



Legend

Proposed Rezone Site

Zoning

- GC General Commercial
- LC Light Commercial
- O Recreation
- RD-10 Residential
- RD-20 Multiple Family Residential
- RD-30 Multiple Family Residential
- RD-5 Residential

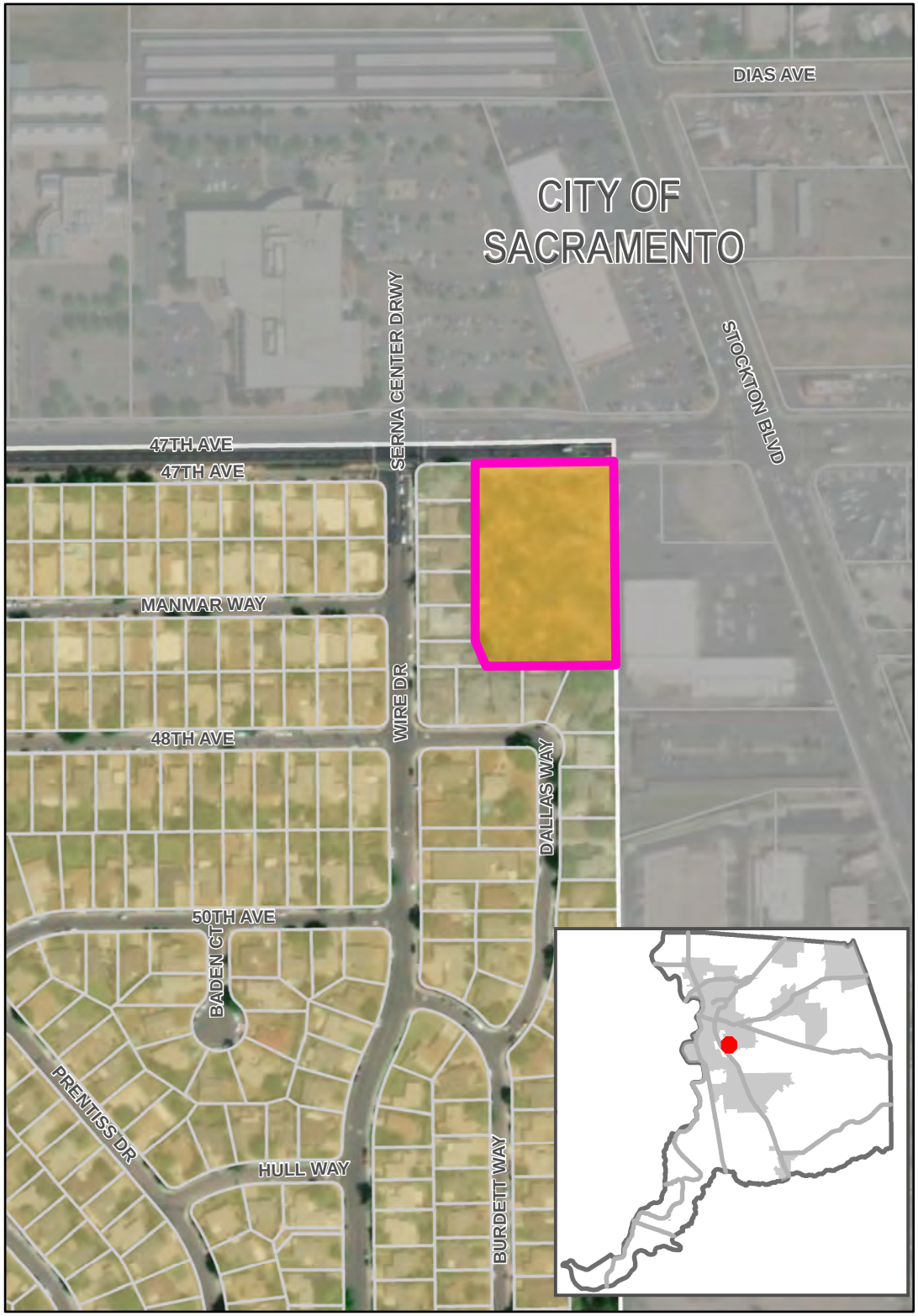
N

0 0.0375 0.075 0.15
Miles

Site 36

APN 039-0241-001-0000

240 feet West of 47th Avenue/Stockton Boulevard, South Sacramento



Legend

PARCELS_lyr selection

Zoning

- RD-10 Residential
- RD-20 Multiple Family Residential
- RD-5 Residential

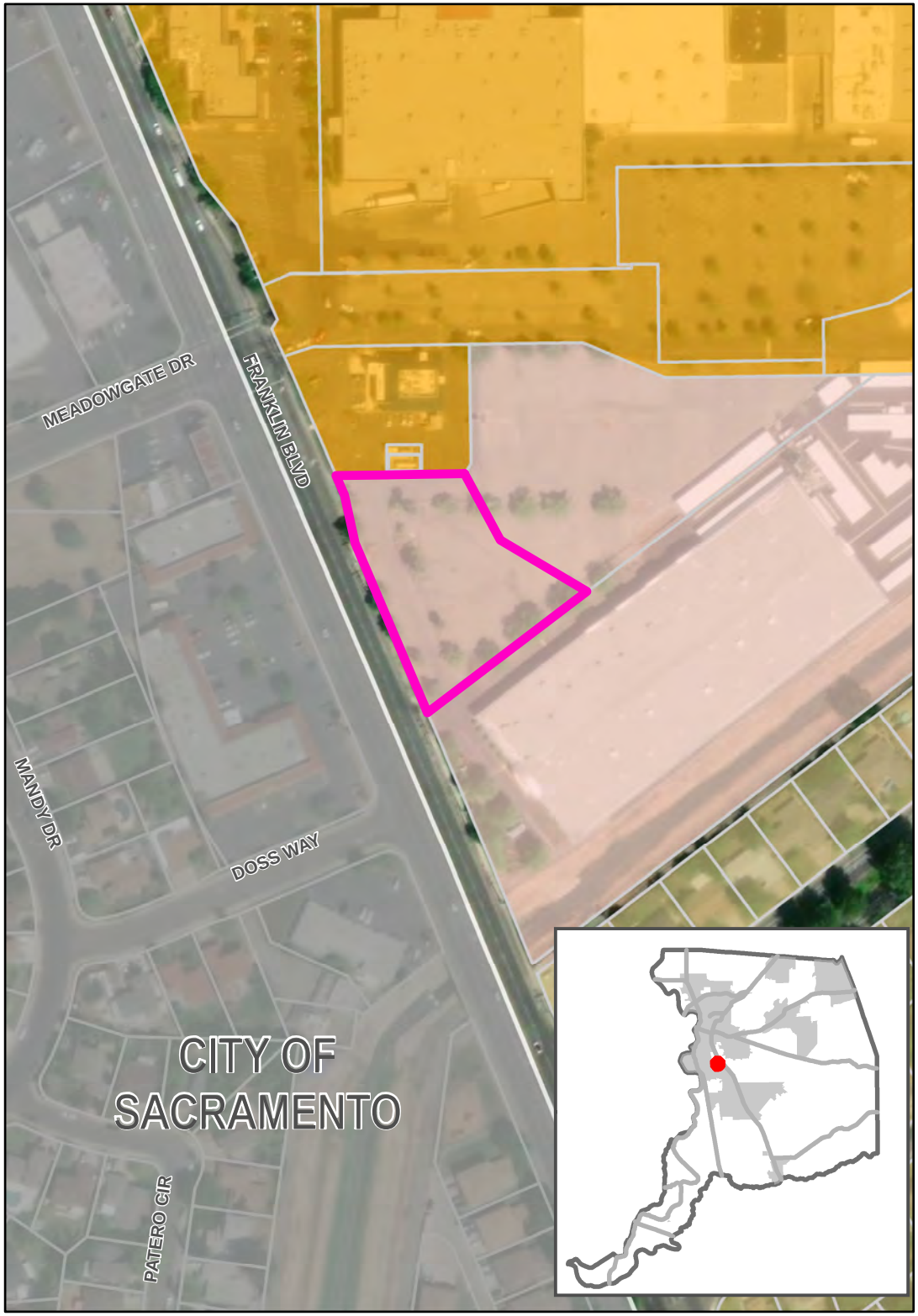
N

0 0.0375 0.075 0.15 Miles

Site 37

APN 050-0010-076-0000

180 feet Southeast of Franklin Boulevard/Meadowgate Drive, South Sacramento



Legend

Proposed Rezone Site

Zoning

GC General Commercial

RD-5 Residential

SC Shopping Center

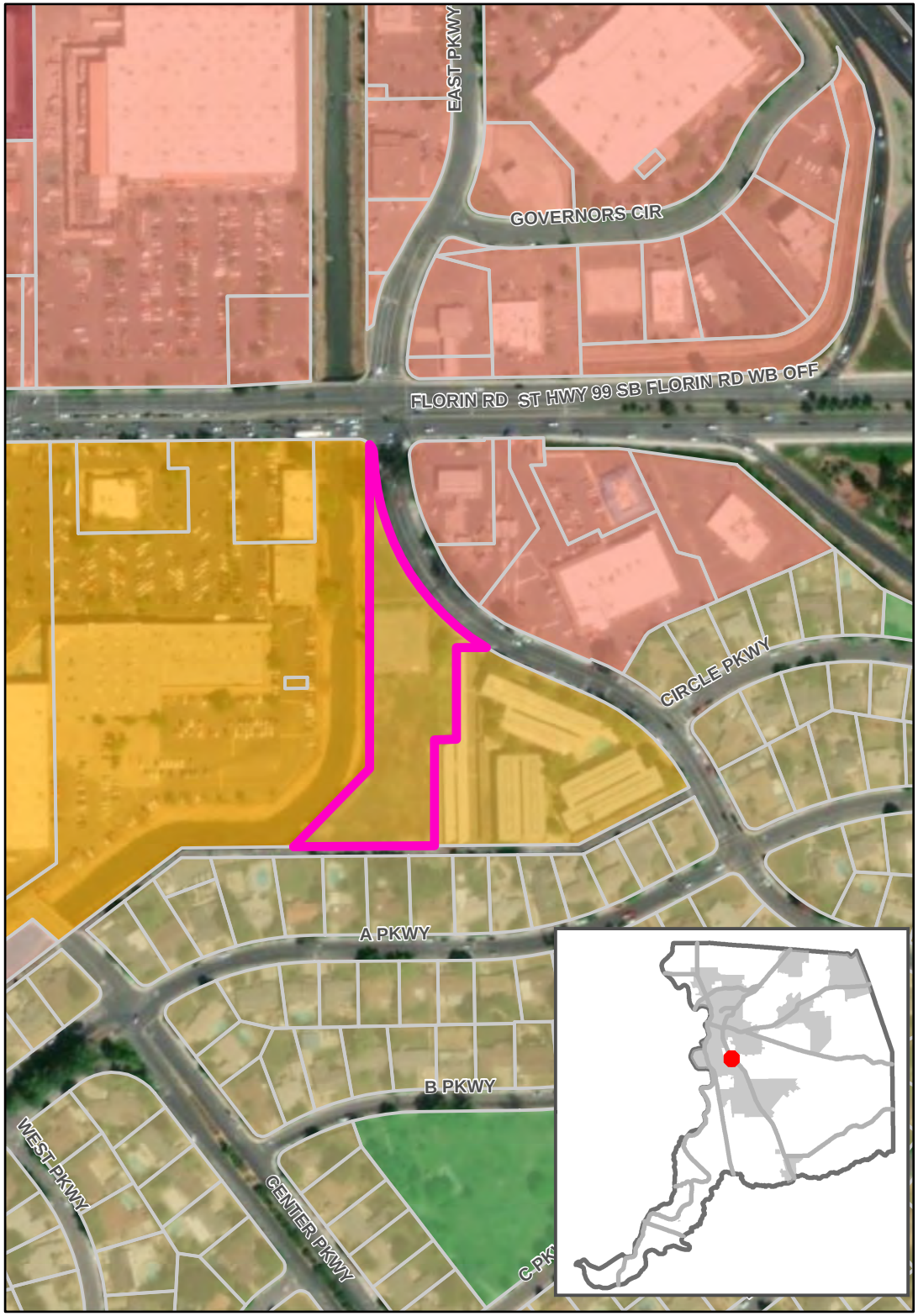
N

0 0.025 0.05 0.1 Miles

Site 38

APN 050-0010-077-0000

7236 East Parkway,
South Sacramento



Legend

Proposed Rezone Site

Zoning

- BP Business and Professional Office
- GC General Commercial
- LC Light Commercial
- O Recreation
- RD-20 Multiple Family Residential
- RD-5 Residential
- SC Shopping Center

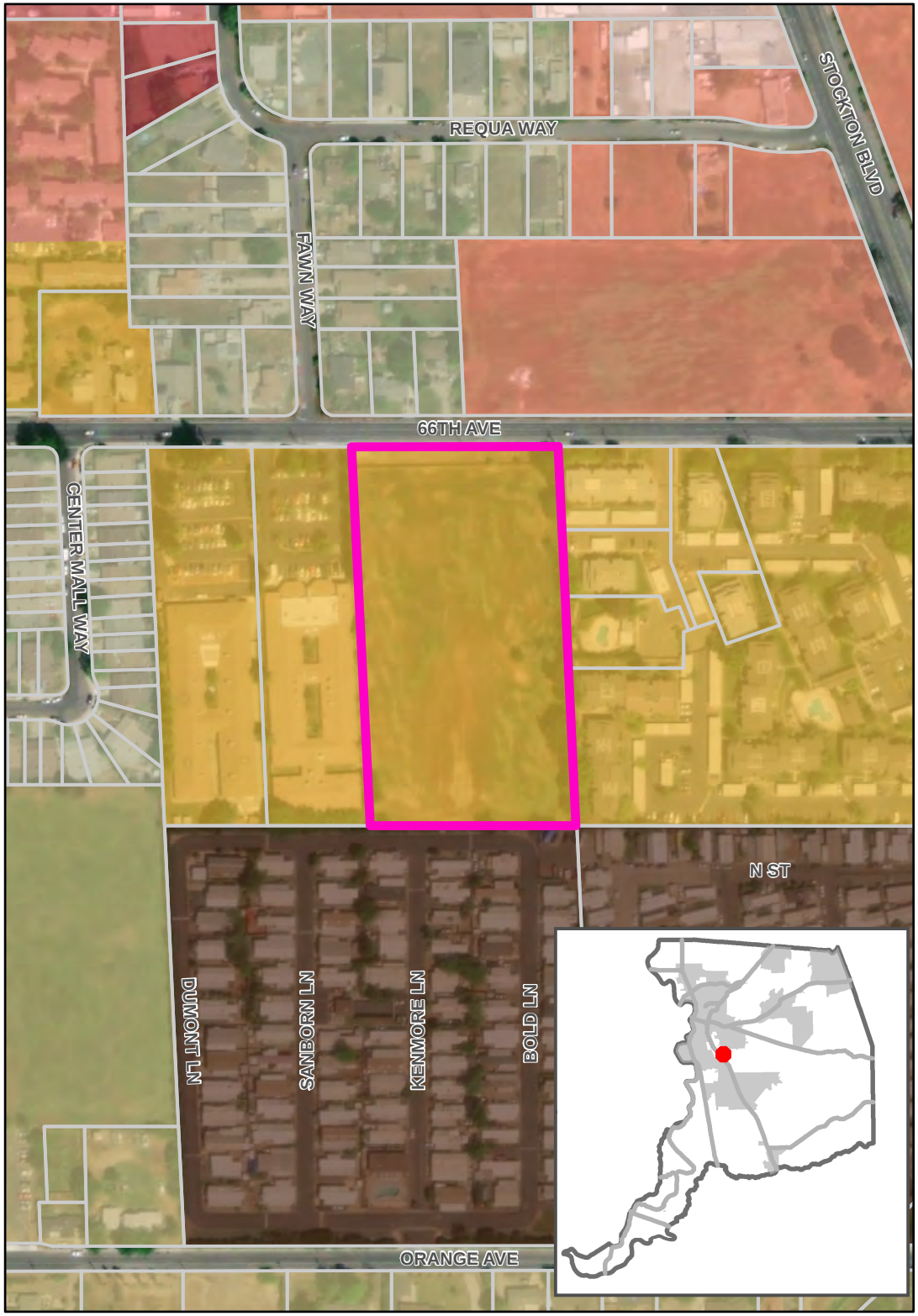
N

0 0.0375 0.075 0.15
Miles

Site 39

APN 050-0311-028-0000

630 feet W of 66th Avenue/ Stockton Boulevard, South Sacramento



Legend

Proposed Rezone Site

Zoning

- AC Auto Commercial
- BP Business and Professional Office
- GC General Commercial
- LC Light Commercial
- RD-10 Residential
- RD-20 Multiple Family Residential
- RD-5 Residential
- RM-1 Mobile Home Subdivision

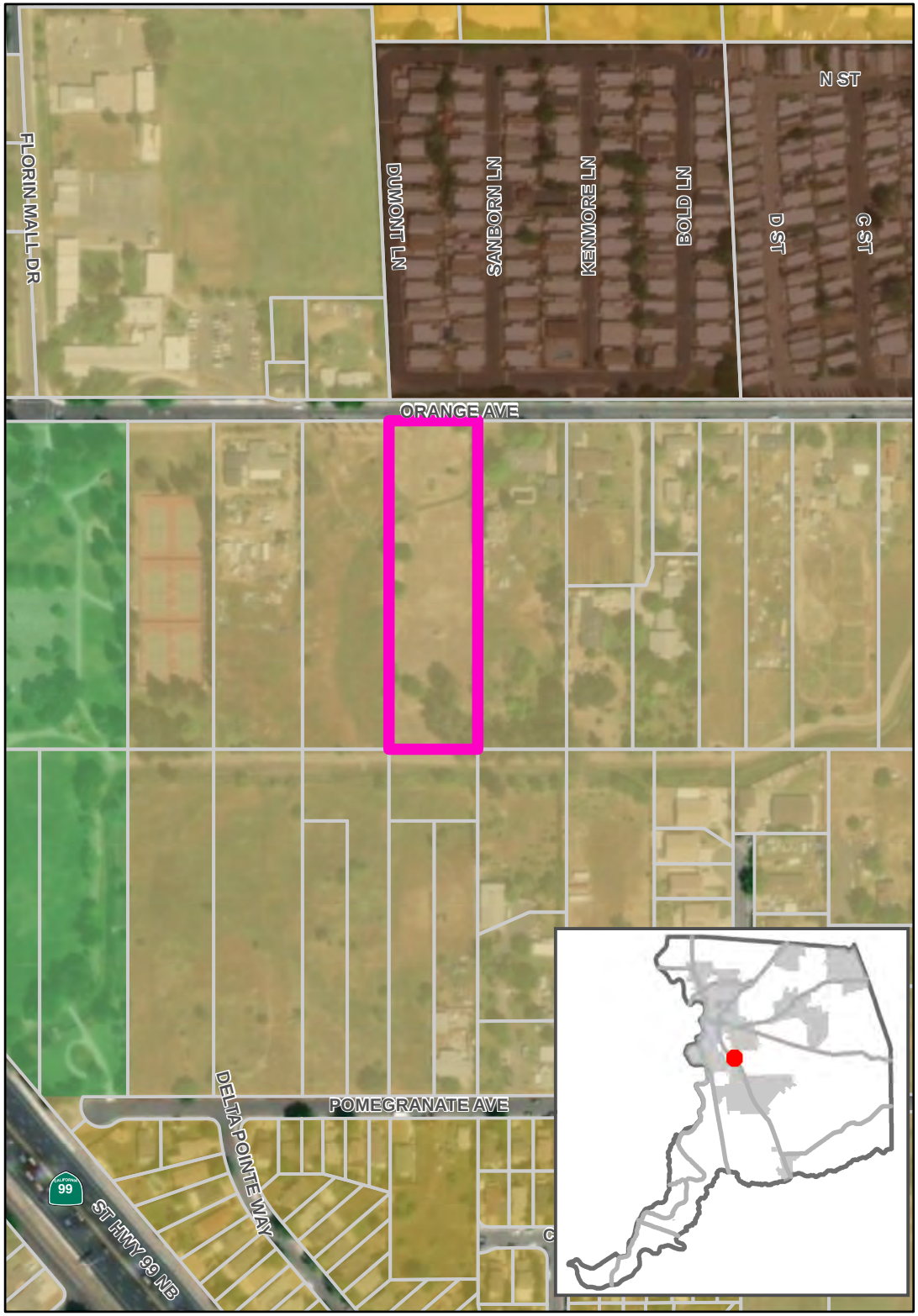
N

0 0.0375 0.075 0.15 Miles

Site 40

APN 050-0331-003-0000

6130 Orange Avenue,
South Sacramento



Legend

Proposed Rezone Site

Zoning

- O Recreation
- RD-10 Residential
- RD-20 Multiple Family Residential
- RD-5 Residential
- RD-7 Residential
- RM-1 Mobile Home Subdivision

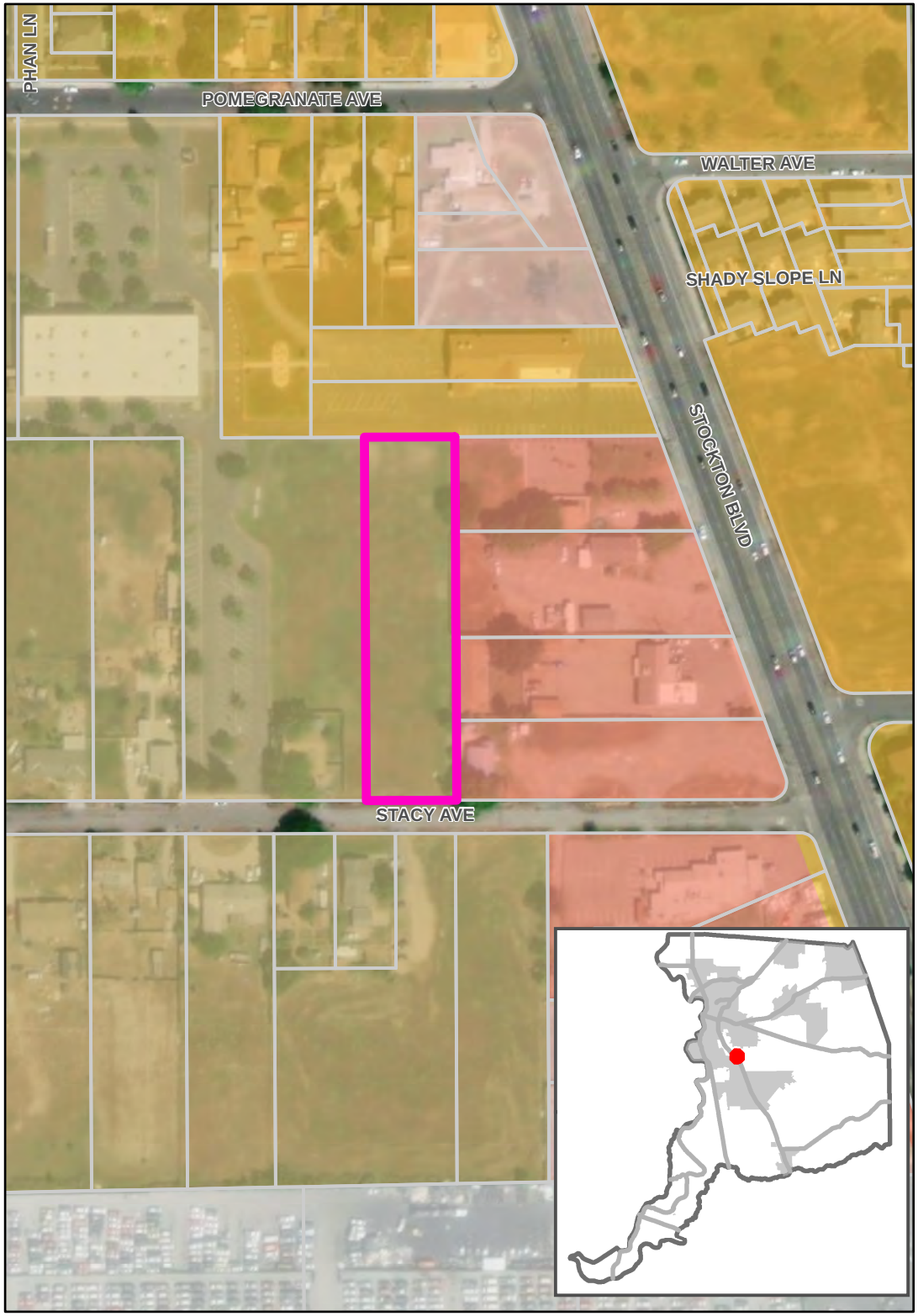
N

0 0.0375 0.075 0.15
Miles

Site 41

APN 050-0391-006-0000

6707 Stacy Avenue,
South Sacramento



Legend

Proposed Rezone Site

Zoning

- GC General Commercial
- LC Light Commercial
- RD-10 Residential
- RD-20 Multiple Family Residential
- RD-5 Residential
- RD-7 Residential
- SPA Special Planning Area

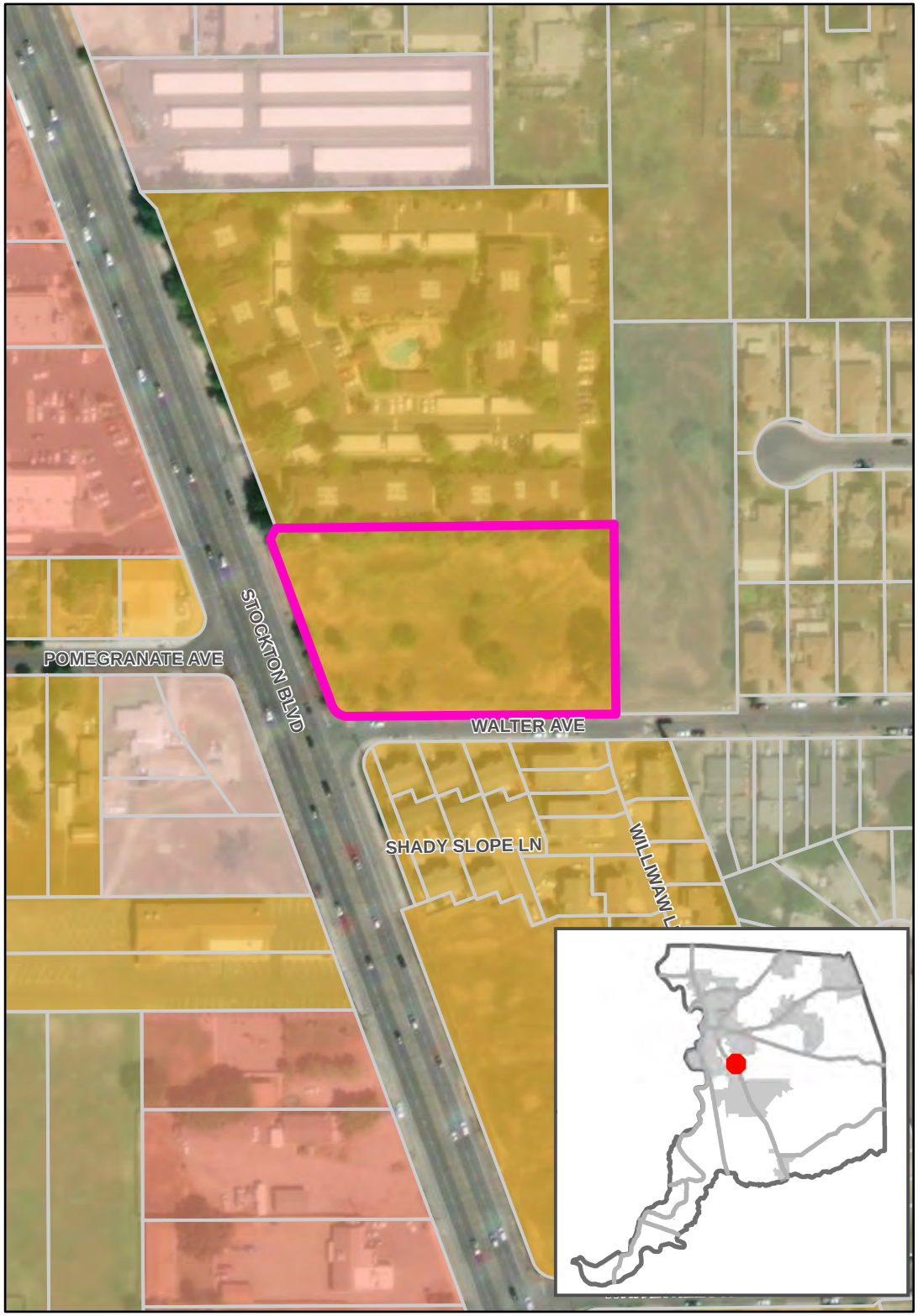
N

0 0.025 0.05 0.1 Miles

Site 42

APN 051-0160-014-0000

Northeast Stockton Boulevard/Walter Avenue, South Sacramento



Legend

Proposed Rezone Site

Zoning

- GC General Commercial
- LC Light Commercial
- RD-10 Residential
- RD-20 Multiple Family Residential
- RD-5 Residential

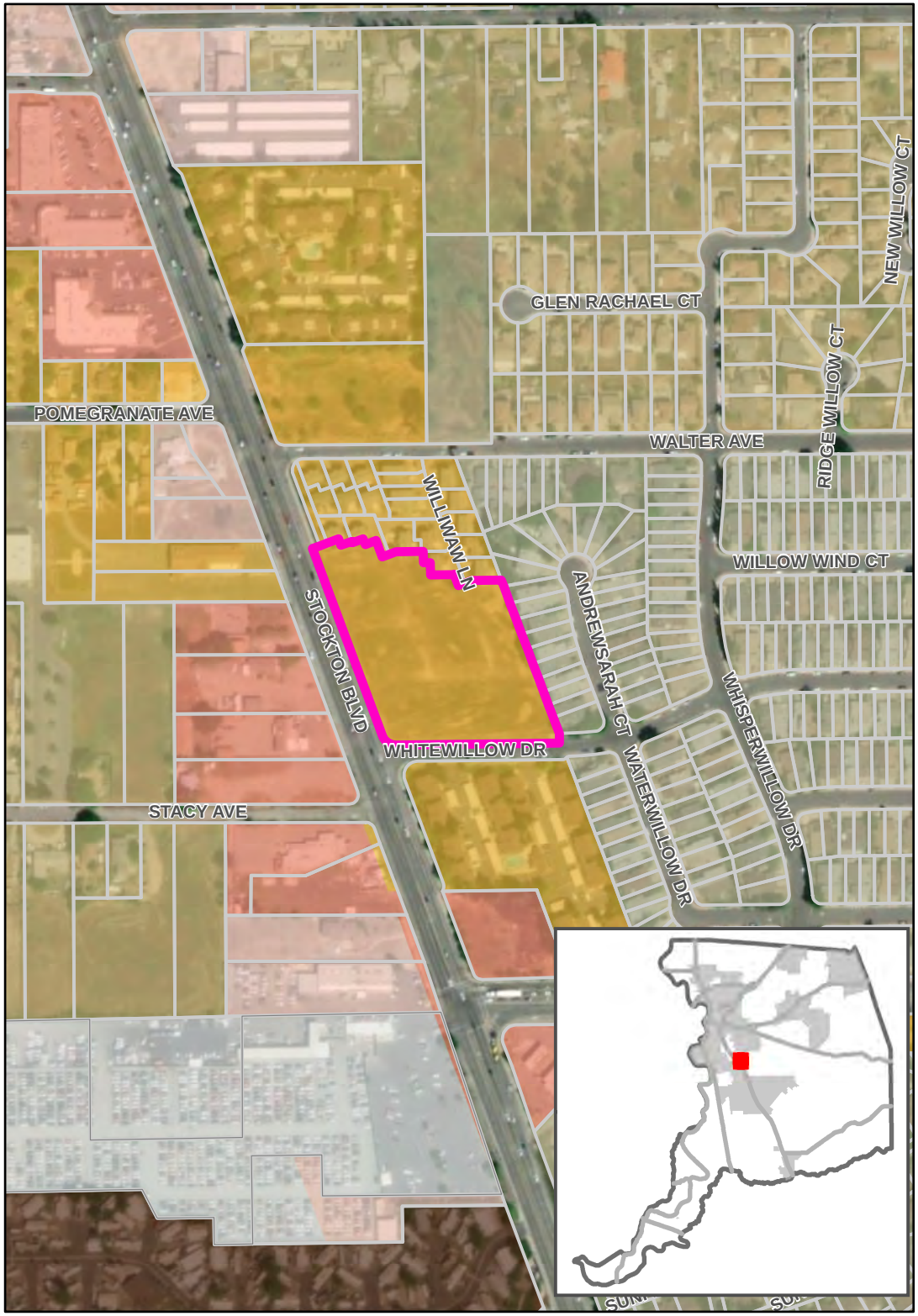
N

0 0.025 0.05 0.1 Miles

Site 44

APN 051-0630-021-0000

Northeast Stockton Boulevard/
Whitewillow Drive,
South Sacramento



Legend

- Proposed Rezone Site

Zoning

- GC General Commercial
- LC Light Commercial
- RD-10 Residential
- RD-20 Multiple Family Residential
- RD-5 Residential
- RM-1 Mobile Home Subdivision
- SPA Special Planning Area

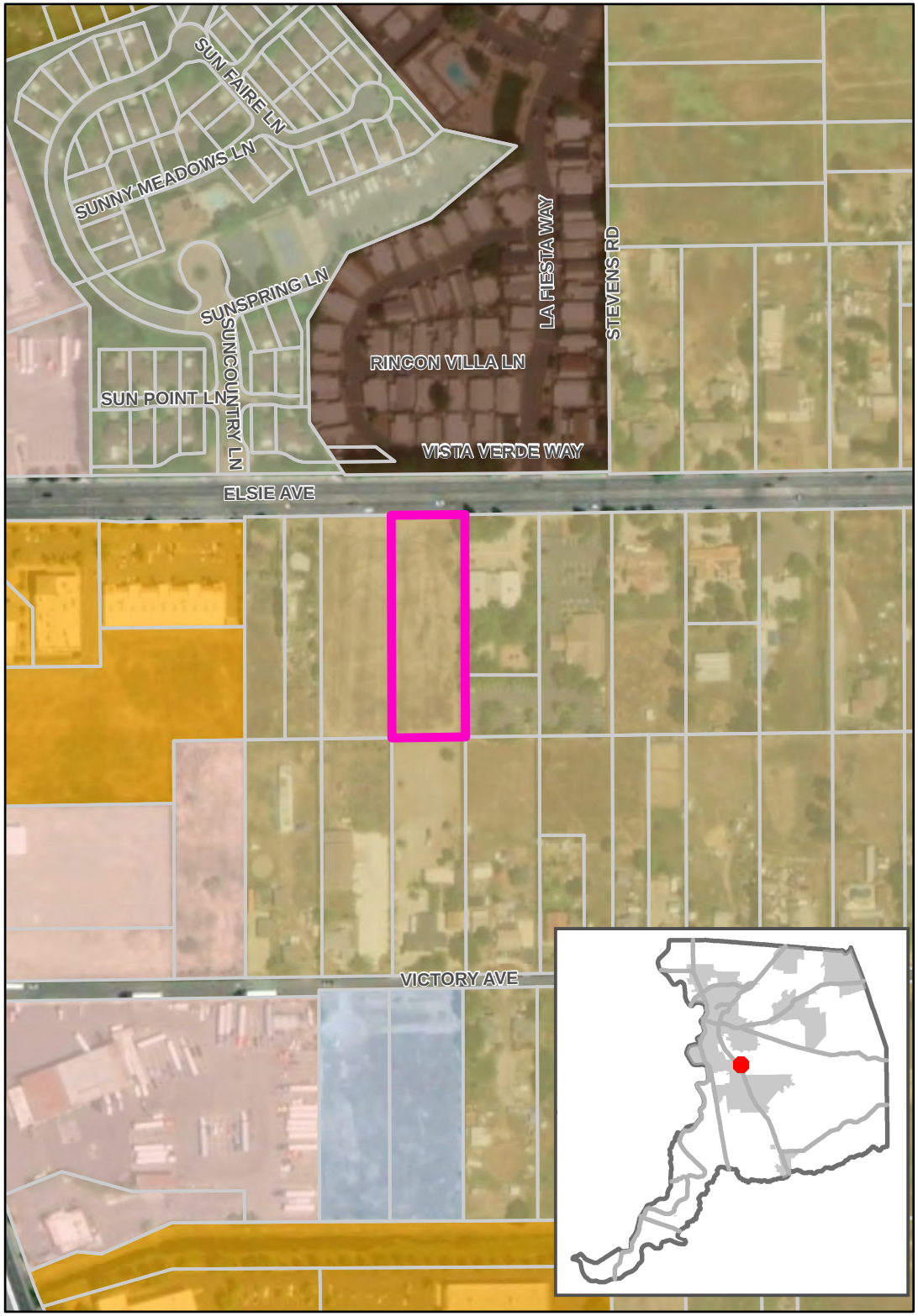
N

0 0.0375 0.075 0.15
Miles

Site 48

APN 115-0061-007-0000

7604 Elsie Avenue,
South Sacramento



Legend

Proposed Rezone Site

Zoning

- GC General Commercial
- RD-10 Residential
- RD-20 Multiple Family Residential
- RD-30 Multiple Family Residential
- RD-5 Residential
- RD-7 Residential
- RM-1 Mobile Home Subdivision
- SC Shopping Center
- TC Highway Travel Commercial

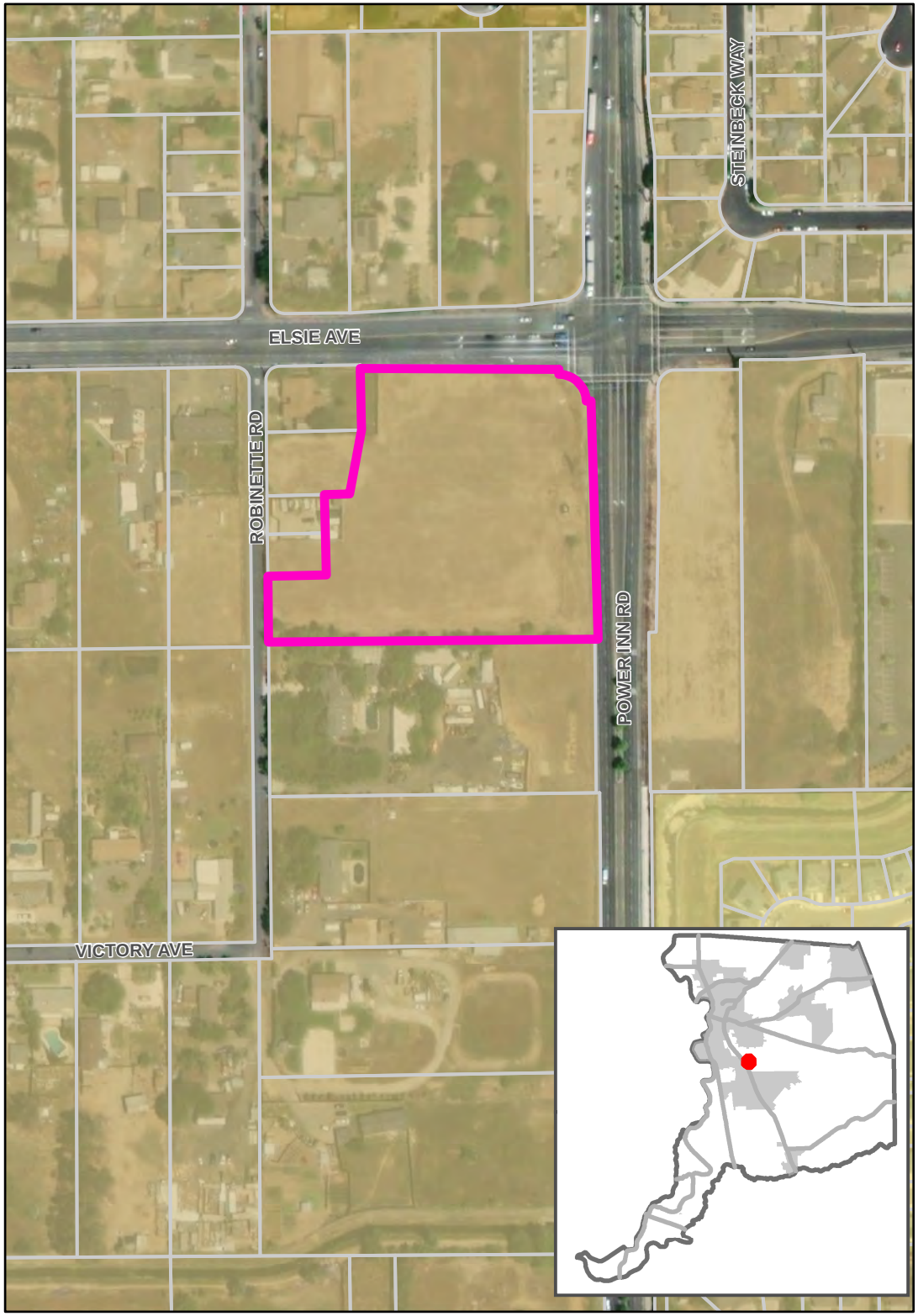
N

0 0.0375 0.075 0.15 Miles

Site 49

APN 115-0062-026-0000

7825 Robinette Road,
South Sacramento



Legend

Proposed Rezone Site

Zoning

- RD-15 Multiple Family Residential
- RD-5 Residential
- RD-7 Residential

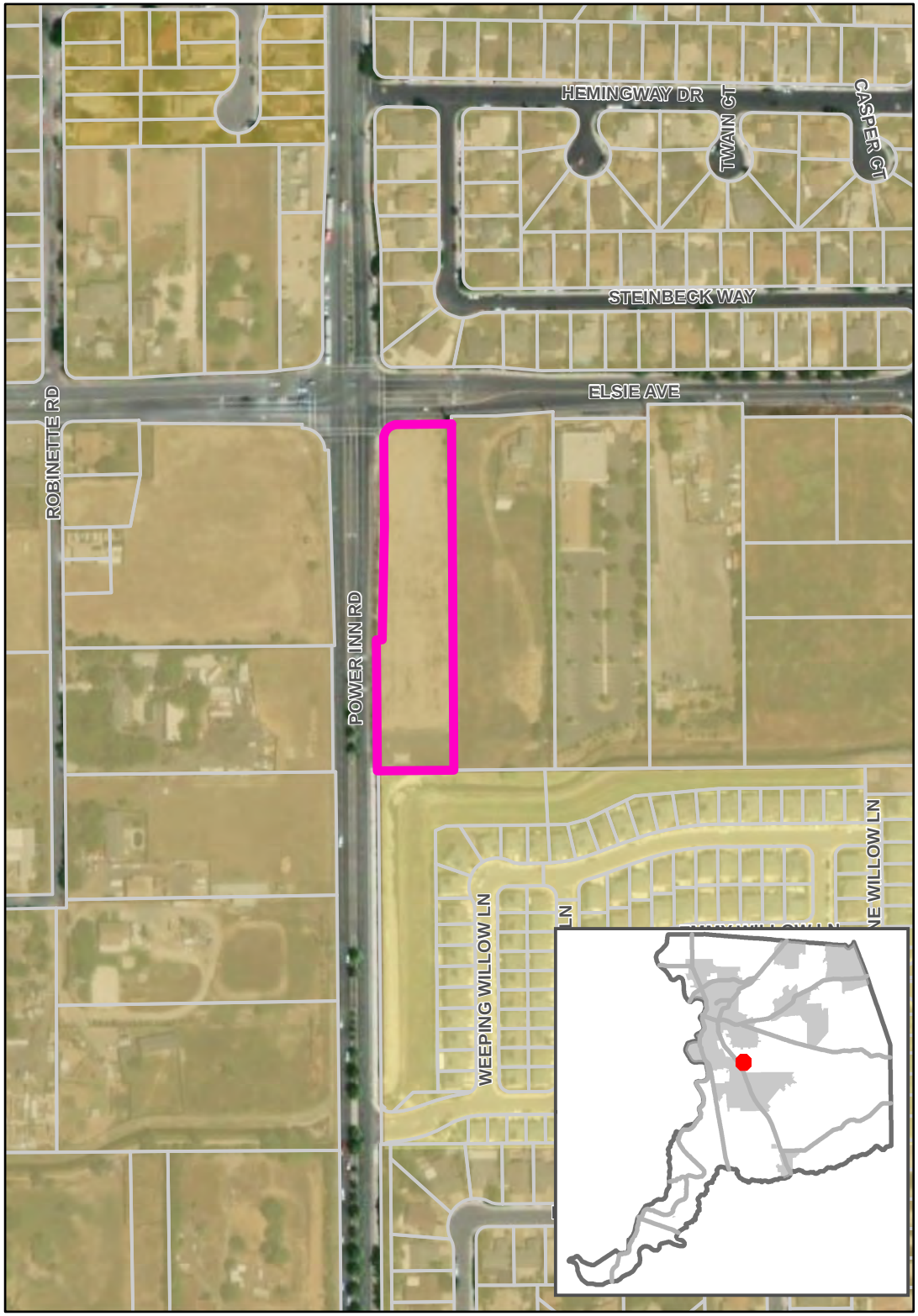
N

0 0.025 0.05 0.1
Miles

Site 50

APN 115-0073-001-0000

Southeast Elsie Avenue/Power Inn Road
South Sacramento



Legend

Proposed Rezone Site

Zoning

- RD-15 Multiple Family Residential
- RD-5 Residential
- RD-7 Residential

N

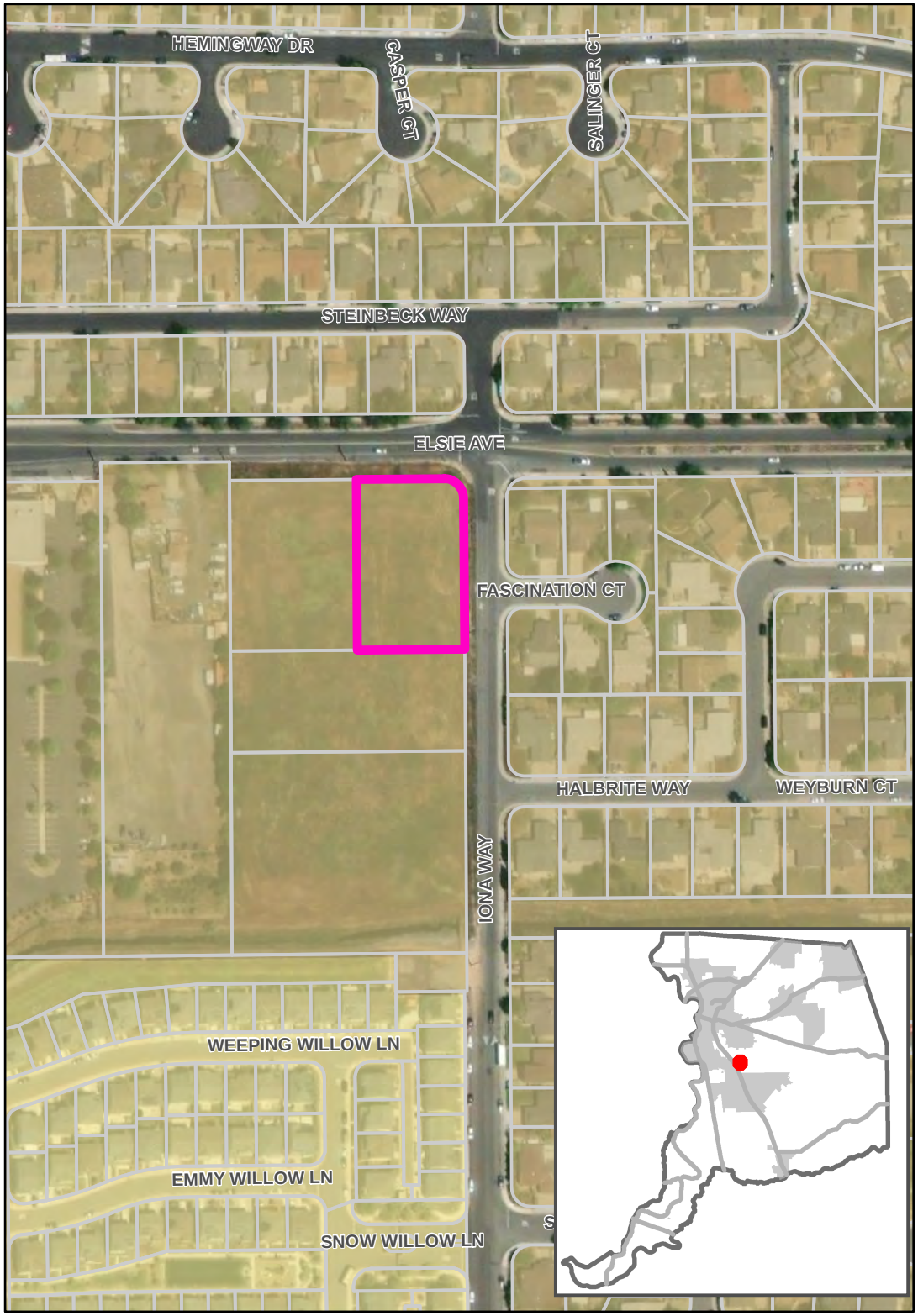
0 0.0375 0.075 0.15
Miles

Site 51

APN 115-0073-010-0000

Southwest Elsie Avenue/Iona Way

South Sacramento



Legend

Proposed Rezone Site

Zoning

RD-15 Multiple Family Residential

RD-5 Residential

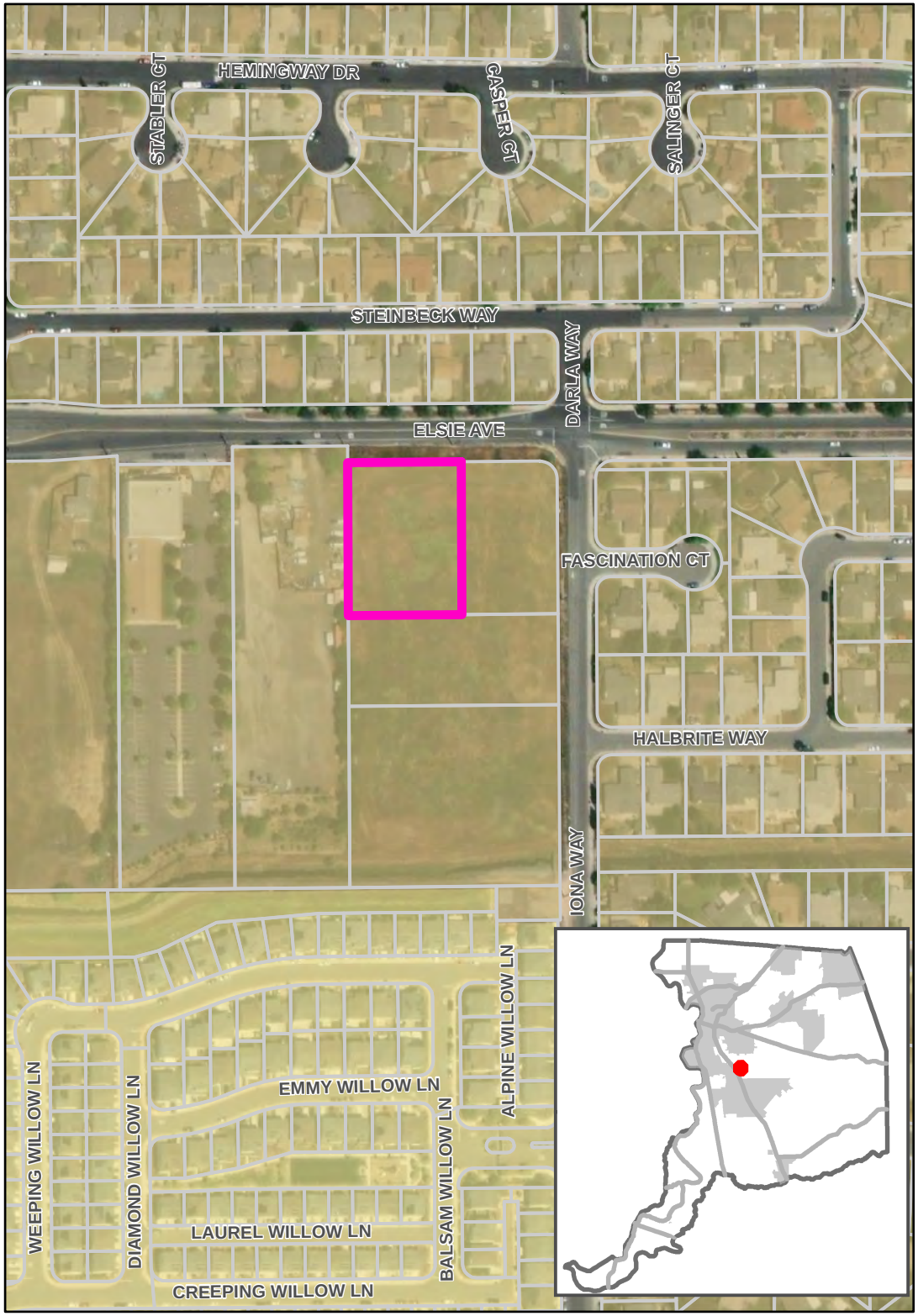
N

0 0.025 0.05 0.1 Miles

Site 52

APN 115-0073-011-0000

140 feet West of Elsie Avenue/Iona Way, South Sacramento



Legend

Proposed Rezone Site

Zoning

RD-15 Multiple Family Residential

RD-5 Residential

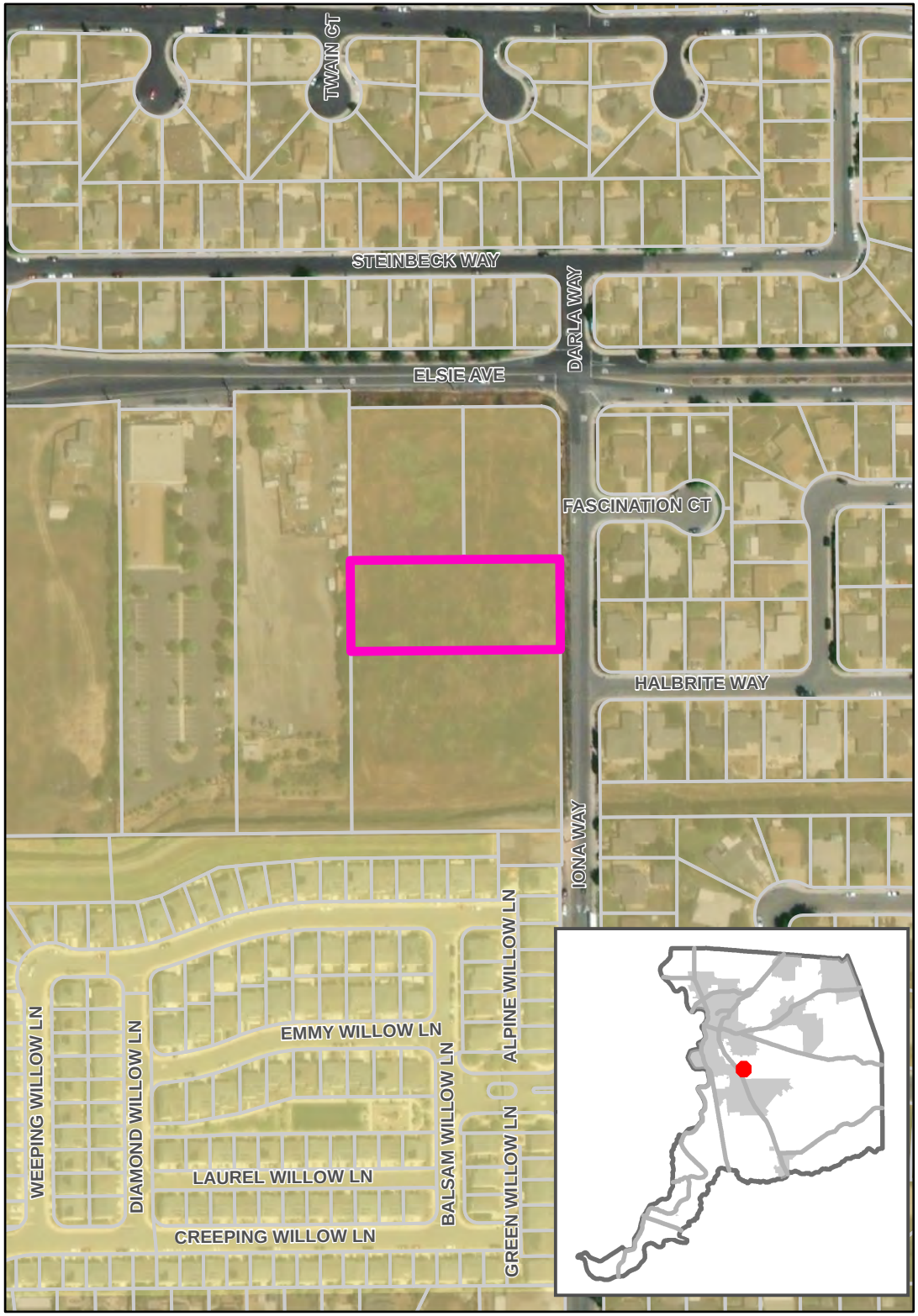
N

0 0.0375 0.075 0.15 Miles

Site 53

APN 115-0073-012-0000

220 feet South of Elsie Avenue/Iona Way, South Sacramento



Legend

Proposed Rezone Site

Zoning

RD-15 Multiple Family Residential

RD-5 Residential

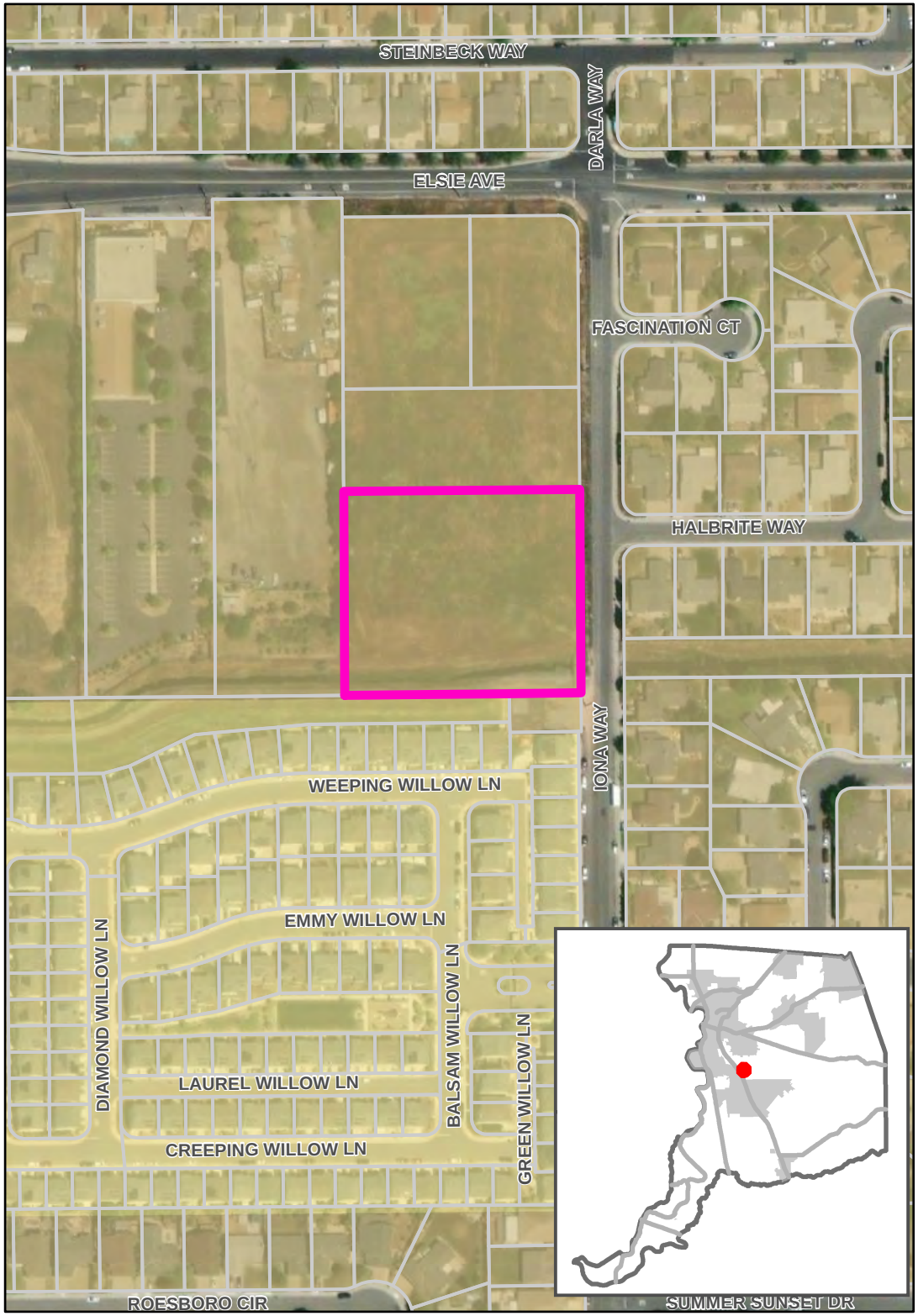
N

0 0.025 0.05 0.1 Miles

Site 54

APN 115-0073-013-0000

350 feet South of Elsie Avenue/Iona Way, South Sacramento



Legend

Proposed Rezone Site

Zoning

RD-15 Multiple Family Residential

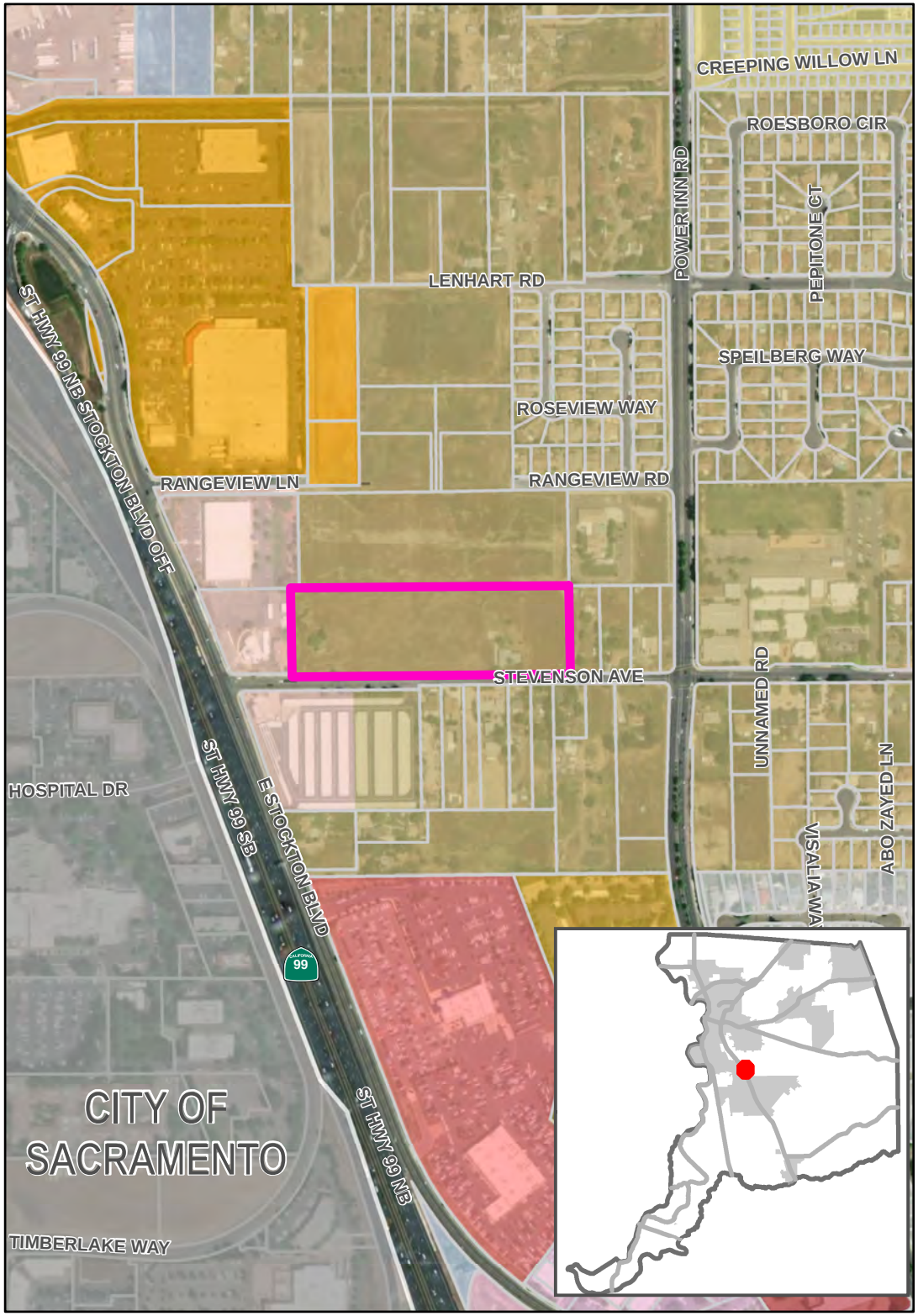
RD-5 Residential

N

0 0.025 0.05 0.1 Miles

Site 55

APN 115-0201-012-0000
7901 Stevenson Avenue,
South Sacramento



Legend

Proposed Rezone Site

Zoning

- AC Auto Commercial
- BP Business and Professional Office
- GC General Commercial
- MP Industrial - Office Park
- RD-15 Multiple Family Residential
- RD-20 Multiple Family Residential
- RD-30 Multiple Family Residential
- RD-5 Residential
- SC Shopping Center
- SPA Special Planning Area
- TC Highway Travel Commercial

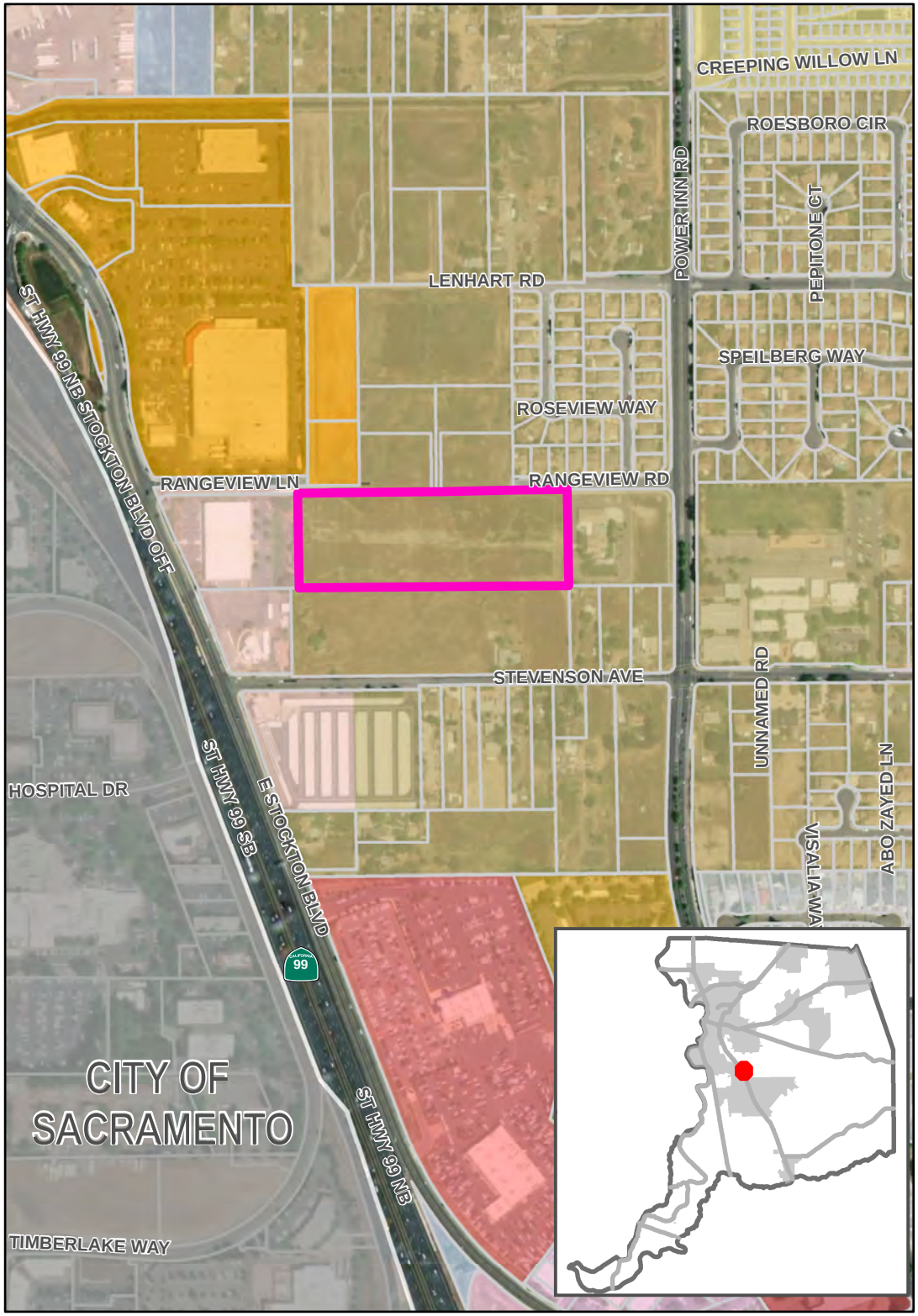
N

0 0.05 0.1 0.2 Miles

Site 56

APN 115-0201-018-0000

7516 Rangeview Lane,
South Sacramento



Legend

Proposed Rezone Site

Zoning

- AC Auto Commercial
- BP Business and Professional Office
- GC General Commercial
- MP Industrial - Office Park
- RD-15 Multiple Family Residential
- RD-20 Multiple Family Residential
- RD-30 Multiple Family Residential
- RD-5 Residential
- SC Shopping Center
- SPA Special Planning Area
- TC Highway Travel Commercial

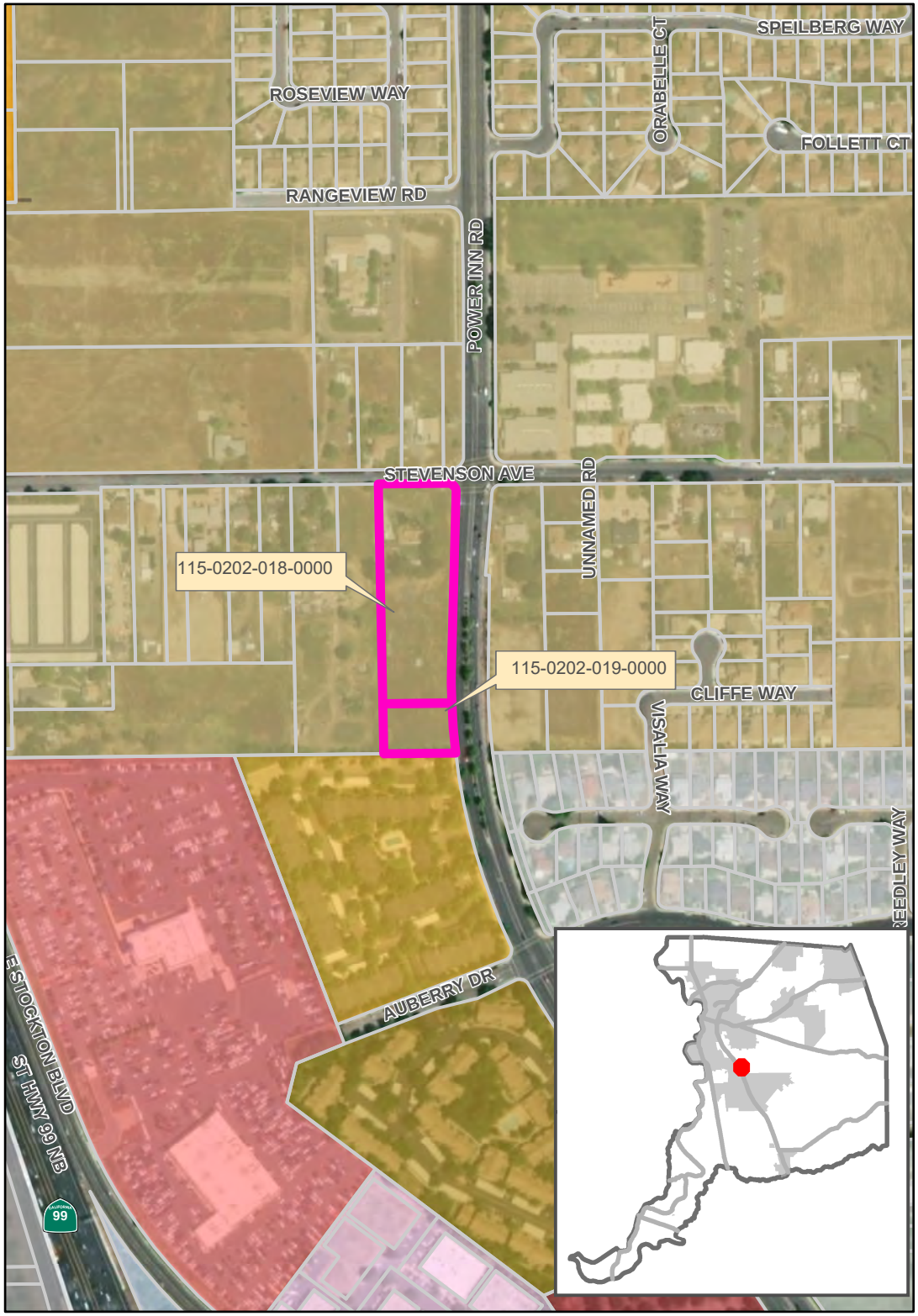
N

0 0.05 0.1 0.2 Miles

Site 57

APNs 115-0202-018-0000
& 115-0202-019-0000

8016 Stevenson Avenue & 540 feet South of Stevenson Avenue/Power Inn Road, South Sacramento



Legend

Proposed Rezone Site

Zoning

- AC Auto Commercial
- BP Business and Professional Office
- GC General Commercial
- MP Industrial - Office Park
- RD-20 Multiple Family Residential
- RD-30 Multiple Family Residential
- RD-5 Residential
- SC Shopping Center
- SPA Special Planning Area
- TC Highway Travel Commercial

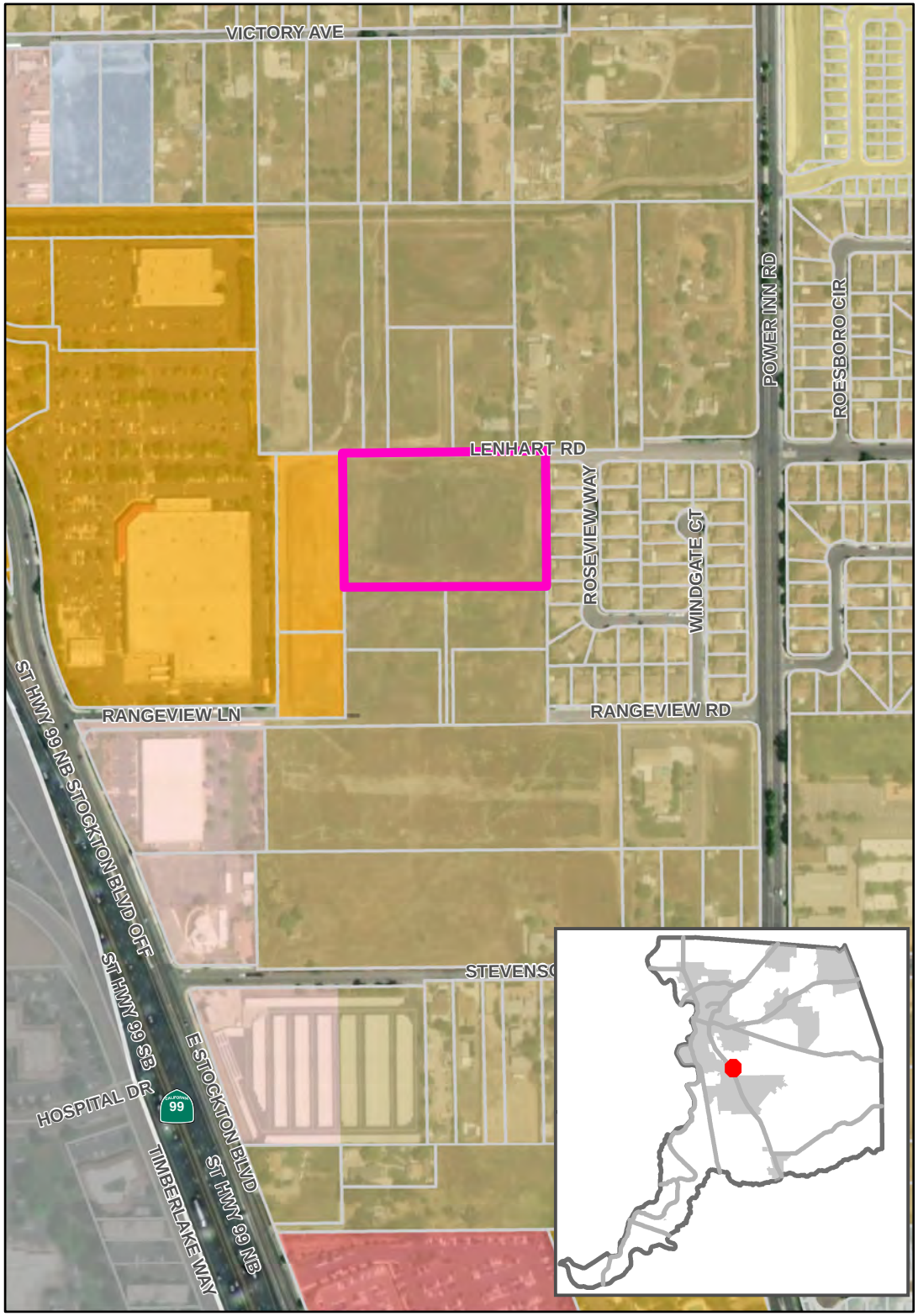
N

0 0.05 0.1 0.2 Miles

Site 58

APN 115-0210-010-0000

540 feet West of Lenhart Road/
Power Inn Road,
South Sacramento



Legend

Proposed Rezone Site

Zoning

- AC Auto Commercial
- GC General Commercial
- RD-15 Multiple Family Residential
- RD-20 Multiple Family Residential
- RD-5 Residential
- SC Shopping Center
- SPA Special Planning Area
- TC Highway Travel Commercial

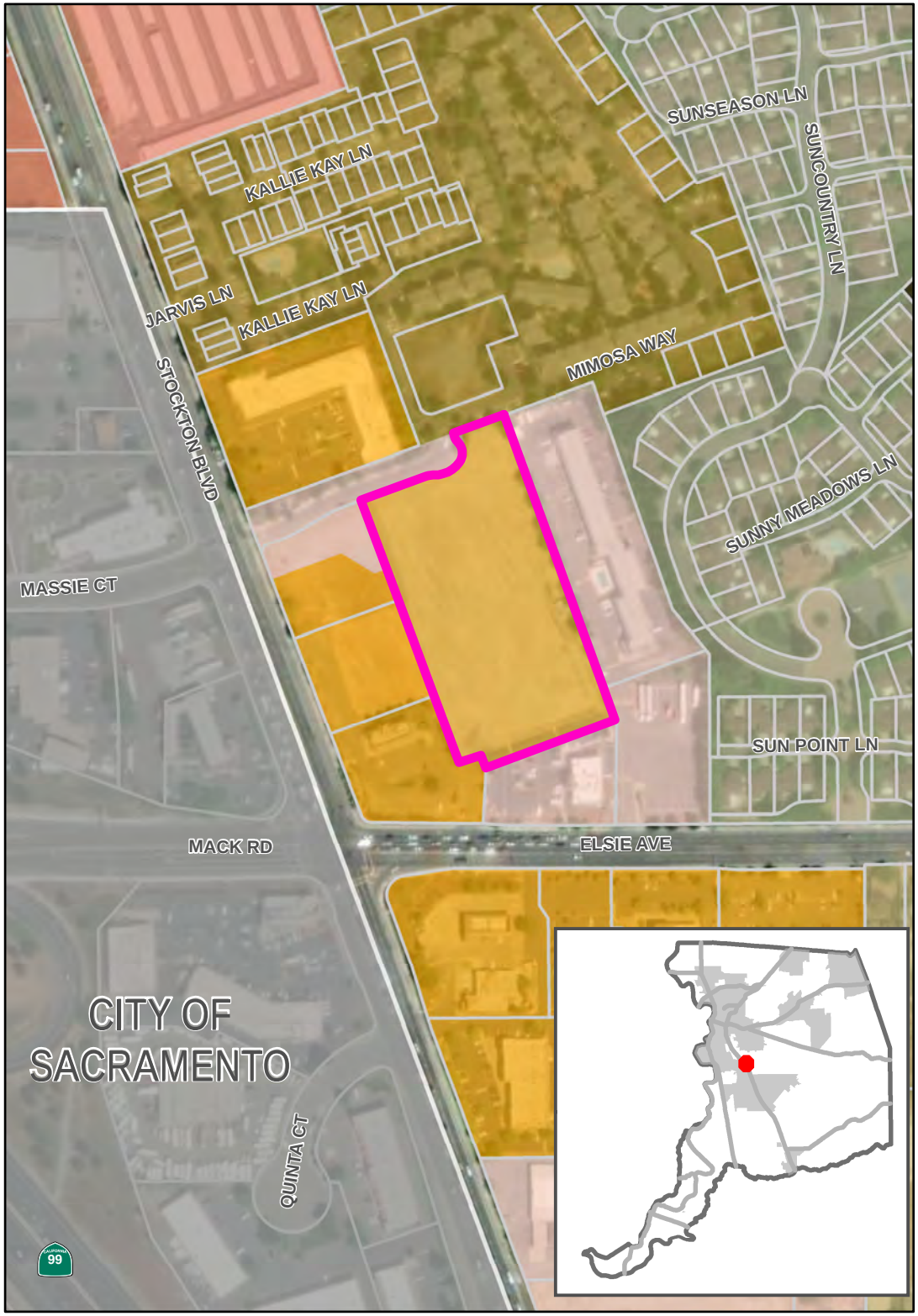
N

0 0.05 0.1 0.2 Miles

Site 59

APN 115-1980-003-0000

7333 Elsie Avenue,
Sacramento



Legend

Proposed Rezone Site

Zoning

- GC General Commercial
- LC Light Commercial
- RD-10 Residential
- RD-20 Multiple Family Residential
- RD-30 Multiple Family Residential
- RD-5 Residential
- RM-1 Mobile Home Subdivision
- SC Shopping Center

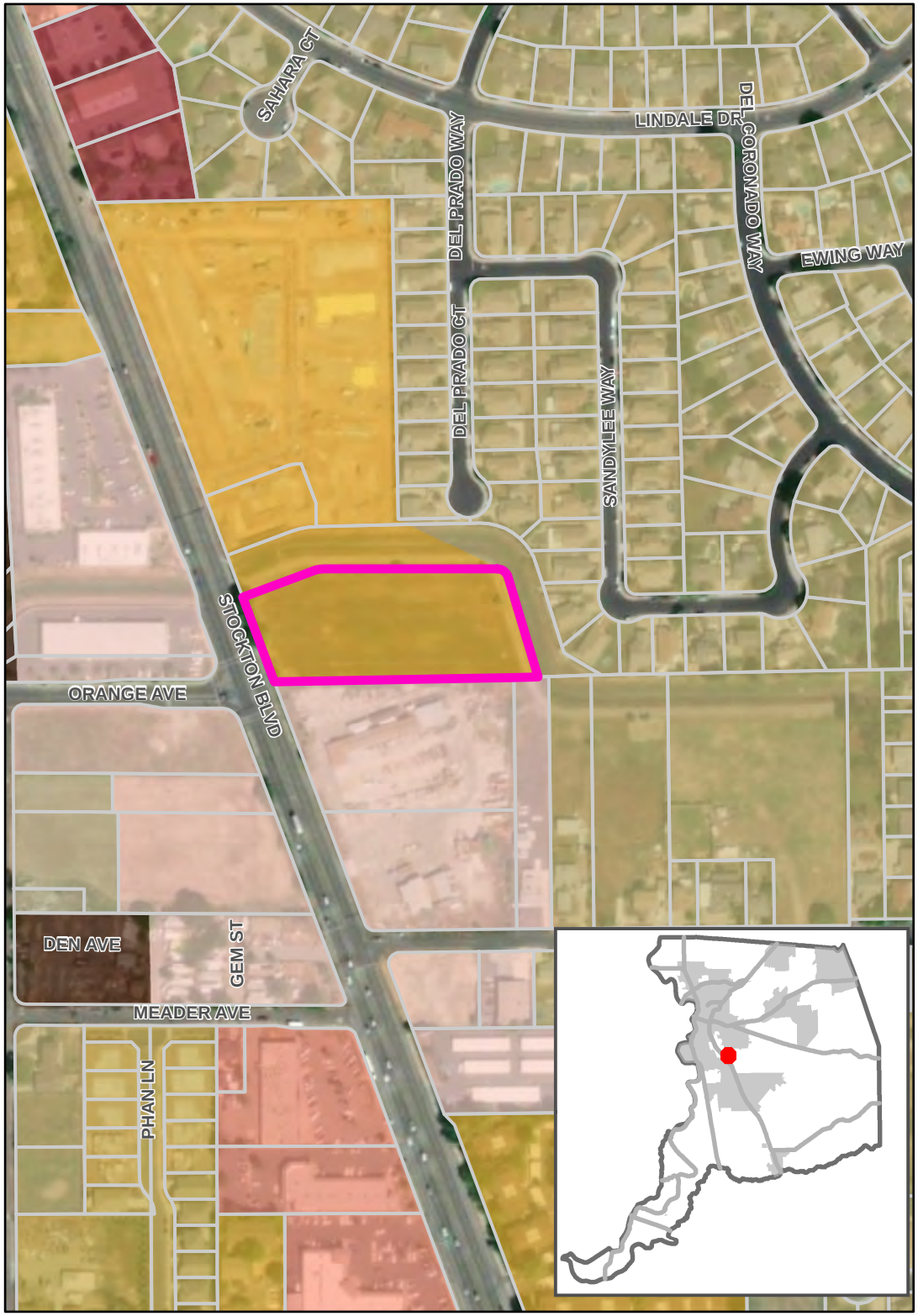
N

0 0.0375 0.075 0.15 Miles

Site 62

APN 051-0640-049-0000

Northeast Stockton Boulevard/
Orange Avenue,
South Sacramento



Legend

Proposed Rezone Site

Zoning

- BP Business and Professional Office
- GC General Commercial
- LC Light Commercial
- RD-10 Residential
- RD-20 Multiple Family Residential
- RD-5 Residential
- RD-7 Residential
- RM-1 Mobile Home Subdivision

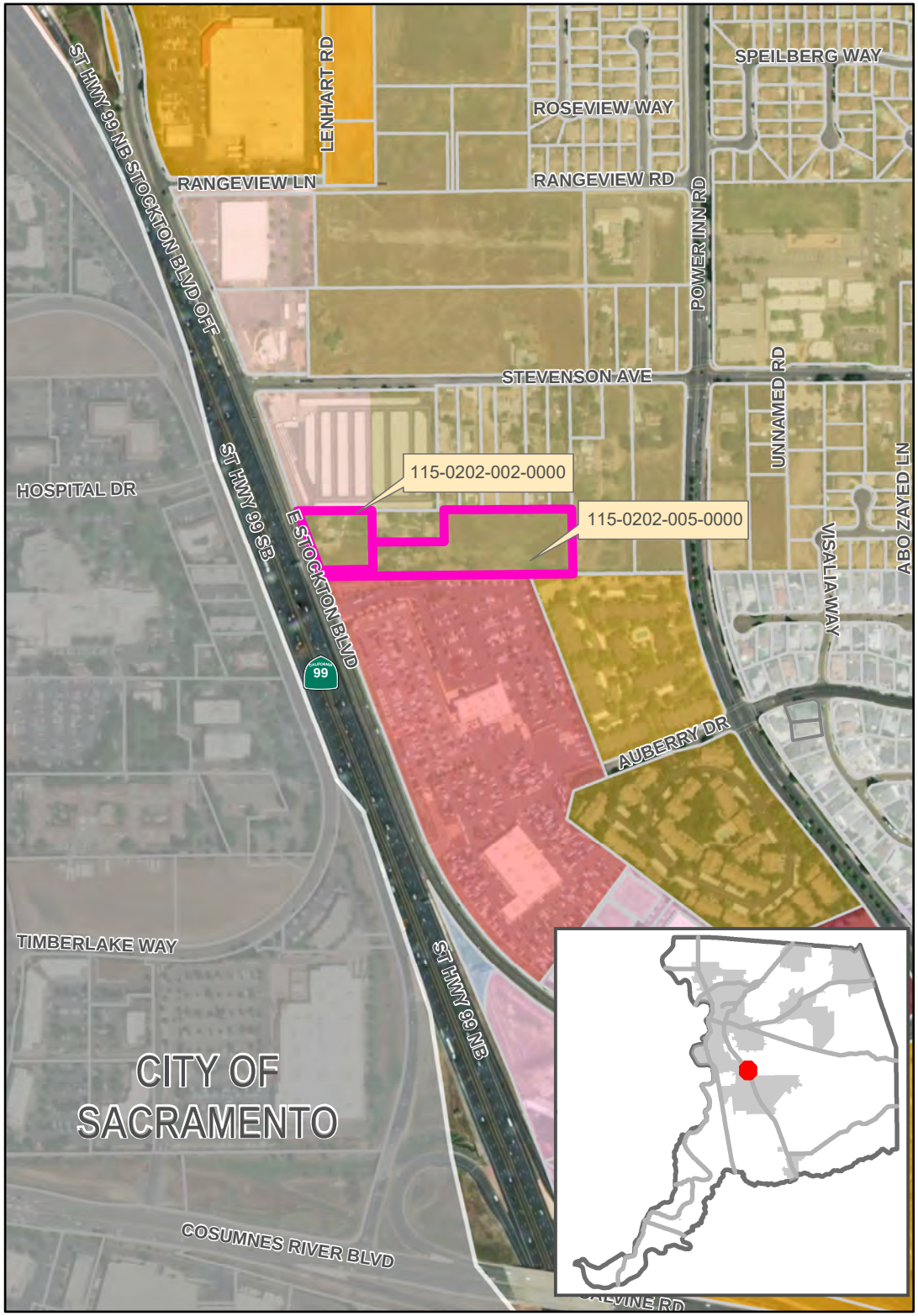
N

0 0.0375 0.075 0.15 Miles

Site 63

APNs 115-0202-002-0000
& 115-0202-005-0000

8095 & 8099 E Stockton Boulevard,
South Sacramento



Legend

Proposed Rezone Site

Zoning

- AC Auto Commercial
- BP Business and Professional Office
- GC General Commercial
- MP Industrial - Office Park
- RD-20 Multiple Family Residential
- RD-30 Multiple Family Residential
- RD-5 Residential
- SC Shopping Center
- SPA Special Planning Area
- TC Highway Travel Commercial

N

0 0.05 0.1 0.2 Miles

California American Water

Water Supply Assessment for
Sacramento County Regional Housing Needs Allocation Rezone Project

March 2024

I. Introduction

On December 29, 2023, the County of Sacramento submitted a letter to California American Water requesting a Water Supply Assessment (WSA) for the Sacramento County (County) Regional Housing Needs Allocation (RHNA) Rezone Project (Project). This WSA was prepared pursuant to the **California Water Code [Section 10910]**. California American Water's 2020 Urban Water Management Plan for the Sacramento Main Districts (2020 UWMP) did not include water demands for the Project; therefore, this assessment addresses the ability of California American Water to serve water to this Project.

II. Project Overview

The County has identified a shortfall of 2,884 housing units in the lower-income categories and therefore cannot accommodate the County's RHNA obligation for lower- and moderate- income housing. The Project provides capacity for future development of housing to meet the County's remaining unmet RHNA needs of 2,884 lower-income category units for the planning year of 2029. The County identified 33 rezone sites within California American Water's service areas. These service areas include Antelope, Fruitridge Vista, Lincoln Oaks, Parkway, and Suburban-Rosemont. Within these service areas, there will be a net increase of 2,105 units including 1,990 lower-income units and 115 moderate-income units. The number of additional units and associated demands in million gallons (MG) are shown in **Table 1**.

Table 1: Additional Units and Demand

Service Area	Additional Units	Additional Demand (MG)
Antelope	203	10.8
Fruitridge Vista	89	23.8
Lincoln Oaks	290	6.2
Parkway	1,236	58.7
Suburban-Rosemont	278	3.4

III. Water Demands [Section 10910(c)]

California American Water's 2020 UWMP for the Sacramento Main District did not include the proposed demands for the Project. There have been no significant changes or updates to demand projections for California American Water's Antelope, Fruitridge Vista, Lincoln Oaks, or Parkway service areas since the 2020 UWMP. Within the Suburban-Rosemont service area there, a WSA was completed earlier this year for the West Jackson Highway (WJH) Project, which is anticipated to add 996 million gallons (MG) of water demand. Historical demands from the past five years are presented in **Table 2**.

Table 2: Historical Demands (MG)

Service Area	2019	2020	2021	2022	2023
Antelope	1,349	1,452	1,442	1,367	1,190
Fruitridge Vista	1,026	964	990	979	928
Lincoln Oaks	1,732	1,849	1,753	1,656	1,591
Parkway	2,482	2,655	2,478	2,373	2,277
Suburban-Rosemont	2,629	2,872	2,622	2,699	2,543

Future demands were estimated by applying historical growth rates and include the demands for the WJH Project in Suburban-Rosemont as well as the projected demands for this Project. For the purpose of this WSA, the Project is projected to be in service by 2030. Projected demands are shown in **Table 3**.

Table 3: Projected Demands (MG)

Service Area	2025	2030	2035	2040	2045
Antelope	1,421	1,469	1,507	1,547	1,565
Fruitridge Vista	998	1,097	1,158	1,218	1,224
Lincoln Oaks	1,830	1,878	1,921	1,966	1,981
Parkway	2,526	2,595	2,606	2,660	2,723
Suburban-Rosemont	2,727	3,027	3,325	3,623	3,923

IV. Water Supply [Section 10910(d)]

A. Identification of Water Supply Entitlements [Section 10910(d)(1)]

California American Water's service areas are served primarily by groundwater wells. The wells in the Fruitridge Vista, Parkway, and Suburban-Rosemont service areas draw water from the South American Subbasin (SASb). The wells in the Antelope and Lincoln Oaks service areas draw water from the North American Subbasin (NASb). These basins are not adjudicated, therefore rights to the groundwater are based on the water rights of the property owner. As is the case with most municipal water providers, California American Water delivers water to parcels that it does not own. This is considered an appropriative use of groundwater. There is no permitting required for the use of groundwater in this case; however, the use of groundwater is limited to what is used by the overlying property owners.

California American Water has an agreement with the City of Sacramento to purchase water. In 2010, CAW revised an existing wholesale supply agreement with the City to receive a maximum of 3.46 million gallons per day (MGD) of non-firm supply during off-peak periods (October 15th through May 14th), plus an additional 2.3 MGD of firm capacity, for a total of 5.76 MGD. Because the non-firm capacity of 3.46 MGD can only be used during seven months of the year, the total yearly amount available is calculated to be 1,576 MG. However, in a dry year or multiple dry years, it is assumed that only the firm supply would be available. Additionally, this agreement includes three of California American Water's service areas, Arden, Parkway, and Suburban-Rosemont, so it is assumed that this firm supply would be available to each of these service areas proportional to their respective demands. For the Suburban-Rosemont service area, this equates to 403 MG, and for the Parkway service area, this equates to 378 MG. California American Water has an additional agreement with the City of Sacramento to purchase water for the Fruitridge Vista service area in the amount of 3.24 MGD. The is considered a guaranteed supply source, so it is assumed to be available in normal and dry years.

California American Water has a take or pay agreement with Sacramento Suburban Water District (SSWD) to purchase up to 652 MG per year of water for its Antelope and Lincoln Oaks service areas. This is not a guaranteed supply source, so it is considered unavailable in dry years.

Total firm supply availability is summarized in **Table 4** for a normal year, a dry year, and multiple dry years. Firm well supply is calculated as the total well supply with the largest well out of service.

Table 4: Supply by Year Type

Year Type	Source	Capacity (MG)				
		Antelope	Fruitridge Vista	Lincoln Oaks	Parkway	Suburban-Rosemont
Normal Years	Groundwater Wells	6,776	3,637	7,827	7,446	9,279
	Purchased Water	652	1,183	652	1,576	1,576
	Total	7,428	4,820	8,479	9,022	10,855
Single Dry Year	Groundwater Wells	6,776	3,637	7,827	7,446	9,279
	Purchased Water	0	1,183	0	378	403
	Total	6,776	4,820	7,827	7,824	9,682
Multiple Dry Years	Groundwater Wells	6,776	3,637	7,827	7,446	9,279
	Purchased Water	0	1,183	0	378	403
	Total	6,776	4,820	7,827	7,824	9,682

B. Demonstration of Water Supply [Section 10910(d)(2)]

Section 10910(d)(2)(A), contracts or proof of entitlements: The agreements between California American Water and the City of Sacramento and SSWD for purchased water are documented in the 2020 UWMPs for California American Water, City of Sacramento, and SSWD, which can be found on the Department of Water Resources website at wuedata.water.ca.gov.

California American Water has appropriative rights to the groundwater extracted from groundwater wells.

Section 10910(d)(2)(B), capital outlay program: California American Water's Capital Improvement Program (CIP) must be approved by the California Public Utilities Commission (CPUC). The current approved CIP from the 2019 General Rate Case (GRC) can be found on the CPUC website at cpuc.ca.gov, Decision D.21-11-018, Appendix B, Attachment C-4. California American Water is currently awaiting a CPUC decision for its latest GRC filed in 2022, which contains an updated CIP.

Section 10910(d)(2)(C), permits for construction of infrastructure: The Project will connect to existing California American Water infrastructure. Although no off-site infrastructure is anticipated to be needed, Project owners would be responsible for providing any infrastructure needed to convey water to the Project, including obtaining any permits for construction.

Section 10910(d)(2)(D), regulatory approvals: The Project is located within California American Water's existing service area, therefore no regulatory approvals are required in order to convey water to the Project.

V. Supply and Demand Assessment [Section 10910(c)(3)]

California American Water has sufficient supply to meet projected demands in normal, dry, and multiple dry years through 2045, as shown in **Tables 5.1 through 5.5**. However, it should be noted that the groundwater wells are aging, and as they age, they tend to lose production capacity and are at risk of failure. California American Water has a well replacement plan in place that prioritizes replacement of wells that are at high risk of failure, whether it be due to age or other factors. This analysis assumes that

these wells are replaced when needed to replace diminished capacity or avoid failure and that replacement wells are of similar production capacity.

Table 5.1: Supply and Demand (MG) – Antelope

Year Type	Source	2025	2030	2035	2040	2045
Normal Years	Supply	7,428	7,428	7,428	7,428	7,428
	Demand	1,421	1,469	1,507	1,547	1,565
	Surplus/Deficit	6,007	5,959	5,921	5,881	5,863
Single Dry Year	Supply	6,776	6,776	6,776	6,776	6,776
	Demand	1,421	1,469	1,507	1,547	1,565
	Surplus/Deficit	5,355	5,307	5,269	5,229	5,211
Multiple Dry Years	Supply	6,776	6,776	6,776	6,776	6,776
	Demand	1,421	1,469	1,507	1,547	1,565
	Surplus/Deficit	5,355	5,307	5,269	5,229	5,211

Table 5.2: Supply and Demand (MG) – Fruitridge Vista

Year Type	Source	2025	2030	2035	2040	2045
Normal Years	Supply	4,820	4,820	4,820	4,820	4,820
	Demand	998	1,097	1,158	1,218	1,224
	Surplus/Deficit	3,822	3,723	3,662	3,602	3,596
Single Dry Year	Supply	4,820	4,820	4,820	4,820	4,820
	Demand	998	1,097	1,158	1,218	1,224
	Surplus/Deficit	3,822	3,723	3,662	3,602	3,596
Multiple Dry Years	Supply	4,820	4,820	4,820	4,820	4,820
	Demand	998	1,097	1,158	1,218	1,224
	Surplus/Deficit	3,822	3,723	3,662	3,602	3,596

Table 5.3: Supply and Demand (MG) – Lincoln Oaks

Year Type	Source	2025	2030	2035	2040	2045
Normal Years	Supply	8,479	8,479	8,479	8,479	8,479
	Demand	1,830	1,878	1,921	1,966	1,981
	Surplus/Deficit	6,649	6,601	6,558	6,513	6,498
Single Dry Year	Supply	7,827	7,827	7,827	7,827	7,827
	Demand	1,830	1,878	1,921	1,966	1,981
	Surplus/Deficit	5,997	5,949	5,906	5,861	5,846
Multiple Dry Years	Supply	7,827	7,827	7,827	7,827	7,827
	Demand	1,830	1,878	1,921	1,966	1,981
	Surplus/Deficit	5,997	5,949	5,906	5,861	5,846

Table 5.4: Supply and Demand (MG) – Parkway

Year Type	Source	2025	2030	2035	2040	2045
Normal Years	Supply	9,022	9,022	9,022	9,022	9,022
	Demand	2,526	2,595	2,606	2,660	2,723
	Surplus/Deficit	6,496	6,427	6,416	6,362	6,298
Single Dry Year	Supply	7,824	7,824	7,824	7,824	7,824
	Demand	2,526	2,595	2,606	2,660	2,723
	Surplus/Deficit	5,298	5,229	5,218	5,164	5,100
Multiple Dry Years	Supply	7,824	7,824	7,824	7,824	7,824
	Demand	2,526	2,595	2,606	2,660	2,723
	Surplus/Deficit	5,298	5,229	5,218	5,164	5,100

Table 5.5: Supply and Demand (MG) – Suburban-Rosemont

Year Type	Source	2025	2030	2035	2040	2045
Normal Years	Supply	10,855	10,855	10,855	10,855	10,855
	Demand	2,727	3,027	3,325	3,623	3,923
	Surplus/Deficit	8,128	7,828	7,530	7,232	6,932
Single Dry Year	Supply	9,682	9,682	9,682	9,682	9,682
	Demand	2,727	3,027	3,325	3,623	3,923
	Surplus/Deficit	6,955	6,655	6,357	6,059	5,759
Multiple Dry Years	Supply	9,682	9,682	9,682	9,682	9,682
	Demand	2,727	3,027	3,325	3,623	3,923
	Surplus/Deficit	6,955	6,655	6,357	6,059	5,759

VI. Groundwater Withdrawals [Section 10910(f)]

Section 10910(f)(1), groundwater information in the UWMP: California American Water's 2020 UWMP identified the SASb as the source of groundwater for its Fruitridge Vista, Parkway, and Suburban-Rosemont service areas. These service areas have a combined well production capacity of approximately 43,700 gallons per minute (gpm) from 55 groundwater wells, which equates to approximately 22,600 MG per year. The firm capacity of these wells, or the capacity with the largest well out of service, is approximately 39,500 gpm, or 20,400 MG. These well capacities were updated from the 2020 UWMP with more recent well pump efficiency tests.

California American Water's 2020 UWMP identified the NASb as the source of groundwater for its Antelope and Lincoln Oaks service areas. These service areas have a combined well production capacity of approximately 30,600 gallons per minute (gpm) from 41 groundwater wells, which equates to approximately 16,100 MG per year. The firm capacity of these wells is approximately 27,800 gpm, or 14,600 MG. These well capacities were updated from the 2020 UWMP with more recent well pump efficiency tests.

Section 10910(f)(2)(A), description of groundwater basin: The SASb is a high priority subbasin surrounded by the American, Cosumnes, Mokelumne, and Sacramento Rivers to the north, south and west, and the foothills of the Sierra Nevada to the east. The SASb is comprised of two aquifers; the upper and lower aquifers are described as follows in the Sacramento Central Groundwater Authority Alternative Submittal:

"The upper fresh-water aquifer is wedge-shaped along the eastern side of the basin (dipping and thickening westward) but is relatively flat-lying on the western side. The thickness can vary up to approximately 300 feet, but is typically 200 feet, and the bottom can extend to an elevation of approximately 200 feet below mean sea level. The upper aquifer is generally correlative to the Laguna Formation and other similar/younger sediments.

The lower fresh-water aquifer is similar in shape to the upper aquifer, but considerably larger. The wedge portion of the lower aquifer, on the eastern side of the basin, rests on bedrock (relatively impermeable) and can extend to depths between 800 and 1,200 feet below mean sea level. Within the center and western portions of the basin, the base of the lower aquifer extends to depths between 1,200 and 2,000 feet below mean sea level, to the top of the unusable water. This unusable water may occur at depths of 800 feet below mean sea level beneath the Delta area of the South American Subbasin. The lower aquifer is generally correlative to the Mehrten Formation and pre-Mehrten sediments.

The Laguna and Mehrten Formations were deposited during the Pliocene and Miocene Epochs, respectively, (Gutierrez, 2011) of the Tertiary or Neogene Period (2.6 to 23.0 million years ago) in a fluvial environment (DWR, 1974). These formations are comprised of interbedded layers of gravel, sand, silt, and clay with numerous channel deposits within the South American Subbasin. The deposits are wedge-shaped and dip gently and thicken in a westerly direction. The Laguna Formation is derived from granitic and metamorphic rocks while the Mehrten Formation is derived from andesitic rock. The Mehrten Formation also includes dense, hard layers of tuff-breccia."

"The cones-of-depressions…were developed during the middle of the last century as groundwater was pumped extensively for agricultural land uses, and were known to not be in a state of equilibrium (i.e., groundwater levels still falling) in the mid 1980's. The majority of the subbasin's recharge occurs from the percolation of rainfall and irrigation water and from the rivers that bound three sides of the subbasin, including the Delta."

The NASb is a high priority basin that covers approximately 342,000 acres in Sutter, Placer, and Sacramento Counties bounded by the American, Bear, Feather, and Sacrmento Rivers. Different portions of the subbasin are managed by different agencies. California American Water's service areas are managed by the Sacramento Groundwater Authority (SGA), which manages the groundwater resources in the area north of the America River within Sacramento County. The following is a description of the NASb from the 2021 Groundwater Sustainability Plan (GSP):

"The NASb is in the Sacramento Valley and is filled largely with sediments derived from the adjacent Sierra Nevada foothills, which contain fresh water. In general, these fresh-water bearing sediments beneath the NASb are thinnest to the east and thicken up to 2,000 feet to the west. The sediments consist of alternating layers of clays, silts, sand and gravel. The sand and gravels layers into which wells are constructed are referred to as aquifers. These sand and gravel layers were deposited by meandering rivers and creeks, so they are not continuous across the entire Subbasin. Although the sediments are not present as continuous layers, they are interconnected. This was demonstrated by observing that groundwater levels in the

various sand and gravel layers have similar levels and trends. Based on this information, the NASb is interpreted as having one principal aquifer.

Groundwater is recharged from throughout the surface of the Subbasin and from groundwater inflow from adjacent subbasins. No geologic sediments are impermeable, so some recharge occurs in all areas that are not covered by impermeable surfaces (such as asphalt or concrete). This is particularly important in agricultural areas where, even though there are low permeability soils, there are more than one hundred thousand acres of land that have applied or ponded water throughout the growing season, which results in large volumes of recharge to the Subbasin."

"Groundwater levels in the western portion of the Subbasin are generally stable through time dating back to early in the 20th century. Groundwater levels in the central part of the Subbasin showed long-term declines in the north-central portion until the mid-1960s and in the southcentral portion until the mid-1990s, when conjunctive use programs arrested these declines and allowed groundwater levels to begin to recover. Groundwater levels in the eastern portion of the subbasin have been generally stable since the 1970s, but they do show declines during dry periods with recovery during wet periods.

The groundwater contours show a pumping depression in the center of the Subbasin that is currently about 30 feet below mean sea level. Groundwater flows radially toward this depression, from the fringes of the Subbasin toward the center. The depression has been stabilized, with groundwater levels generally declining during dry periods and recovering during wet periods.

Limited land subsidence due to groundwater pumping was documented up to the early 1990s, but there were no documented impacts associated with the subsidence. Since then, the subsidence has been negligible."

Section 10910(f)(2)(C), GSP: California enacted the Sustainable Groundwater Management Act in 2014 and this requires that the state's high and medium priority groundwater basins develop a GSP to balance pumping and recharge to the basin. To accomplish this, six Groundwater Sustainability Agencies (GSAs) were formed to develop one GSP for the SASb. The GSP was finalized in 2022 and can be found on the SASb website at sasbgroundwater.org. The key finding of the GSP is that the basin will be sustainable over the next twenty years as long as planned recycled water, recharge, and other projects are implemented. The SGA completed a Groundwater Sustainability Plan for NASb in 2021 and can be found on the SGA website as sgah2o.org. The key finding of this GSP is that while there is currently a surplus of water, there is a potential future deficit of 3,500 AFY, which can be offset through a conjunctive use project.

Section 10910(f)(3), description and analysis of the amount of groundwater pumped: Actual groundwater withdrawals for the past five years are shown in **Table 6**.

Table 6: Historical Groundwater Withdrawals (MG)

Service Area	2019	2020	2021	2022	2023
North American Subbasin					
Antelope	1,152	1,432	1,442	1,367	938
Lincoln Oaks	1,446	1,820	1,751	1,656	1,310
Total	2,598	3,252	3,193	3,023	2,248
South American Subbasin					
Fruitridge Vista	0	399	646	877	869
Parkway	2,184	2,081	2,172	2,249	2,069
Suburban-Rosemont	2,466	2,531	2,622	2,590	2,380
Total	4,650	5,011	5,440	5,716	5,318

VII. Conclusion of Sufficiency

In conclusion, California American Water has sufficient supply for future demands, including the Sacramento County RHNA Rezone Project, through 2045. This includes normal years, dry years, and multiple dry years.

APPENDIX UTIL-3: SACRAMENTO SUBURBAN WATER DISTRICT CORRESPONDENCE AND WATER SUPPLY ASSESSMENT

THESE CORRESPONDENCES INCLUDED FOUR ADDITIONAL SITES THAT ARE LONGER INCLUDED IN THE PROJECT. ADDITIONALLY, NUMBERING OF THE CANDIDATE REZONE SITES HAVE BEEN MODIFIED SINCE THE OCCURRENCE OF THESE CORRESPONDENCES.

Todd Smith, Planning Director
Planning and Environmental Review

Troy Givans, Director
Department of Community Development

County of Sacramento

December 29, 2023

Dan York, General Manager
Sacramento Suburban Water District
3701 Marconi Avenue #100
Sacramento, CA 95821
epc@sswd.org; newdevelopment@sswd.org

Subject: Request for a Water Supply Assessment for the Sacramento County Regional Housing Needs Allocation (RHNA) Rezone Project (Control No. PLNP2020-00042)

Dear Dan York,

Planning and Environmental Review (PER) is currently preparing the environmental analysis associated with the Sacramento County Regional Housing Needs Allocation (RHNA) Rezone Project (Project). The Project's revised Notice of Preparation (NOP) was released on December 22, 2023, and may be viewed online at: https://planning.saccounty.gov/PlansandProjectsIn-Progress/Pages/Countywide-Rezone-Program.aspx.

The Sacramento County Housing Element of 2021-2029 identifies a shortfall of 2,884 units for the lower-income category (includes the low, very low, and extremely low income categories; incomes ranging from $0 to $69,050 annually) in the County. Simply, there is insufficient appropriately-zoned sites to accommodate the County's RHNA obligation for the lower-income category. As such, PER is undertaking a rezone of ±248.33 acres comprising 83 candidate rezone sites within the unincorporated County to provide additional lower-income (to fulfill the RHNA obligation and increase the buffer) and moderate income (to increase the buffer) category housing opportunities. The Project does not propose to construct new residential or other development on the ±248.33 acres proposed to be rezoned; rather, it provides capacity for future development of housing units to meet the County's remaining unmet RHNA of 2,884 lower income category units, consistent with State law. The planning horizon year for the Project is 2029.

Attachment 1 lists the 21 candidate rezone sites (Sites 1-4, 6-7, 9-11, 14-15, 20-24, and 72-76) within Sacramento Suburban Water District's (SSWD's) service area that are proposed to be rezoned with the Project. Information regarding site acreage, existing and proposed zoning designations, and net increase in units are also provided. The net increase in residential units is calculated as the difference between an existing zoning designation's maximum density and the proposed zoning designation's maximum density. For example, a 1-acre site currently zoned RD-20 (maximum density of 20 units per acre) with a proposed zoning of RD-30 (maximum density of 30 units per acre) nets 10 additional units the Project. Attachment 2 depicts the locations of these sites within SSWD's service area, as well as individual site maps. In total, the Project is

anticipated to result in a net increase of 1,088 units (1,020 lower-income units and 68 moderate-income units) within SSWD's service area.

It is noted that Section 4.7 of SSWD's 2020 Urban Water Management Plan provides a projection of water use for lower income households. Pursuant to California Water Code §10910 through 10915, PER requests the following information:

1. Whether the projected water demand associated with the Project was include as part of the most recently adopted urban water management plan; and
2. If the Project's water demand was not included as part of the most recently adopted urban water management plan, since the Project would result in a net increase of more than 500 dwelling units within SSWD's service area, please provide a water supply assessment (WSA) for the Project.

California Water Code §10910(c) identifies that the WSA shall include a discussion regarding whether the public water system's total projected water supplies available during normal, single dry, and multiple dry water years during a 20-year projection will meet the projected water demand associated with a proposed project, in addition to the public water system's existing and planned future uses, including agricultural and manufacturing uses.

Additionally, PER requests any comments (including conditions of approval or advisories) SSWD may have for the Project. If you have any questions or would like to set up a meeting to further discuss the Project, please contact me at shenj@saccounty.gov or 916.875.3711.

Sincerely,



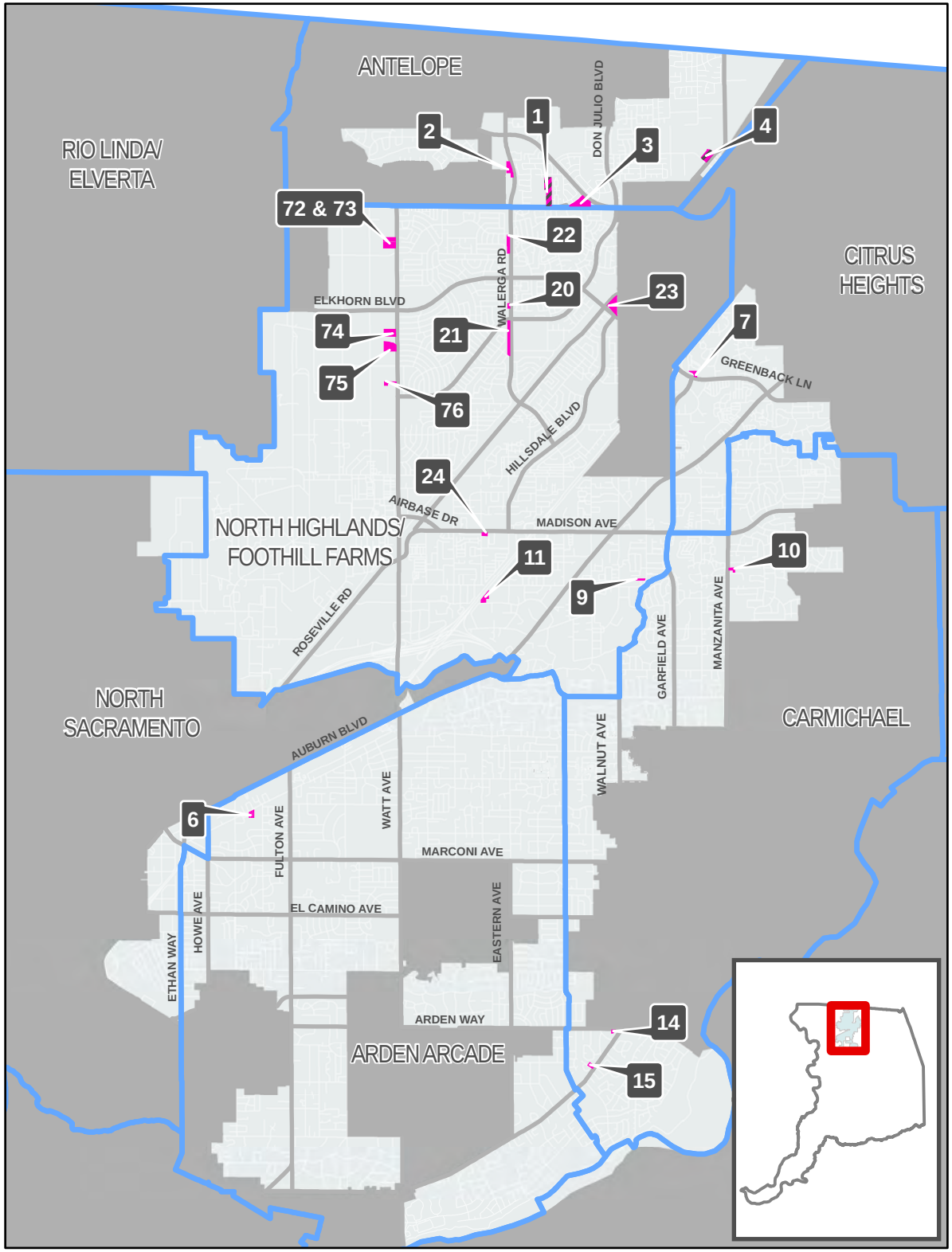
Jessie Shen
Senior Planner

Attachments

Attachment 1 – Sacramento Suburban Water District List of Candidate Rezone Sites
Attachment 2 – Sacramento Suburban Water District Maps of Candidate Rezone Sites

Site #	APN	Address/Siting Description	Lot size / Portion of Lot Rezoned (net acres)	Zoning Designation/SPA/ Specific or Master Plan Area (Current)	Zoning Designation (Proposed)	Net Increase
1	203-0110-047-0000	0.3 miles W of Antelope Road/Walerga Road	10.00	RD-20	RD-30	100
2	203-0110-069-0000	0.2 miles S of Elverta Road/Walerga Road	4.66	UR	RD-30	138
3	203-0120-089-0000	S Antelope Road/Elverta Road	9.69	RD-20	RD-40	194
4	203-0260-064-0000	7907 Antelope North Road	5.80	RD-20/RD-7/O	RD-30	58
6	268-0010-007-0000, 268-0010-008-0000 & 268-0010-009-0000	2328 Edison Avenue, 2332 Edison Avenue & 2336 Edison Avenue	1.98	RD-20	RD-30	20
7	220-0025-002-0000	6344 Verner Avenue	1.80	RD-5	RD-30	45
9	230-0091-056-0000	4921 Hemlock Street	1.32	RD-20	RD-30	13
10	236-0051-073-0000	5817 Muldrow Road	1.33	RD-5	RD-10	7
11	240-0050-026-0000	5108 Pasadena Avenue	3.01	RD-2	RD-15	39
14	289-0042-005-0000	5020 Arden Way	0.72	RD-2	RD-10	6
15	289-0600-022-0000	4845 Fair Oaks Boulevard	1.46	RD-4	RD-15	16
20	219-0032-004-0000	NW Walerga Road/Blackjack Way	0.97	BP	RD-20	0
21	219-0033-001-0000	SW Walerga Road/Don Julio Boulevard	5.70	RD-20/BP	RD-30	57
22	219-0042-019-0000	NW Walerga Road/Galbraith Drive	3.36	BP	RD-30	33
23	222-0024-001-0000 & 222-0024-041-0000	E Roseville Road/Elkhorn Boulevard overpass	9.96	RD-10	RD-30	120
24	228-0182-005-0000	5140 Harrison Street	1.22	BP	RD-30	12
72	208-0122-066-0000	500 feet N of Watt Avenue/Q Street	3.06	SPA (North Watt - RMU-1)	RD-40	46
73	208-0132-008-0000	7235 Watt Avenue	4.62	SPA (North Watt - RMU-1)	RD-40	69
74	208-0162-018-0000	0.2 miles S Watt Avenue/Elkhorn Boulevard	5.15	SPA (North Watt - RMU-2)	RD-30	51
75	208-0162-027-0000	0.1 miles N Watt Avenue/I Street	6.35	SPA (North Watt - RMU-1)	RD-30	32
76	215-0062-057-0000	6233 Watt Avenue	2.13	SPA (North Watt - RMU-1)	RD-40	32

Sacramento Suburban Water District



1 APN 203-0110-047-0000	20 APN 219-0032-004-0000
2 APN 203-0110-069-0000	21 APN 219-0033-001-0000
3 APN 203-0120-089-0000	22 APN 219-0042-019-0000
4 APN 203-0260-064-0000	23 APN 222-0024-001-0000*
6 APNs 268-0010-007-0000, 268-0010-008-0000, & 268-0010-009-0000	24 APN 228-0182-005-0000
7 APN 220-0025-002-0000	72 APN 208-0122-066-0000
9 APN 230-0091-056-0000	73 APN 208-0132-008-0000
10 APN 236-0051-073-0000	74 APN 208-0162-018-0000
11 APN 240-0050-026-0000	75 APN 208-0162-027-0000
14 APN 289-0042-005-0000	76 APN 215-0062-057-0000
15 APN 289-0600-022-0000	

*overlaps with California American Water

Legend

- Proposed Rezone Sites
- Partially Rezoned Parcels
- Community Boundaries
- Major Roads
- Local Roads

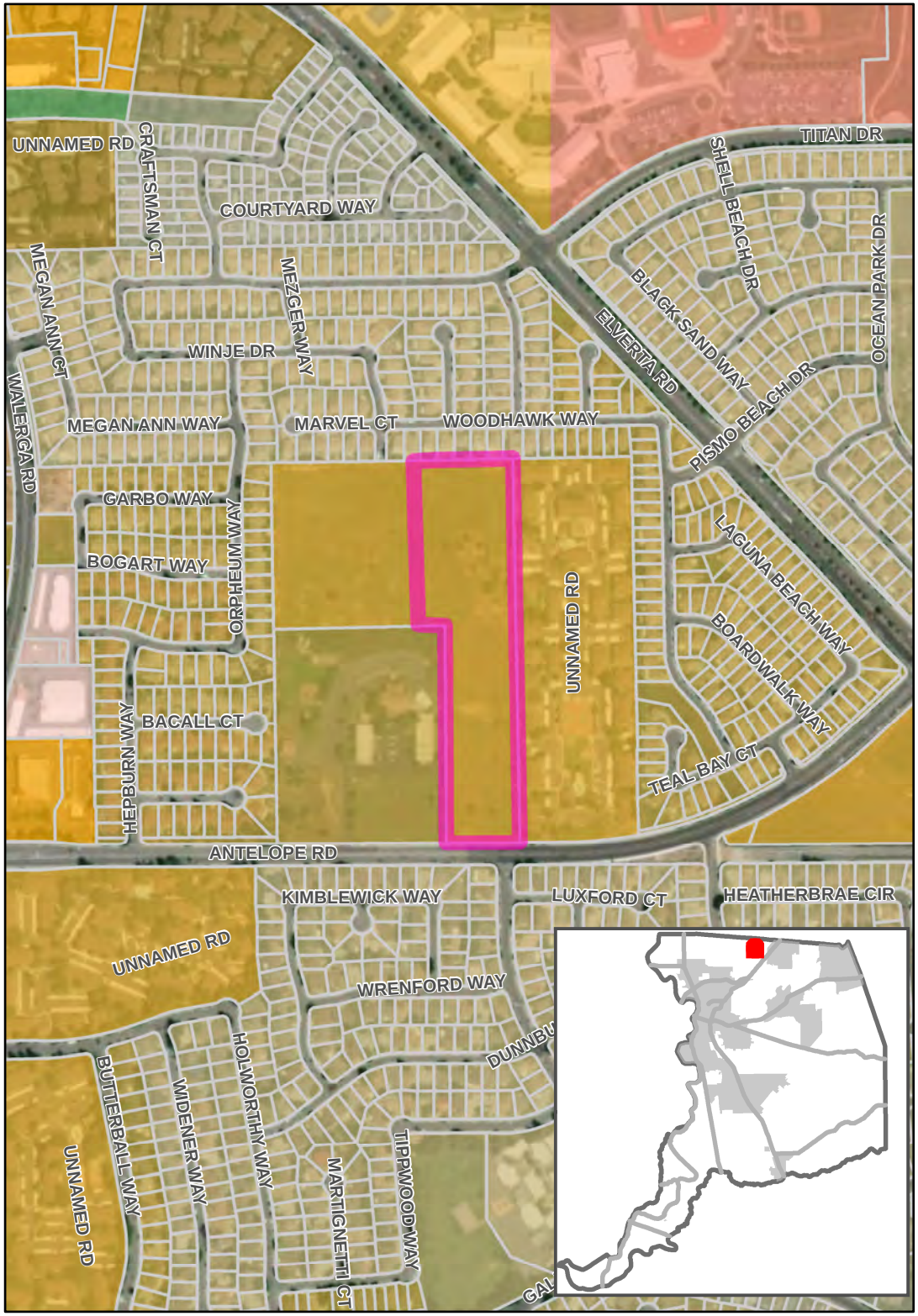
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0 0.5 1 2 Miles

Site 1

APN 203-0110-047-0000

0.3 miles West of Antelope Road/Walerga Road, Antelope



Legend

- Proposed Rezone Site

Zoning

- GC General Commercial
- LC Light Commercial
- O Recreation
- RD-10 Residential
- RD-20 Multiple Family Residential
- RD-30 Multiple Family Residential
- RD-5 Residential
- RD-7 Residential
- SC Shopping Center
- UR Urban Reserve

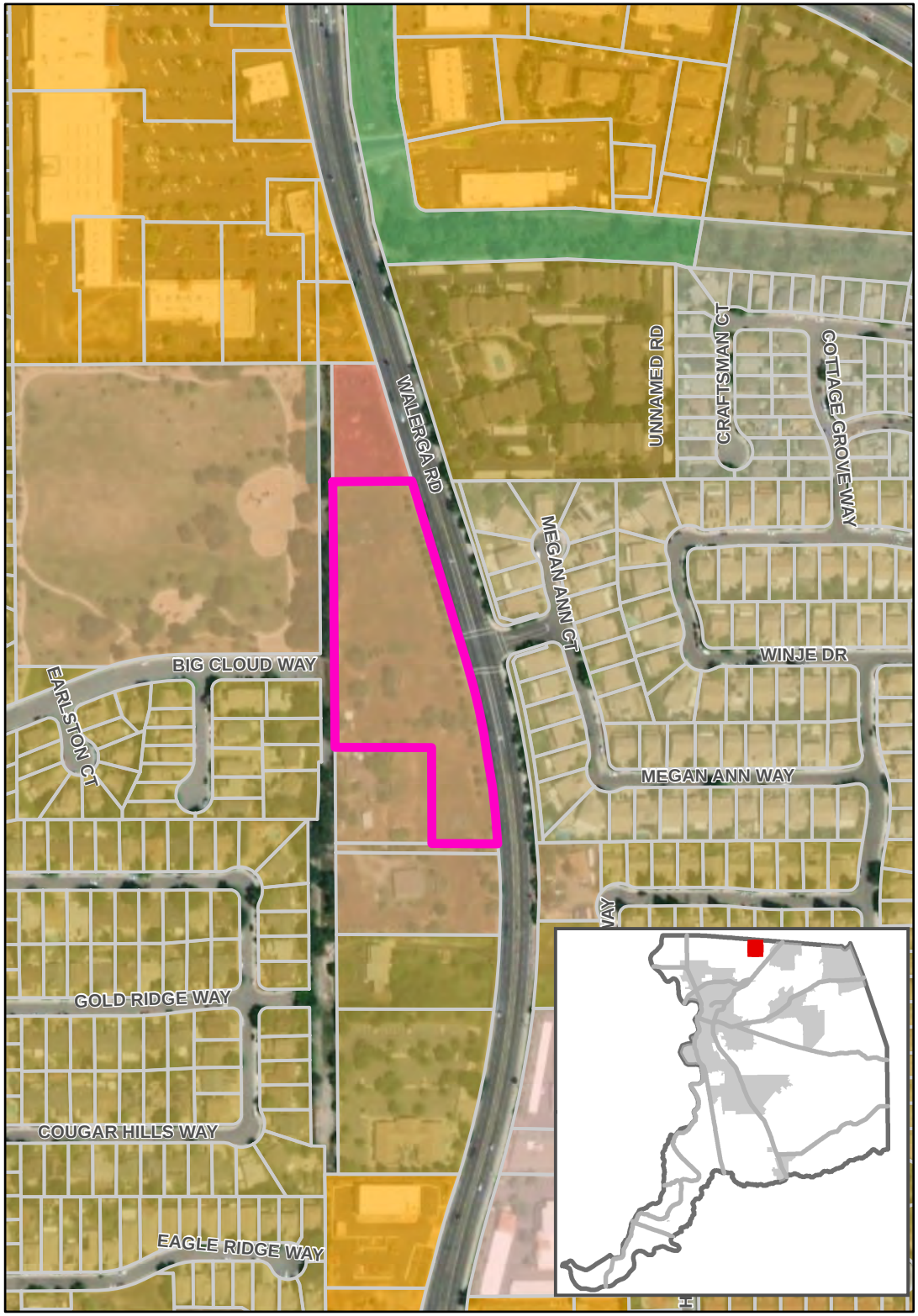
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Site 2

APN 203-0110-069-0000

0.2 miles South of Elverta Road/Walerga Road, Antelope



Legend

- Proposed Rezone Site

Zoning

- GC General Commercial
- LC Light Commercial
- O Recreation
- RD-10 Residential
- RD-30 Multiple Family Residential
- RD-5 Residential
- RD-7 Residential
- SC Shopping Center
- UR Urban Reserve

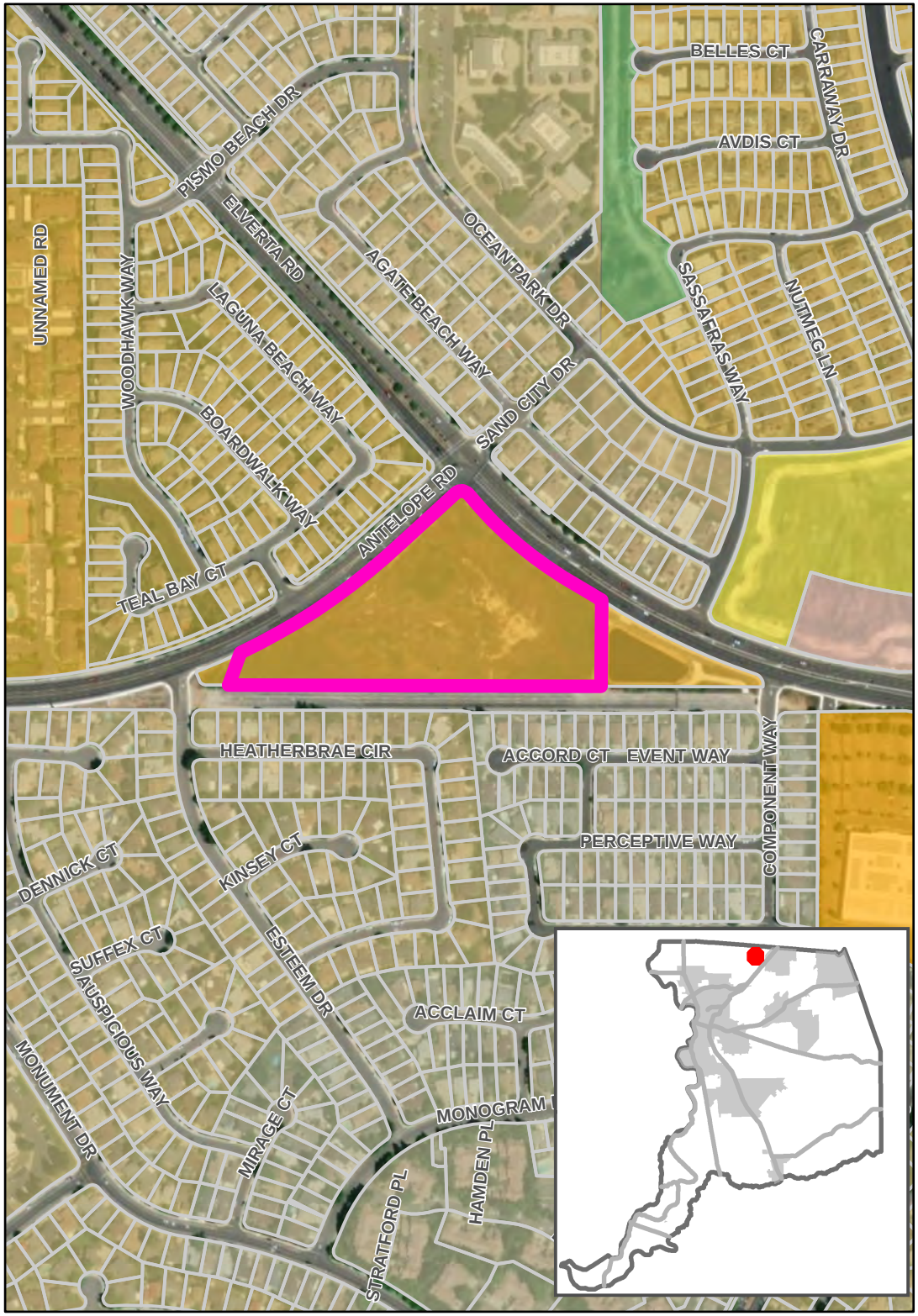
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0 0.05 0.1 0.2 Miles

Site 3

APN 203-0120-089-0000

South Antelope Road/
Elverta Road, Antelope



Legend

Proposed Rezone Sites

Zoning

- GC General Commercial
- O Recreation
- RD-10 Residential
- RD-20 Multiple Family Residential
- RD-25 Multiple Family Residential
- RD-5 Residential
- RD-7 Residential
- SC Shopping Center

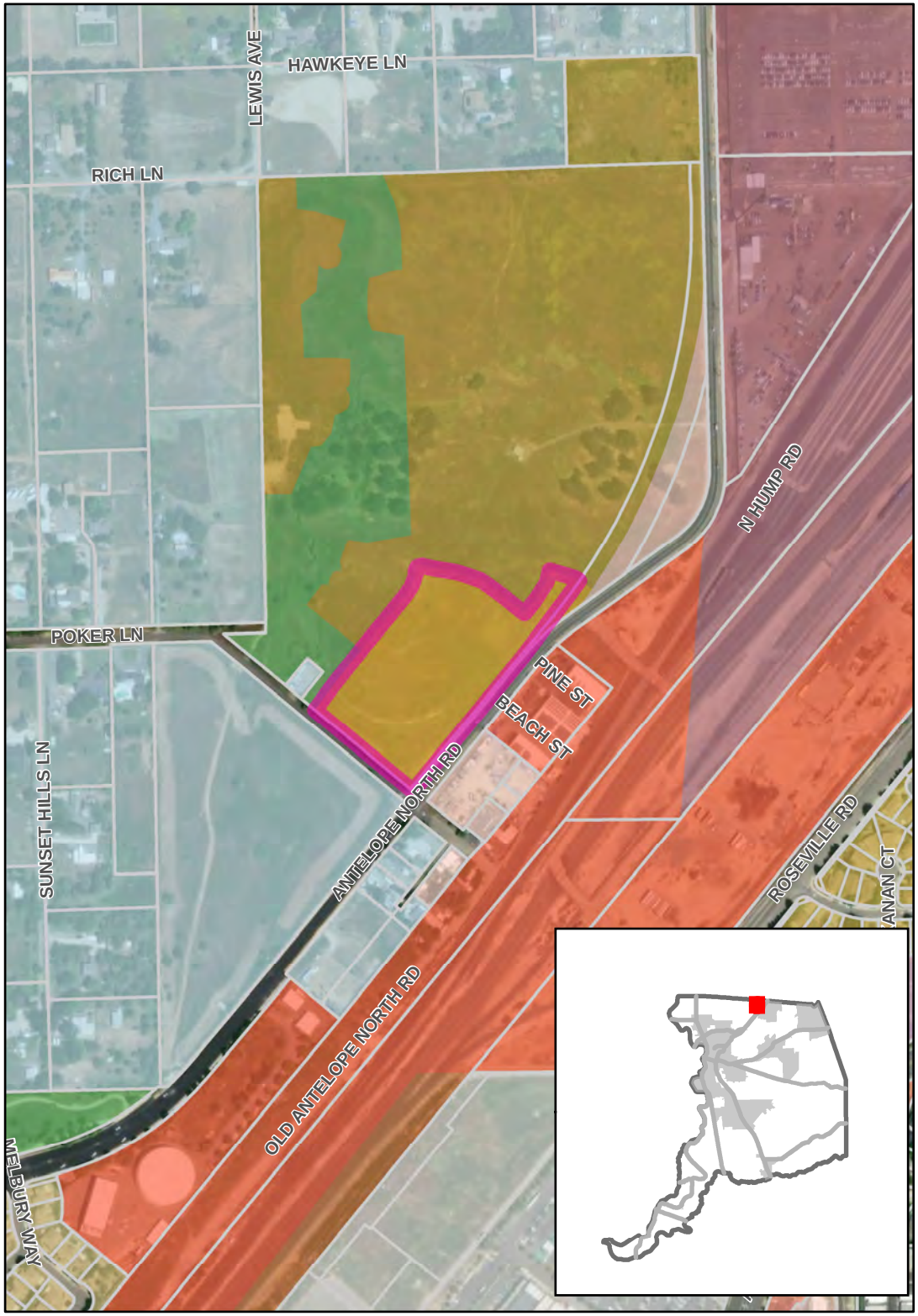
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Site 4

APN 203-0260-064-0000

7907 Antelope North Road, Antelope



Legend

- Proposed Rezone Site

Zoning

- AR-2 Agricultural-Residential - 2 Acres
- GC General Commercial
- IR Interim-Agricultural Reserve
- LC Light Commercial
- M-1 Light Industrial
- M-2 Heavy Industrial
- MP Industrial - Office Park
- O Recreation
- RD-20 Multiple Family Residential
- RD-7 Residential
- SPA Special Planning Area

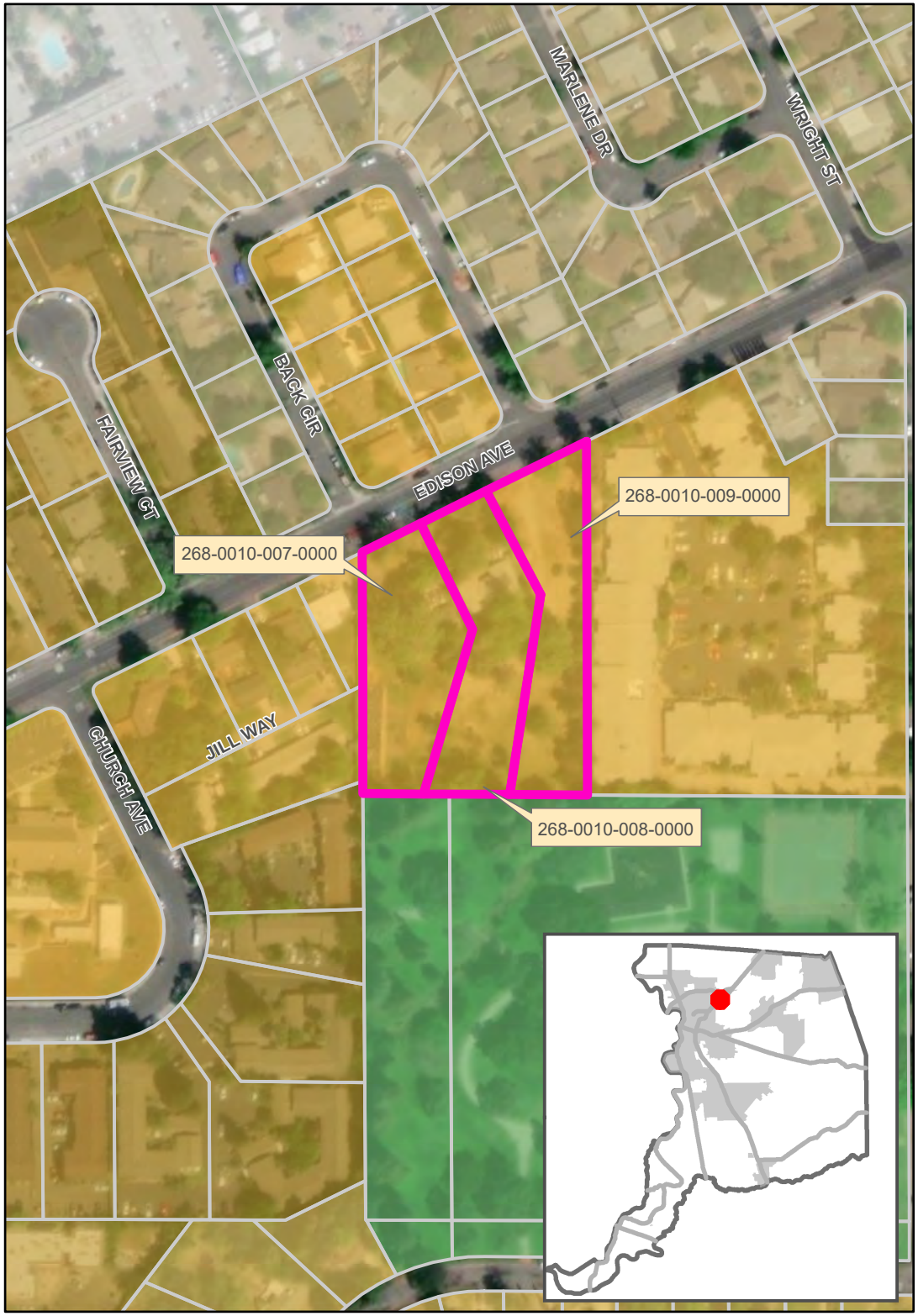
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Site 6

APNs 268-0010-007-0000,
268-0010-008-0000 &
268-0010-009-0000

2328, 2332, & 2336
Edison Avenue, Arden Arcade



Legend

Proposed Rezone Site

Zone

- O Recreation
- RD-20 Multiple Family Residential
- RD-30 Multiple Family Residential
- RD-4 Residential
- RD-5 Residential
- SPA Special Planning Area

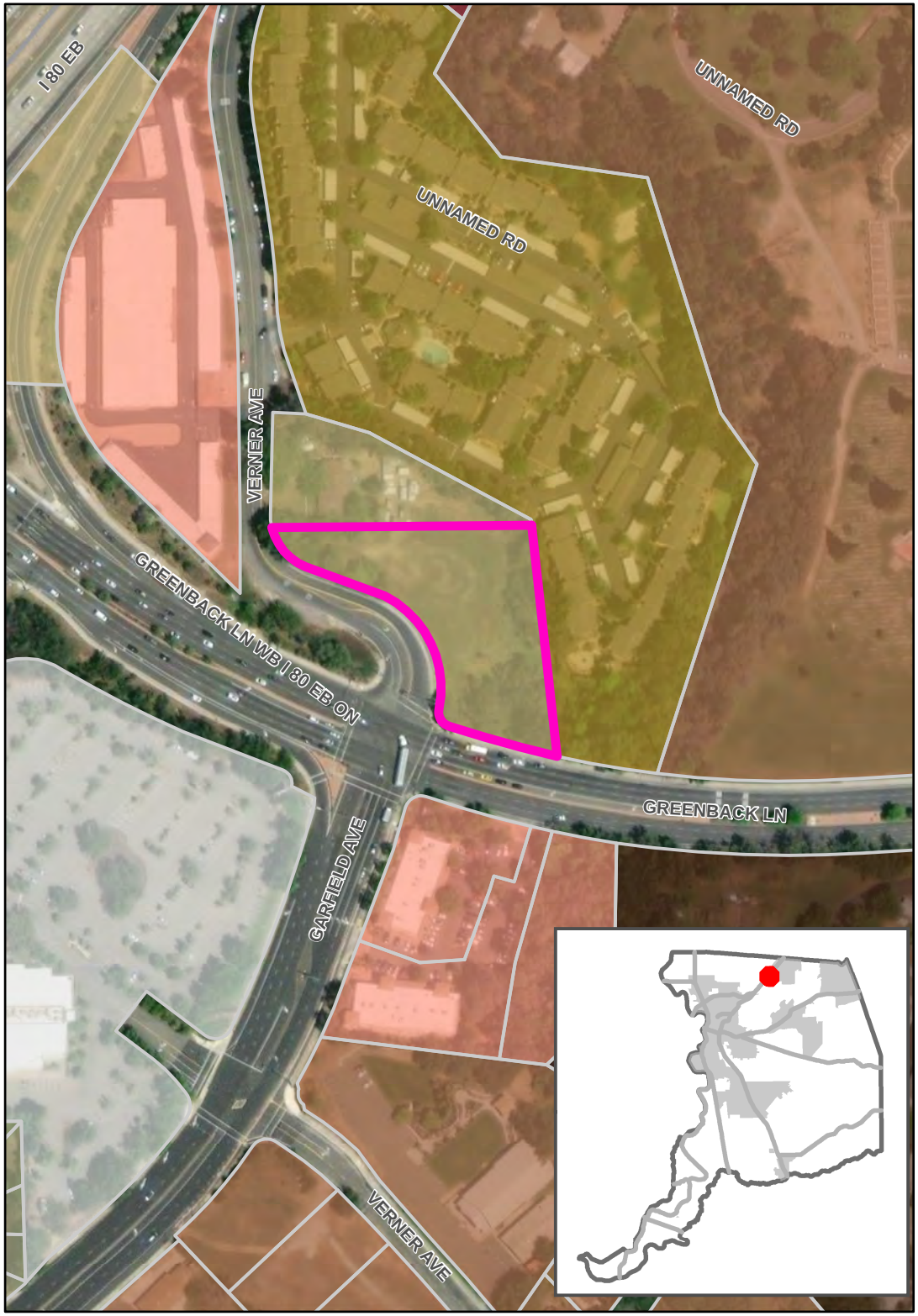
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Miles

Site 7

APN 220-0025-002-0000

6344 Verner Avenue,
Carmichael/Old Foothill Farms



Legend

Proposed Rezone Site

Zoning

- BP Business and Professional Office
- LC Light Commercial
- RD-10 Residential
- RD-2 Residential
- RD-30 Multiple Family Residential
- RD-5 Residential
- RM-1 Mobile Home Subdivision
- SPA Special Planning Area

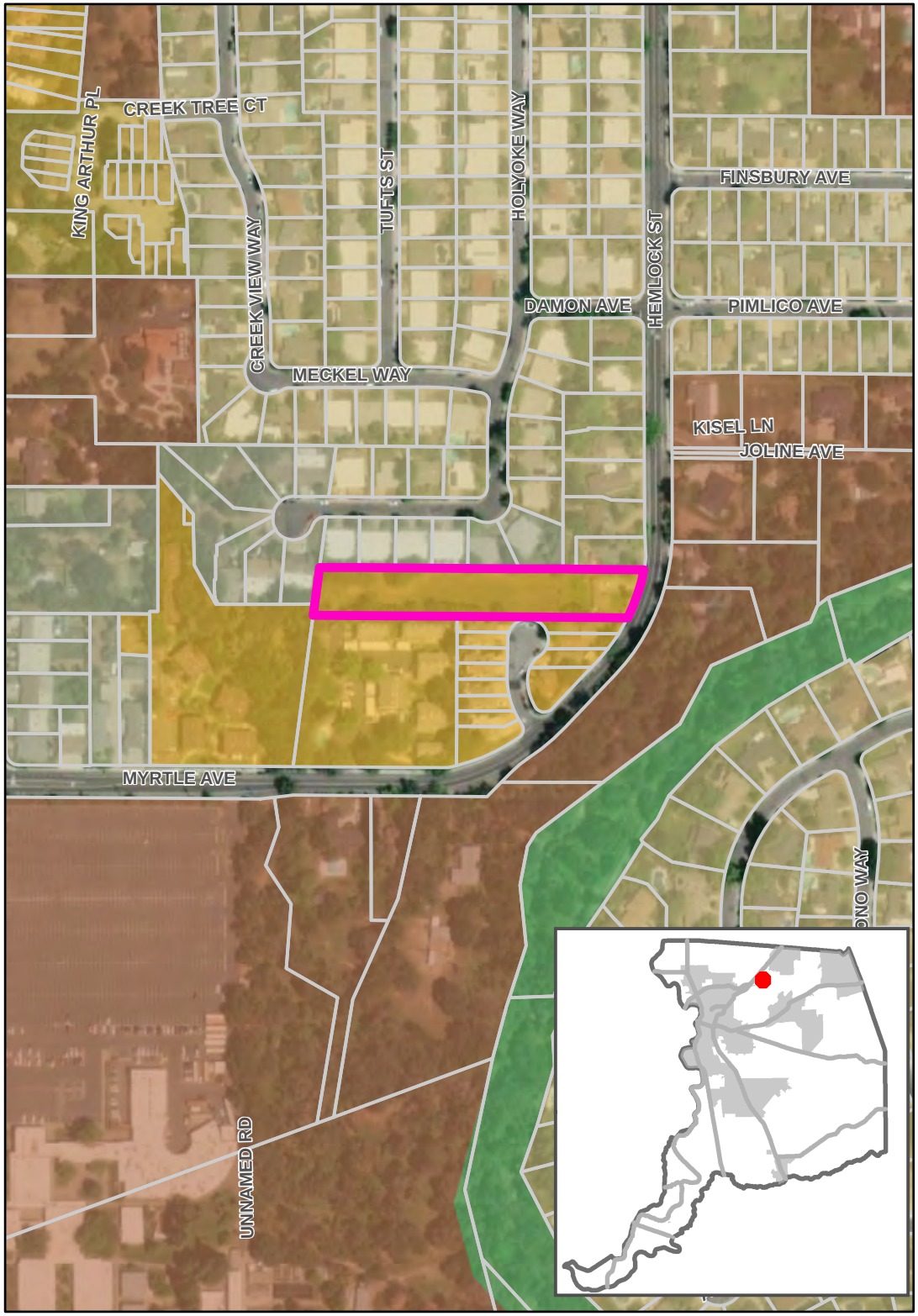
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0 0.025 0.05 0.1
Miles

Site 9

APN 230-0091-056-0000

4921 Hemlock Street,
Carmichael/Old Foothill Farms



Legend

Proposed Rezone Site

Zoning

- O Recreation
- RD-10 Residential
- RD-2 Residential
- RD-20 Multiple Family Residential
- RD-5 Residential
- RD-7 Residential

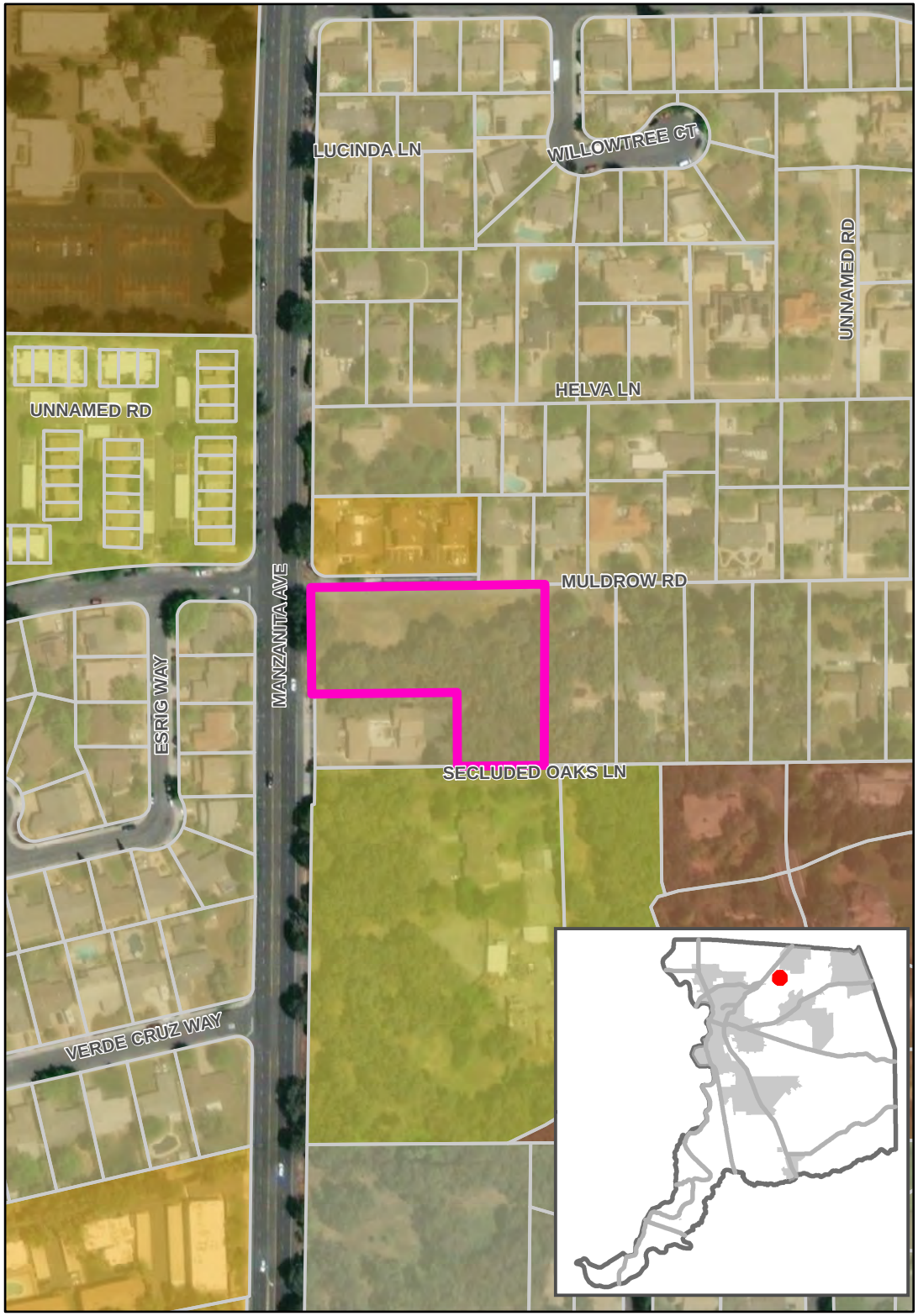
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Site 10

APN 236-0051-073-0000

5817 Muldrow Road,
Carmichael/Old Foothill Farms



Legend

Proposed Rezone Site

Zoning

- R-2-A Multiple Family Residential Zone
- RD-1 Residential
- RD-10 Residential
- RD-2 Residential
- RD-20 Multiple Family Residential
- RD-40 Multiple Family Residential
- RD-5 Residential

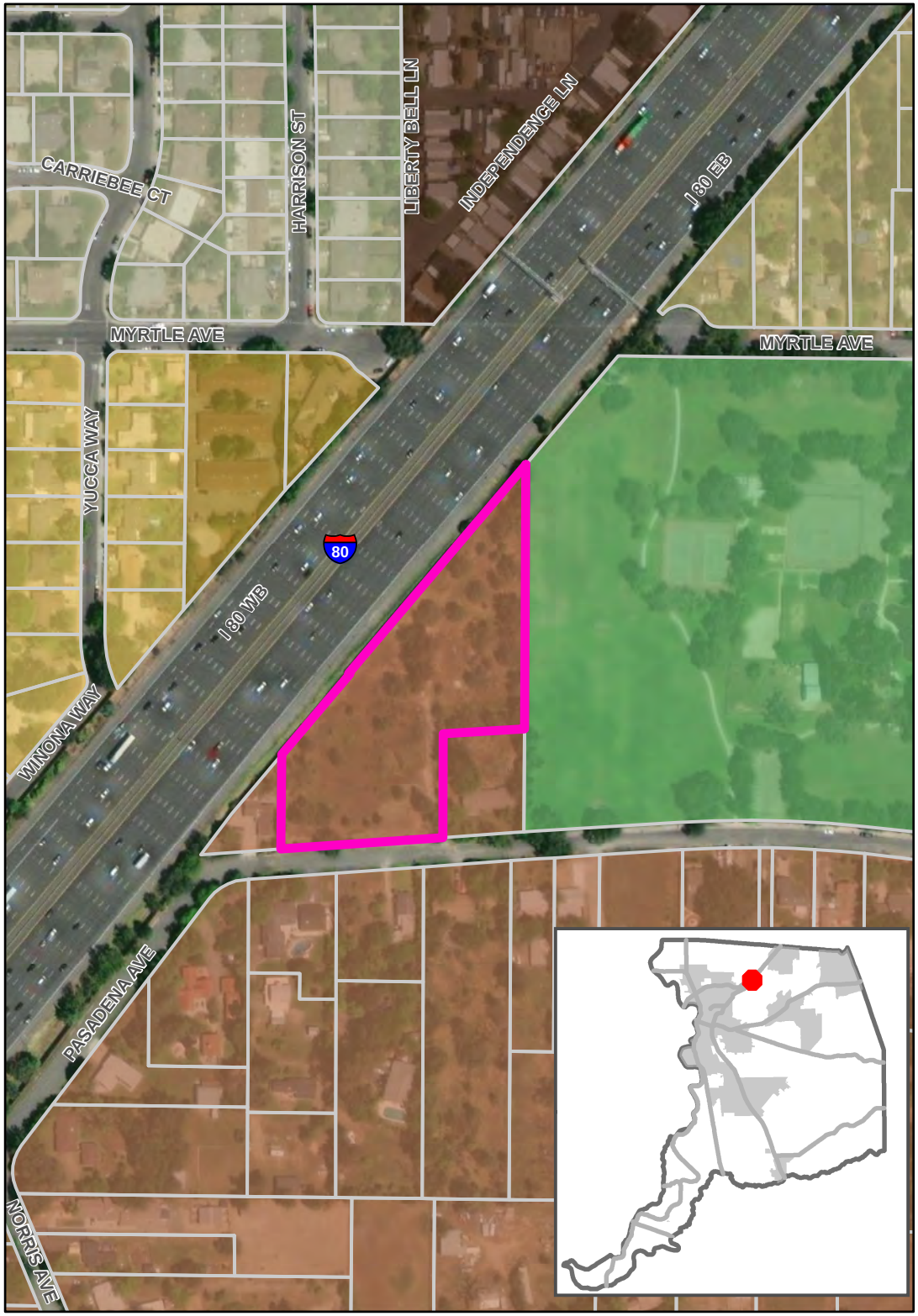
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0 0.025 0.05 0.1 Miles

Site 11

APN 240-0050-026-0000

5108 Pasadena Avenue,
Carmichael/Old Foothill Farms



Legend

- Proposed Rezone Site

Zoning

- O Recreation
- RD-10 Residential
- RD-2 Residential
- RD-30 Multiple Family Residential
- RD-4 Residential
- RD-5 Residential
- RM-1 Mobile Home Subdivision

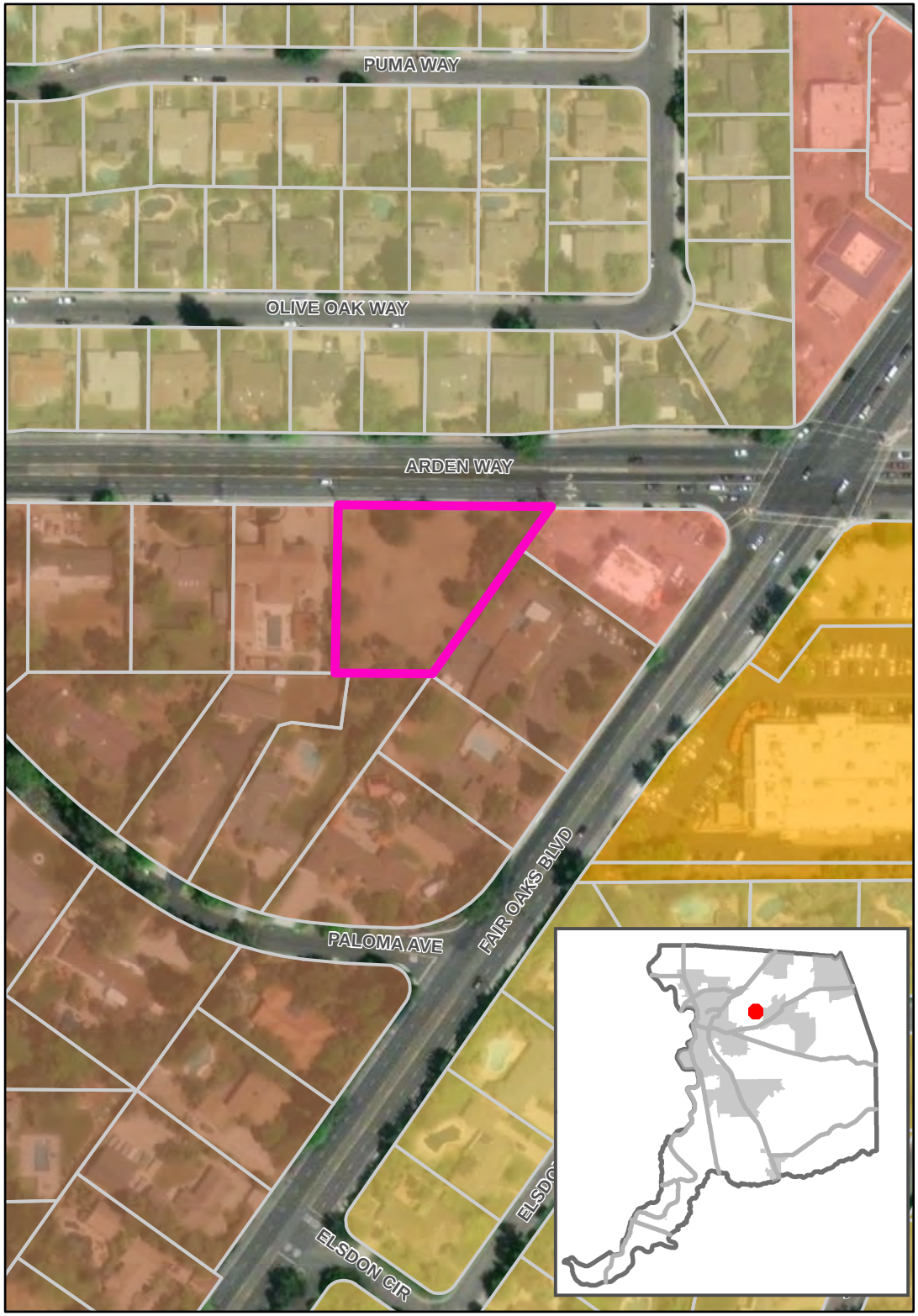
N

0 0.0375 0.075 0.15
Miles

Site 14

APN 289-0042-005-0000

5020 Arden Way, Carmichael/
Old Foothill Farms



Legend

Proposed Rezone Site

Zoning

- LC Light Commercial
- RD-2 Residential
- RD-4 Residential
- RD-5 Residential
- SC Shopping Center

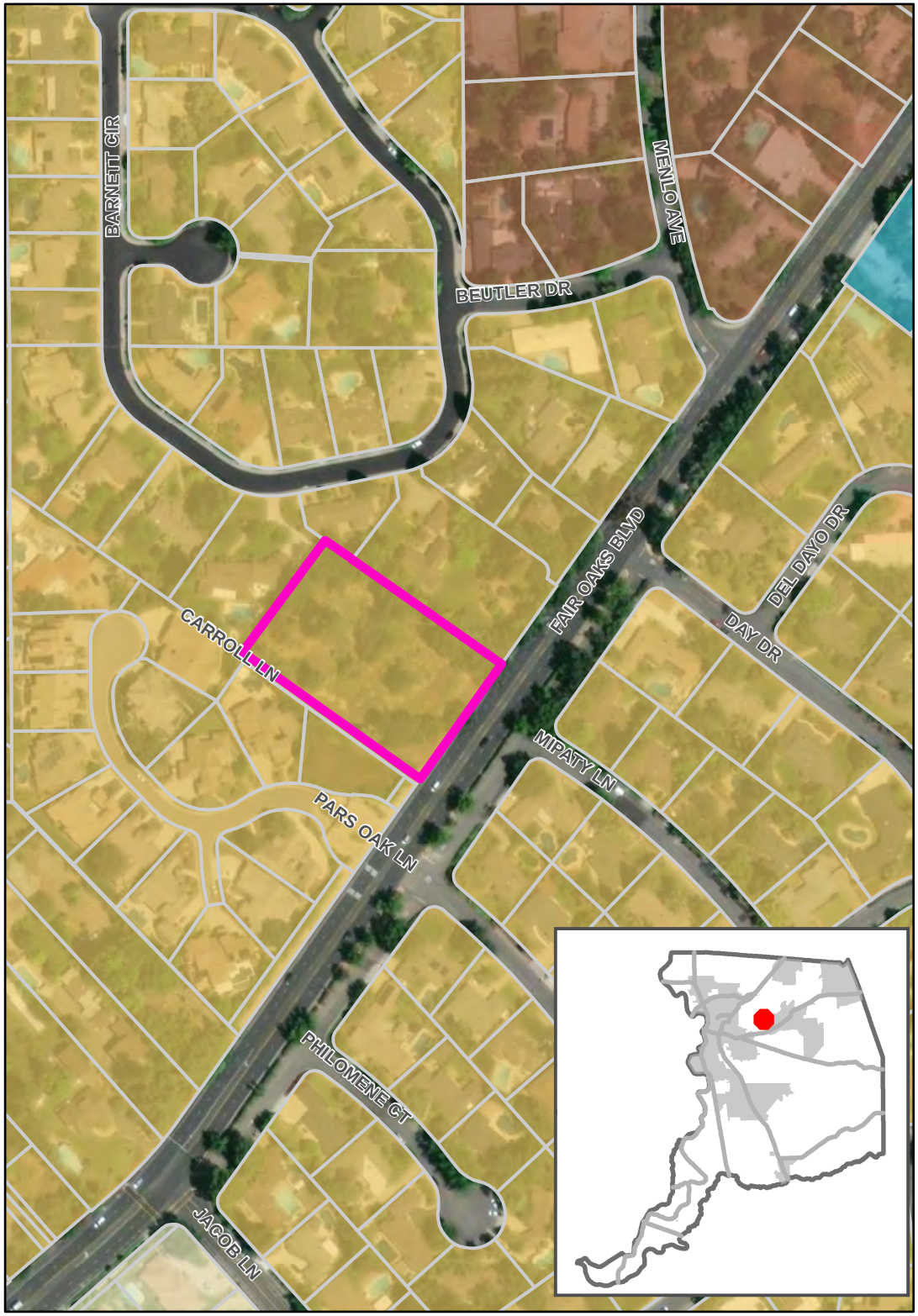
N

0 0.025 0.05 0.1 Miles

Site 15

APN 289-0600-022-0000

4845 Fair Oaks Boulevard,
Carmichael/Old Foothill Farms



Legend

Proposed Rezone Site

Zoning

- AR-1 Agricultural-Residential - 1 Acre
- RD-2 Residential
- RD-3 Residential
- RD-4 Residential

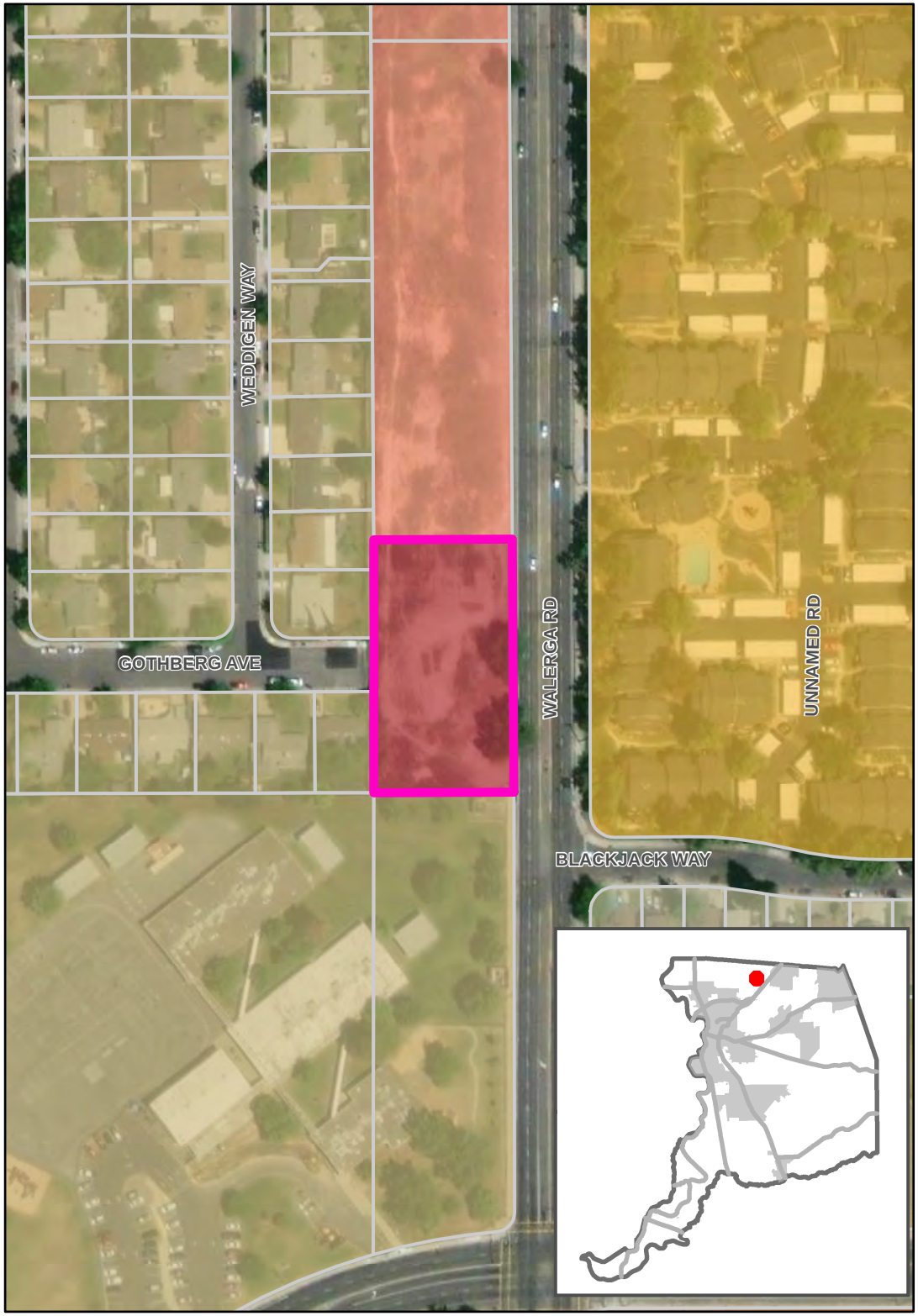
N

0 0.025 0.05 0.1 Miles

Site 20

APN 219-0032-004-0000

Northwest Walerga Road/Blackjack Way,
North Highlands



Legend

Proposed Rezone Site

Zoning

- BP Business and Professional Office
- LC Light Commercial
- RD-10 Residential
- RD-2 Residential
- RD-20 Multiple Family Residential
- RD-5 Residential

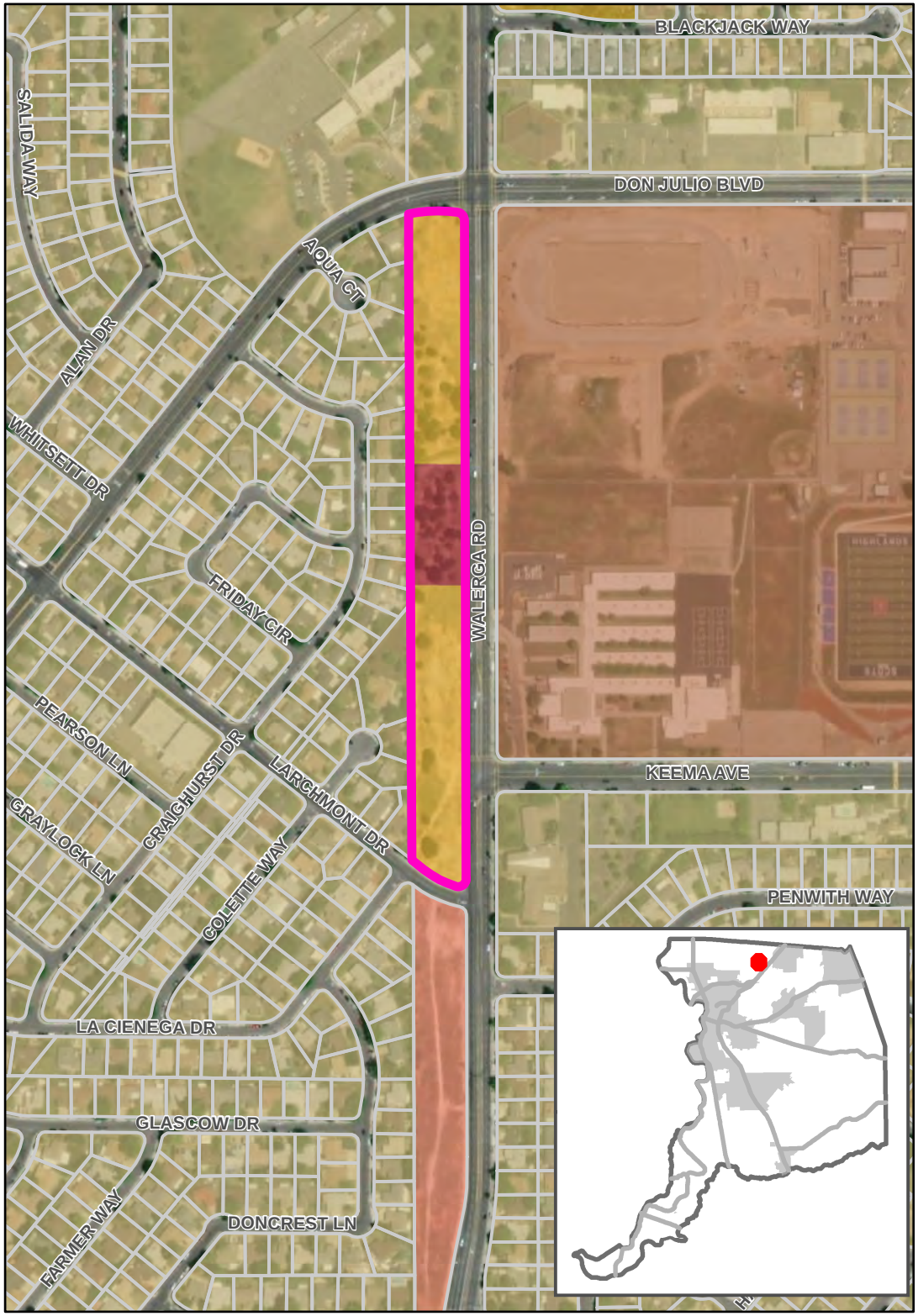
N

0 0.025 0.05 0.1 Miles

Site 21

APN 219-0033-001-0000

Southwest Walerga Road/Don Julio Boulevard, North Highlands



Legend

- Proposed Rezone Site

Zoning

- BP Business and Professional Office
- LC Light Commercial
- RD-10 Residential
- RD-2 Residential
- RD-20 Multiple Family Residential
- RD-5 Residential

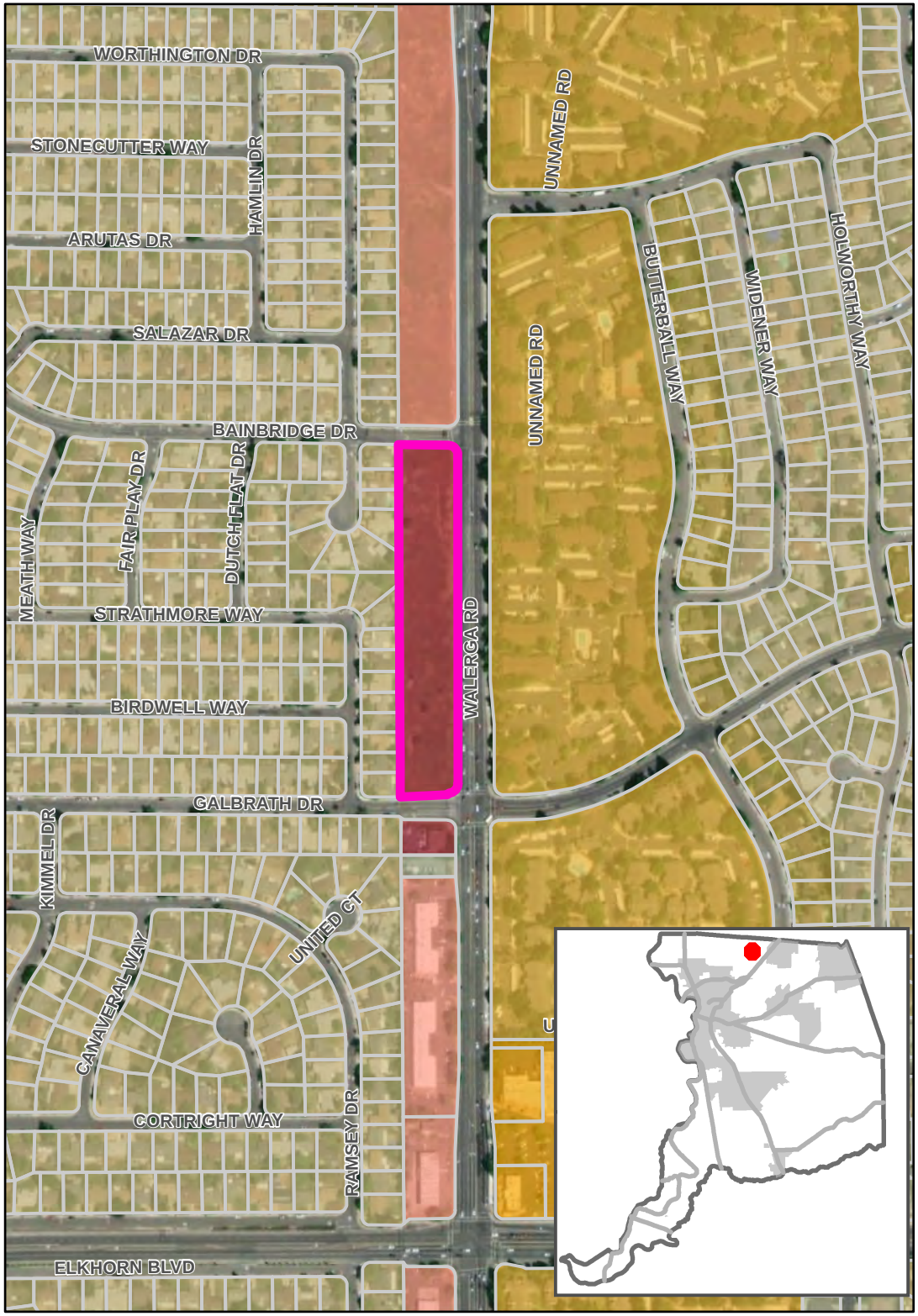
N

0 0.05 0.1 0.2 Miles

Site 22

APN 219-0042-019-0000

NW Walerga Road/Galbraith Drive,
North Highlands



Legend

Proposed Rezone Site

Zoning

- BP Business and Professional Office
- LC Light Commercial
- RD-10 Residential
- RD-20 Multiple Family Residential
- RD-5 Residential
- RD-7 Residential
- SC Shopping Center

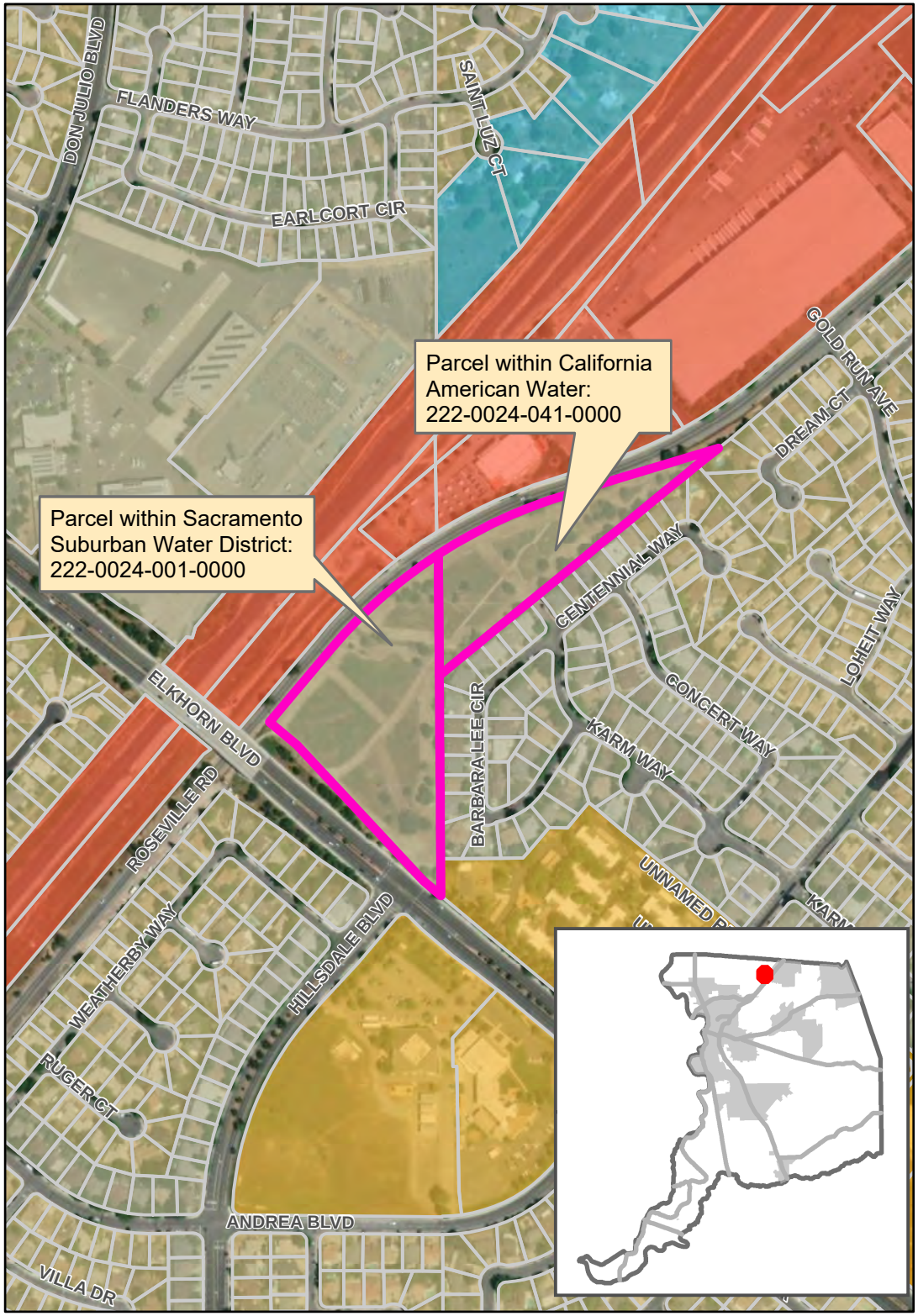
N

0 0.05 0.1 0.2 Miles

Site 23

APNs 222-0024-001-0000
& 222-0024-041-0000

East Roseville Road/Elkhorn Boulevard Overpass, North Highlands



Legend

Proposed Rezone Site

Zoning

- AR-1 Agricultural-Residential - 1 Acre
- M-1 Light Industrial
- RD-10 Residential
- RD-20 Multiple Family Residential
- RD-5 Residential
- SC Shopping Center

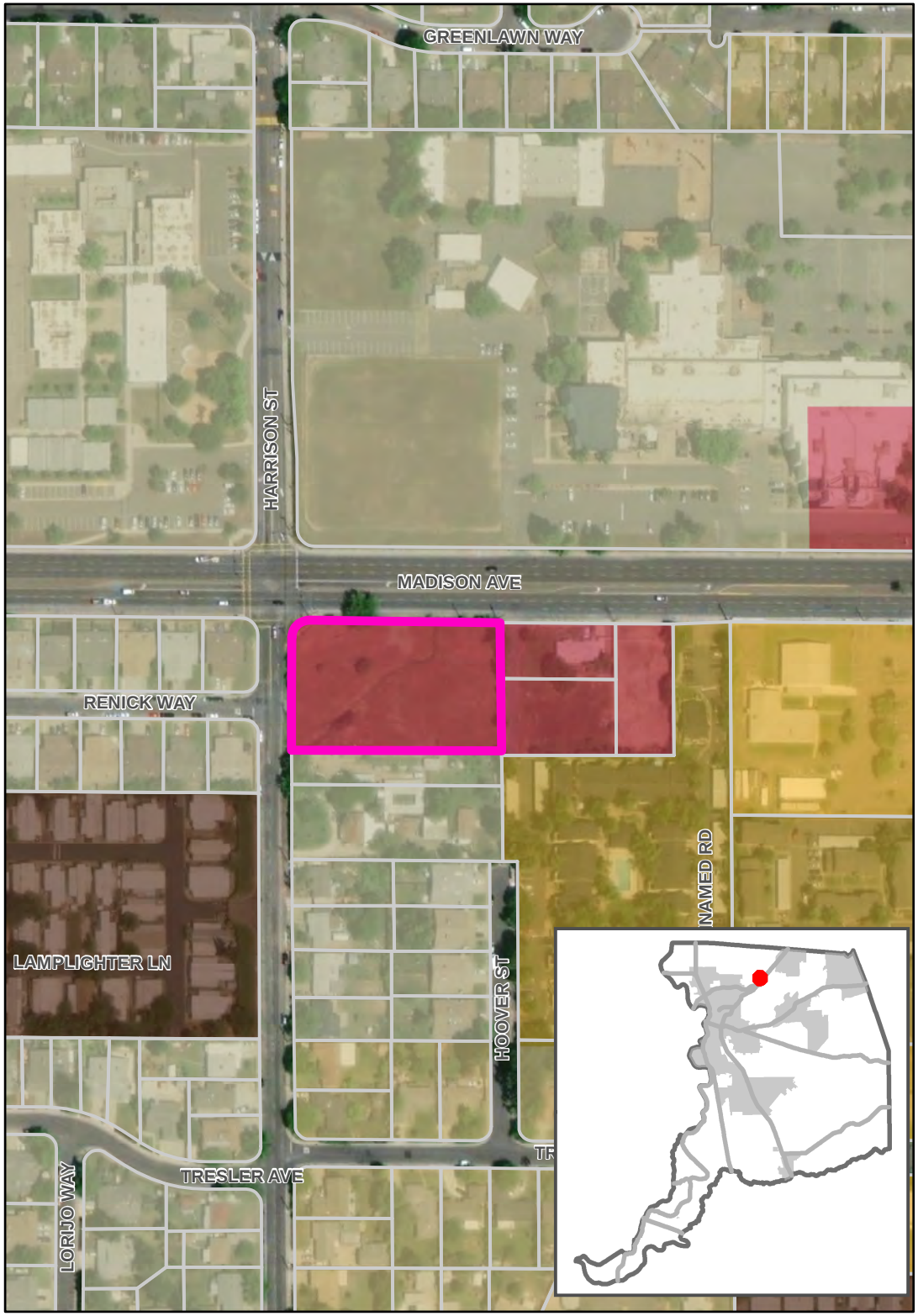
N

0 0.05 0.1 0.2 Miles

Site 24

APN 228-0182-005-0000

5140 Harrison Street,
North Highlands



Legend

- Proposed Rezone Site

Zoning

- BP Business and Professional Office
- RD-10 Residential
- RD-20 Multiple Family Residential
- RD-30 Multiple Family Residential
- RD-5 Residential
- RM-1 Mobile Home Subdivision

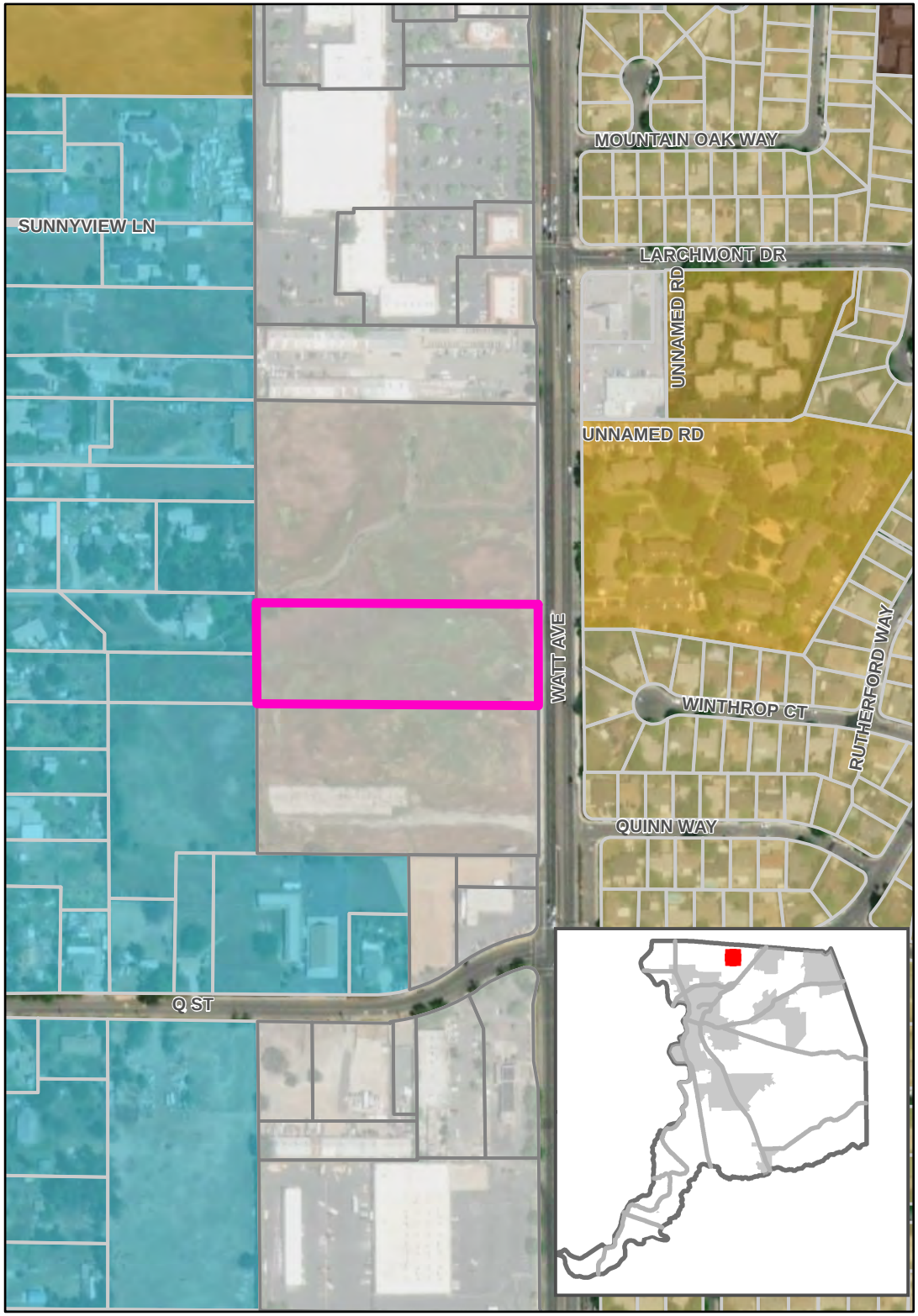
N

0 0.025 0.05 0.1 Miles

Site 72

APN 208-0122-066-0000

500 feet North of Watt Avenue/Q Street, North Highlands



Legend

- Proposed Rezone Site

Zoning

- AR-1 Agricultural-Residential - 1 Acre
- RD-20 Multiple Family Residential
- RD-30 Multiple Family Residential
- RD-5 Residential
- RD-7 Residential
- RM-1 Mobile Home Subdivision
- SPA Special Planning Area

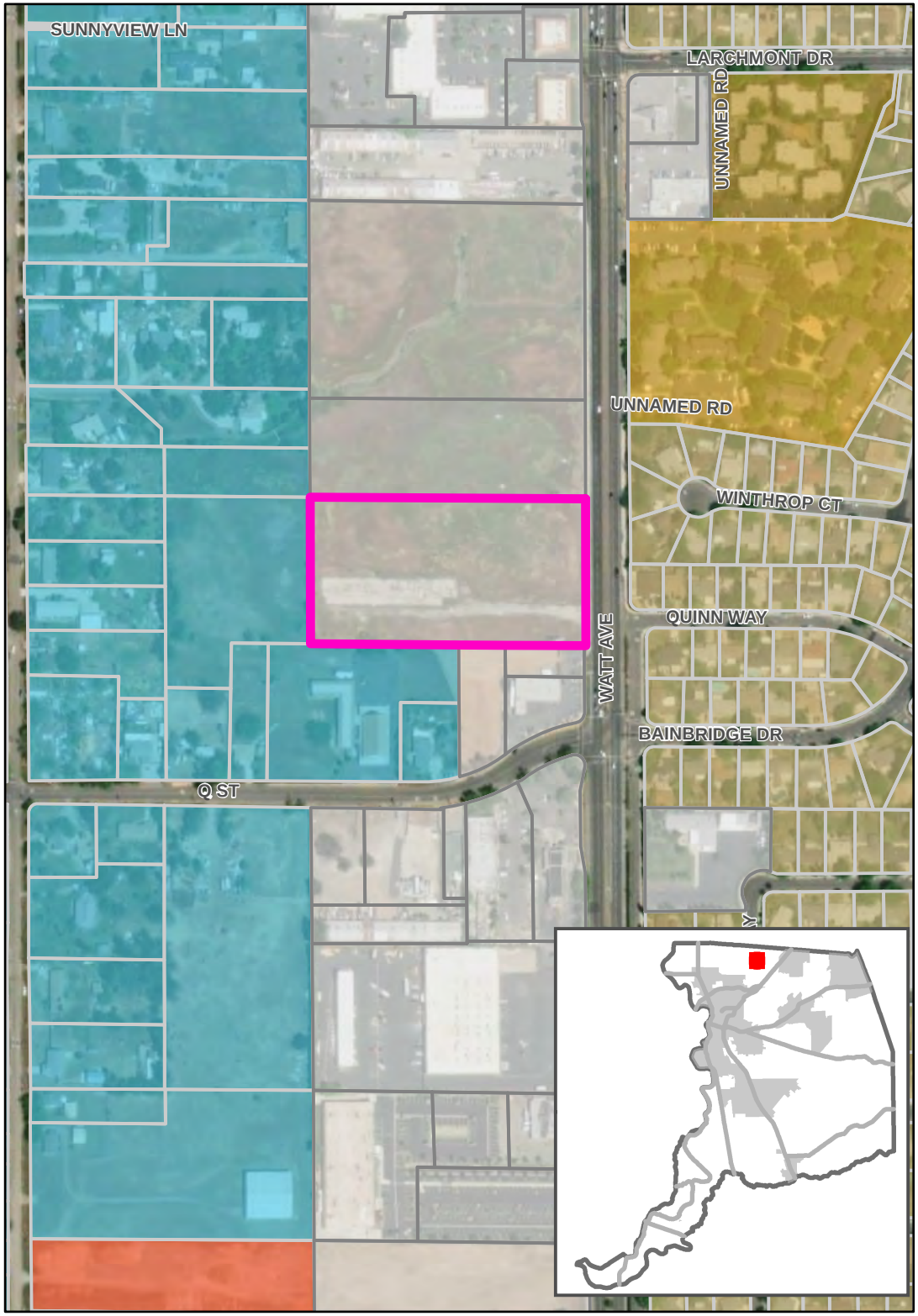
N

0 0.05 0.1 0.2 Miles

Site 73

APN 208-0132-008-0000

7235 Watt Avenue,
North Highlands



Legend

- Proposed Rezone Site

Zoning

- AR-1 Agricultural-Residential - 1 Acre
- M-1 Light Industrial
- RD-20 Multiple Family Residential
- RD-30 Multiple Family Residential
- RD-5 Residential
- SPA Special Planning Area

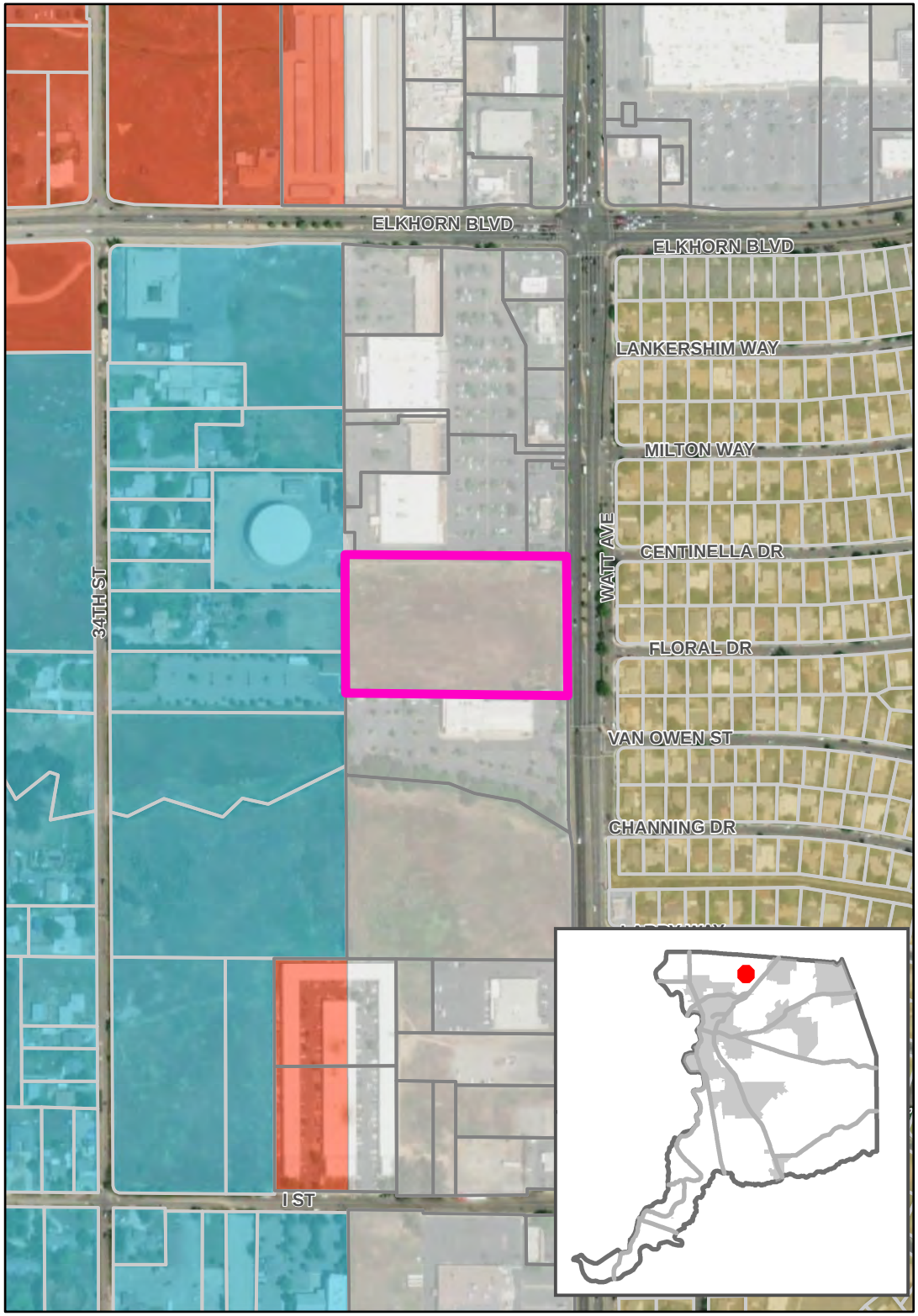
N

0 0.05 0.1 0.2 Miles

Site 74

APN 208-0162-018-0000

0.2 Miles South of Watt Avenue/Elkhorn Boulevard, North Highlands



Legend

- Proposed Rezone Site

Zoning

- AR-1 Agricultural-Residential - 1 Acre
- M-1 Light Industrial
- RD-10 Residential
- RD-5 Residential
- SPA Special Planning Area

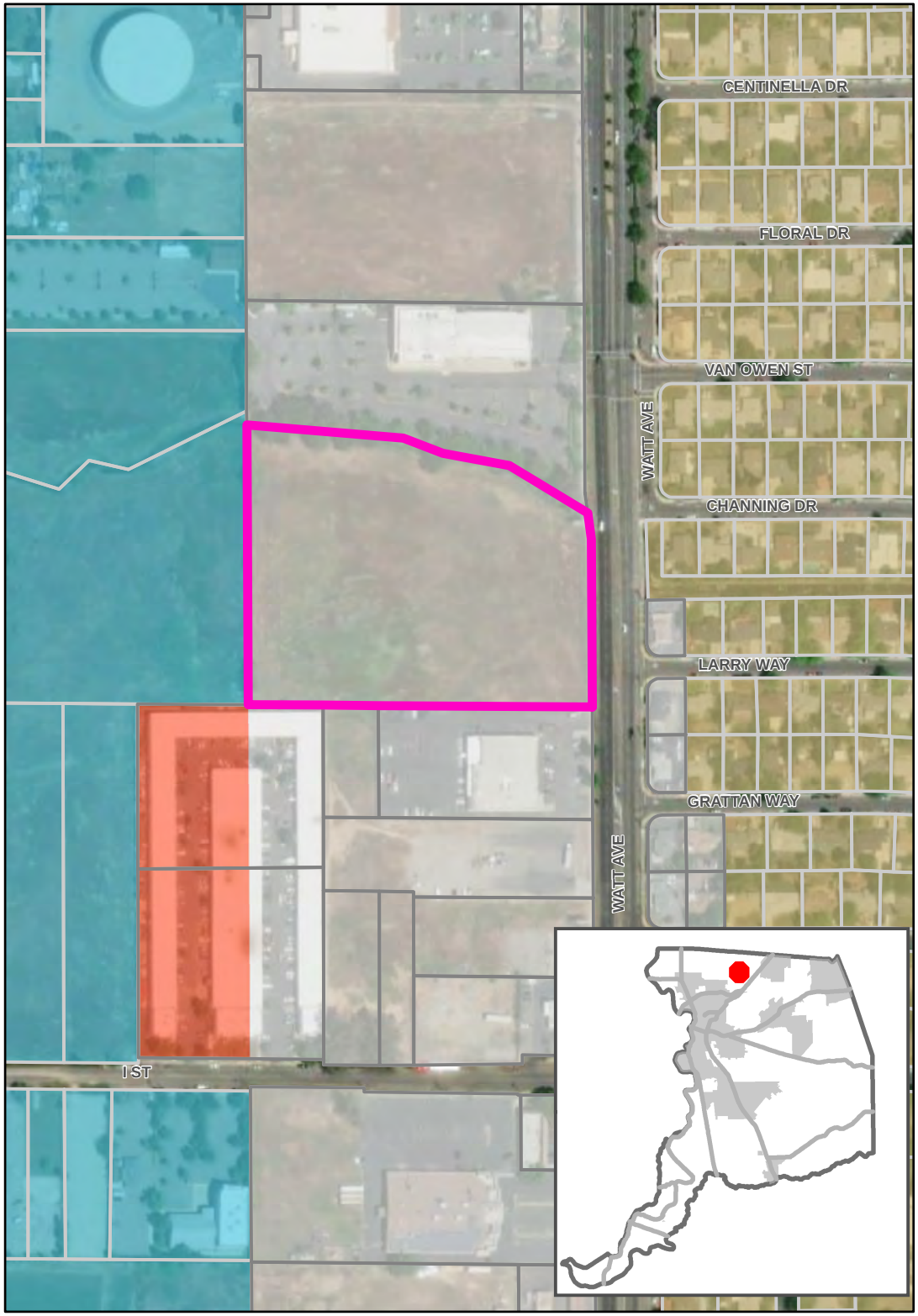
N

0 0.05 0.1 0.2 Miles

Site 75

APN 208-0162-027-0000

0.1 miles North of Watt Avenue/I Street, North Highlands



Legend

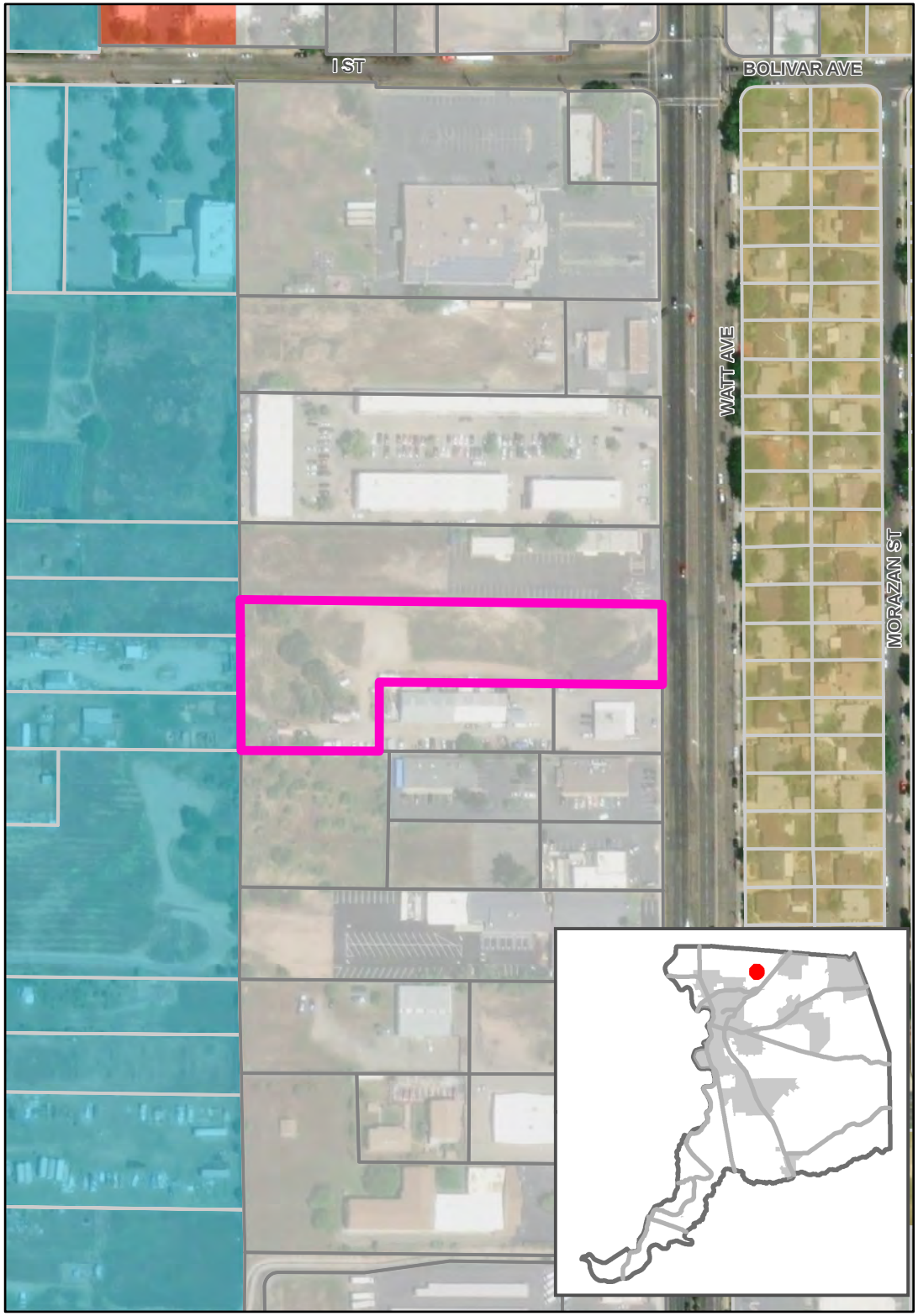
Proposed Rezone Site

Zoning

- AR-1 Agricultural-Residential - 1 Acre
- M-1 Light Industrial
- RD-5 Residential
- SPA Special Planning Area

N

0 0.0375 0.075 0.15 Miles



Site 76

APN 215-0062-057-0000

6233 Watt Avenue,
North Highlands

Legend

Proposed Rezone Site

Zoning

AR-1 Agricultural-Residential - 1 Acre

M-1 Light Industrial

RD-5 Residential

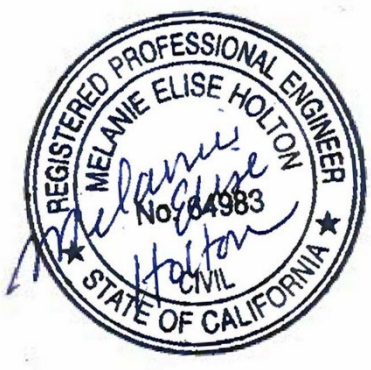
SPA Special Planning Area

N

0 0.025 0.05 0.1 Miles

Water Supply Assessment for Sacramento Suburban Water District Portion of the Sacramento County Regional Housing Needs Allocation (RHNA) Rezone Project

Prepared for
Sacramento Suburban Water District
Sacramento, CA
March 12, 2024



Brown AND Caldwell
11020 White Rock Road, Suite 200
Rancho Cordova, CA 95670

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List of Abbreviations

ac-ft/yr	acre-feet per year
APN	Assessor Parcel Number
CEQA	California Environmental Quality Act
CIMIS	California Irrigation Management Information System
DU	dwelling unit
DWR	California Department of Water Resources
Eto	evapotranspiration
GPCD	gallons per capita per day
gpd	gallons per day
gpd/DU	gallons per day per dwelling unit
no	number
Project	Sacramento Suburban Water District portion of the Sacramento County Regional Housing Needs Allocation (RHNA) rezone project
RHNA	Regional Housing Needs Allocation
SB	Senate Bill
SSWD	Sacramento Suburban Water District
UWMP	Urban Water Management Plan
UWDF	unit water demand factor
WSA	Water Supply Assessment
WSMP	Water System Master Plan

Executive Summary

This Water Supply Assessment (WSA) was prepared on behalf of Sacramento Suburban Water District (SSWD) for the portion of the Sacramento County Regional Housing Needs Allocation (RHNA) rezone project that would be served by and is located in SSWD's service area (Project) in accordance with Senate Bill (SB) 610 (now codified as California Water Code sections 10910 and 10911) and SB 221. SB 610 and SB 221 require land use planning entities that are evaluating certain large development projects to verify that sufficient water supplies are projected to exist to supply the Project. A WSA is a document required to be prepared for use in Sacramento County's environmental review of the Project under the California Environmental Quality Act (CEQA).

The Project addressed in this WSA is a rezoning of a total of 74.55 acres on 20 sites to a range of higher density residential land uses within the SSWD service area.

As described in SSWD's 2020 Urban Water Management Plan (Brown and Caldwell, 2021), SSWD uses mainly groundwater that is supplemented with surface water when it is available. Surface water is obtained under contracts with Placer County Water Agency, the United States Bureau of Reclamation, San Juan Water District, and the City of Sacramento. Groundwater has historically been the primary source of water for SSWD and is the primary source of supply in dry years.

The Project is estimated to increase SSWD's projected 2045 water demand by 0.8 percent from 38,536 acre-feet per year (ac-ft/yr) to 38,835 ac-ft/yr. SSWD's projected 2045 available annual water supply is 93,064 ac-ft/yr (48,000 ac-ft/yr in a dry year), which is 139 percent and 24 percent above the projected 2045 total demand of 38,835 ac-ft/yr for the total service area including the Project in a normal and dry year, respectively. Therefore, SSWD's projected available annual water supplies are sufficient to serve the demands of SSWD's existing water service area including the increased demands due to the Project.

This WSA does not verify the adequacy of the existing and planned future groundwater well pumping capacity and the distribution system's hydraulic capacity to serve the Project.

Section 1

Introduction

This section describes the purpose of this water supply assessment (WSA), the WSA requirements, the portion of the Sacramento County Regional Housing Needs Allocation (RHNA) rezone project that is served by and located in SSWD's service area (Project), and limitations of the WSA.

1.1 Purpose

This WSA has been prepared for the purpose of documenting the availability of water supplies to serve the Sacramento Suburban Water District (SSWD) and the Project.

SSWD intends to supply water to the existing water system's service area including the demands due to the Project through buildout. Water supplies that are excess to the amount needed to supply the buildout of the existing water system's service area are available to supply additional demands due to the Project.

This WSA documents the projected buildout demand of SSWD's water system's service area that includes the estimated Project demand. The SSWD demands including the Project are compared to SSWD's projected water supplies to verify that sufficient water supplies are projected to exist to supply the Project.

1.2 WSA Requirements

Senate Bills (SB) 610 (now codified as California Water Code sections 10910 and 10911) and 221 require that WSAs be included in environmental documentation for certain projects and an affirmative written verification of sufficient water supply be included in the WSA for approval of certain development. Applicable developments are those that would have a water demand that would be equivalent to or greater than the amount of water used by a 500 dwelling unit (DU) project or would increase the number of service connections by at least 10 percent. The WSA is performed in conjunction with a project's land-use approval process and must include an evaluation of the sufficiency of the water supplies available to the water supplier to meet existing and anticipated future demands including the demand associated with the Project. The evaluation must cover a twenty-year period and address the following water year types: a) normal; b) single dry; and c) multiple dry.

The WSA must identify any existing water supply entitlements, water rights, or water service contracts held by the water supplier or relevant to the identified water supply for the Project. If the public water supplier relies on groundwater supplies, the WSA must describe the groundwater basins from which the Project will be supplied. For each basin that has not been adjudicated, the assessment should indicate whether the California Department of Water Resources (DWR) has identified the basin as being critically overdrafted.

1.3 Description of Project

The Project addressed in this WSA is the SSWD portion of the greater Sacramento County RHNA rezone project. The Project is a rezoning of a total of 74.55 acres on 20 sites from a mixture of residential and non-residential land use zoning to a range of higher density residential land use with the SSWD service area. Table 1-1 summarizes those Project site locations, current and proposed land use zoning, and increase in DUs due to the proposed zoning changes.

Table 1-1. Land Use and Demographics for the Project

Site No.	Assessor Parcel Number (APN)	Address/Siting Description	Redeveloped acreage [a], acre	Land Use Zoning		Project Dwelling Units	
				Current	Project	Net Increase [c]	Total
1	203-0110-047-0000	0.3 miles west of Antelope Road/Walerga Road	10.0 [b]	RD-20	RD-30	100	300
2	203-0110-069-0000	0.2 miles south of Elverta Road/Walerga Road	4.66	UR	RD-30	138	140
3	203-0120-089-0000	S Antelope Road/Elverta Road	9.69	RD-20	RD-40	194	388
5	268-0010-007-0000 268-0010-008-0000 268-0010-009-0000	2328 Edison Avenue 2332 Edison Avenue 2336 Edison Avenue	1.98	RD-20	RD-30	20	59
6	220-0025-002-0000	6344 Verner Avenue	1.80	RD-5	RD-30	45	54
8	230-0091-056-0000	4921 Hemlock Street	1.32	RD-20	RD-30	13	40
9	236-0051-073-0000	5817 Muldrow Road	1.33	RD-5	RD-10	7	13
10	240-0050-026-0000	5108 Pasadena Avenue	3.01	RD-2	RD-15	39	45
13	289-0042-005-0000	5020 Arden Way	0.72	RD-2	RD-10	6	7
14	289-0600-022-0000	4845 Fair Oaks Boulevard	1.46	RD-4	RD-15	16	22
19	219-0032-004-0000	NW Walerga Road/Blackjack Way	0.97	BP	RD-20	0	19
20	219-0033-001-0000	SW Walerga Road/Don Julio Boulevard	5.70	RD-20/BP	RD-30	57	171
21	219-0042-019-0000	NW Walerga Road/Galbraith Drive	3.36	BP	RD-30	33	101
22	222-0024-001-0000 222-0024-041-0000	E Roseville Road/Elkhorn Boulevard overpass	6.02 [d]	RD-10	RD-30	120	181
23	228-0182-005-0000	5140 Harrison Street	1.22	BP	RD-30	12	37
68	208-0122-066-0000	500 feet north of Watt Avenue/Q Street	3.06	SPA (North Watt - RMU-1)	RD-40	46	122
69	208-0132-008-0000	7235 Watt Avenue	4.62	SPA (North Watt - RMU-1)	RD-40	69	185
70	208-0162-018-0000	0.2 miles south of Watt Avenue/Elkhorn Boulevard	5.15	SPA (North Watt - RMU-2)	RD-30	51	155
71	208-0162-027-0000	0.1 miles north of Watt Avenue/I Street	6.35	SPA (North Watt - RMU-1)	RD-30	32	191
72	215-0062-057-0000	6233 Watt Avenue	2.13	SPA (North Watt- RMU-1)	RD-40	32	85
Total			**74.55**	--	--	**1,030**	**2,314**

a. Redeveloped acreage is equal to lot size, except as noted.

b. Site No. 1: Lot size is 16.64 acres, but only 10.0 acres are being re-developed in this Project.

c. Net increase in dwelling units is difference between dwelling units for Project land use zoning minus current land use zoning.

d. Site No. 22: The SSWD service area parcel (222-0024-001-000) area is 6.02 acres. Parcel 222-0024-041-0000 is within the California American Water Company service area, so it is excluded from the WSA.

1.4 WSA Limitations

A WSA is a document required to be prepared for use in Sacramento County's environmental review of the Project under the California Environmental Quality Act (CEQA). This WSA does not verify the adequacy of the existing and planned future groundwater well pumping capacity and the distribution system's hydraulic capacity to serve the Project.

Section 2

Water Demands

This section describes the projected water demand for the existing SSWD water service area and the Project. SSWD's historical and projected water use is described in Section 4 of the SSWD 2020 Urban Water Management Plan (UWMP) (Brown and Caldwell, 2021).

2.1 Multi-Family Unit Water Demand Factors

Multi-family unit water demand factors (UWDF) were established for each of the Project's proposed land use zoning categories for RD-10 to RD-40 (i.e., the revised land uses proposed by Sacramento County for the Project). SSWD's Water System Master Plan (WSMP) (Brown and Caldwell, 2017) identifies multi-family UWDFs. The majority (99 percent) of the buildout multi-family land use area within the SSWD service area as documented in the WSMP is within the low density category, which is defined as 7 to 15 DUs per acre.

The approach to estimate the multi-family UWDFs consisted of the following steps:

1. Usage Factors
    a. Use the 1.6 people per multi-family DU (WSMP)
    b. Use 209 gallons per day per multi-family DU (UWMP)
    c. Use 131 gallons per capita per day demand for buildout for the multi-family low density land use category, with an average density of 11 DUs per acre (WSMP).
2. Outdoor Usage
    a. Estimate the outdoor water use for the multi-family low density land use category using: a) the evapotranspiration and effective precipitation values for the Project area; and b) an estimate of the landscape area.
3. Indoor Usage
    a. Calculate the indoor water use per capita and per DU by subtracting the outdoor demand in step 2 from the total demand in step 1.
    b. Indoor water usage is assumed to be 105 gpd/person.
4. UWDFs
    a. For each land use zone, apply the respective DUs per acre to the indoor UWDF from step 3; and then
    b. add the estimated outdoor water use from step 2.

Table 2-1 presents the estimated UWDFs for each of the multi-family land use zones.

Table 2-1. Multi-Family Unit Water Demand Factors Estimate						
Item	Units	Multi-Family Land Use Zoning				
		SSWD existing multi-family land use	RD-15	RD-20	RD-30	RD-40
Dwelling units (DU)	DU/acre	11	15	20	30	40
Population [a]	people/acre	17.6	24	32	48	64
Indoor water use [b]	gpd/acre	1,848	2,520	3,360	5,040	6,720
	ac-ft/yr/acre	2.1	2.8	3.8	5.6	7.5
Landscape area [c]	Landscaped acre/acre	0.15	0.15	0.15	0.15	0.15
Outdoor water use [d]	ac-ft/yr/acre	0.51	0.51	0.51	0.51	0.51
	gpd/acre	453	453	453	453	453
UWDF						
Total water usage	ac-ft/yr/acre	2.6	3.3	4.3	6.2	8.0
	gpd/acre	2,301	2,973	3,813	5,493	7,173
Demand per DU	gpd/DU	209	198	191	183	179
Per capita demand	GPCD	131	124	119	114	112

a. *Based on 1.6 people per DU (WSMP) (Brown and Caldwell, 2017)*
b. *Based on assumed indoor usage of 105 gpd/person*
c. *Based on assumed 15% irrigated landscape per acre*
d. *Based on a net evapotranspiration (ETo) of 58 in/year, with a 70% ETo factor. The net ETo is from SSWD's Urban Water Use Objective (UWUO) Report to DWR (DWR, 2024)*

2.2 Projected Water Demand

This section presents the projected water demands for the SSWD water service area (pre-Project) and the Project, both individually and combined, through 2045.

2.2.1 Projected Water Demands for the Water Service Area (pre-Project)

The projected water demands for the current land use zoning in the water service area were estimated in Section 4 of the SSWD 2020 UWMP. Table 2-2 presents the projected water demands for the current land use zoning as projected in the 2020 UWMP, minus the water demand previously estimated for the current land use zoning of the Project parcels. Water demand projections for 2025 through 2045 assume a normal water year type.

Table 2-2. Projected Water Demands with Current Land Use Zoning (pre-Project), ac-ft/yr					
Area	2025	2030	2035	2040	2045
Total Service Area (pre-Project) [a]	38,184	38,617	38,611	38,574	38,536
Project Parcels (current land use zoning) [b]	- 174	- 174	- 174	- 174	- 174
Total Service Area Minus Project Parcels	**38,010**	**38,443**	**38,437**	**38,400**	**38,362**

a. *2020 UWMP Table 4-5*
b. *Calculated based on SSWD Water System Master Plan UWDFs (WSMP Table 3-14) combined with the Project parcel acreage and current land use zoning*

2.2.2 Projected Water Demands for the Project

The projected water demands for the Project are based on the UWDFs in Table 2-1 and the Project land use and dwelling units summarized in Table 1-1. The Project is estimated to be constructed after 2025 with Project completion by 2029. The projected demand for the Project is 473 ac-ft/yr as shown in Table 2-3. A portion of this demand (174 ac-ft/yr) is already accounted for in the 2020 UWMP (see Table 2-2). The net increase in demand as a result of the Project is 299 ac-ft/yr (473 ac-ft/yr – 174 ac-ft/yr = 299 ac-ft/yr).

Table 2-3. Project Water Demands

Site No.	APN	Address/Siting Description	Redeveloped acreage [a], acre	Project Land Use Zoning	Total Project Dwelling Units [b]	UWDF [c], gpd/DU	Project Demand, ac-ft/yr
1	203-0110-047-0000	0.3 miles west of Antelope Road/Walerga Road	10.0 [d]	RD-30	300	183	61.5
2	203-0110-069-0000	0.2 miles south of Elverta Road/Walerga Road	4.66	RD-30	140	183	28.7
3	203-0120-089-0000	S Antelope Road/Elverta Road	9.69	RD-40	388	179	77.9
5	268-0010-007-0000268-0010-008-0000268-0010-009-0000	2328 Edison Avenue 2332 Edison Avenue 2336 Edison Avenue	1.98	RD-30	59	183	12.2
6	220-0025-002-0000	6344 Verner Avenue	1.80	RD-30	54	183	11.1
8	230-0091-056-0000	4921 Hemlock Street	1.32	RD-30	40	183	8.1
9	236-0051-073-0000	5817 Muldrow Road	1.33	RD-10	13	209	3.1
10	240-0050-026-0000	5108 Pasadena Avenue	3.01	RD-15	45	198	10.0
13	289-0042-005-0000	5020 Arden Way	0.72	RD-10	7	209	1.7
14	289-0600-022-0000	4845 Fair Oaks Boulevard	1.46	RD-15	22	198	4.9
19	219-0032-004-0000	NW Walerga Road/Blackjack Way	0.97	RD-20	19	191	4.1
20	219-0033-001-0000	SW Walerga Road/Don Julio Boulevard	5.70	RD-30	171	183	35.1
21	219-0042-019-0000	NW Walerga Road/Galbraith Drive	3.36	RD-30	101	183	20.7
22	222-0024-001-0000 222-0024-041-0000	E Roseville Road/Elkhorn Boulevard overpass	6.02 [e]	RD-30	181	183	37.0
23	228-0182-005-0000	5140 Harrison Street	1.22	RD-30	37	183	7.5
68	208-0122-066-0000	500 feet north of Watt Avenue/Q Street	3.06	RD-40	122	179	24.6
69	208-0132-008-0000	7235 Watt Avenue	4.62	RD-40	185	179	37.1
70	208-0162-018-0000	0.2 miles south of Watt Avenue/Elkhorn Boulevard	5.15	RD-30	155	183	31.7
71	208-0162-027-0000	0.1 miles north of Watt Avenue/I Street	6.35	RD-30	191	183	39.1
72	215-0062-057-0000	6233 Watt Avenue	2.13	RD-40	85	179	17.1
Total			**74.55**	--	**2,314**	--	**473**

Table 2-3. Project Water Demands

a. Redeveloped acreage is equal to lot size, except as noted.

b. Total dwelling units are dwelling units for Project land use zoning and Project redeveloped acreage.

c. UWDF from Table 2-1.

d. Site No. 1: Lot size is 16.64 acres, but only 10.0 acres are being re-developed in this Project.

e. Site No. 22: The SSWD service area parcel (222-0024-001-000) area is 6.02 acres. Parcel 222-0024-041-0000 is within the California American Water Company service area, so it is excluded from the WSA.

2.2.3 Total Projected Water Demand

Table 2-4 presents the projected demand for the water service area (excluding the Project demands) and the projected demand for the Project sites. The Project is estimated to increase SSWD's projected 2045 demand by 0.8 percent from 38,536 acre-feet per year (ac-ft/yr) to 38,835 ac-ft/yr.

Table 2-4. Total Projected Water Demand for SSWD with Project, ac-ft/yr

Area	2025	2030	2035	2040	2045
Total Service Area Minus Project Parcels [a]	38,010	38,443	38,437	38,400	38,362
Project [b]	0	473	473	473	473
Total	**38,010**	**38,916**	**38,910**	**38,873**	**38,835**

a. See Table 2-2.

b. See Table 2-3. The Project is estimated to be constructed after 2025 with Project completion by 2029.

Section 3

Water Supply to Demand Comparison

This section provides a comparison of SSWD's normal and dry water year supplies and water demands. SSWD's water demands are described in Section 2. SSWD's total water supplies for normal and dry years through 2045 shown in this section are from SSWD's 2020 UWMP.

3.1 Water Supplies

As described in SSWD's 2020 UWMP, SSWD uses mainly groundwater that is supplemented with surface water when it is available that is obtained under contracts with Placer County Water Agency, the United States Bureau of Reclamation, San Juan Water District, and the City of Sacramento. Groundwater has historically been the primary source of water for SSWD and is the primary source of supply in dry years. The groundwater use in SSWD has significantly declined since 1998 due to the availability of surface water as an alternative supply.

3.2 Normal Year Water Supply and Demand Comparison

Table 3-1 compares SSWD's projected normal year water demands to the supplies in five-year intervals through 2045. The water demands represent the SSWD's total projected water demands for the existing water service area plus the Project. The supply minus demand row indicates that in all years there is a surplus of projected supply.

Table 3-1. Normal Year Water Supply and Demand Comparison, ac-ft/yr

Year	2025	2030	2035	2040	2045
Total supply [a]	93,064	93,064	93,064	93,064	93,064
Total demand [b]	38,010	38,916	38,910	38,873	38,835
Supply minus demand, surplus/(deficit)	55,054	54,148	54,154	54,191	54,229

a. *See SSWD 2020 UWMP Table 7-4.*

b. *See Table 2-4.*

3.3 Single Dry Year Water Supply and Demand Comparison

Table 3-2 provides a projected water supply and demand comparison for single dry years through the year 2045. Purchased surface water supplies from Placer County Water Agency, United States Bureau of Reclamation, and the City of Sacramento are reduced to zero and groundwater is the primary source of supply in dry years with some dry year supply from San Juan Water District and from City of Sacramento exchange (groundwater substitution transfer). As can be seen in Table 3-2, SSWD has the supplies to meet single dry year demands of the existing service area and the Project.

Table 3-2. Single Dry Year Water Supply and Demand Comparison, ac-ft/yr					
	2025	2030	2035	2040	2045
Total supply [a]	48,000	48,000	48,000	48,000	48,000
Total demand [b]	38,010	38,916	38,910	38,873	38,835
Supply minus demand, surplus/(deficit)	9,990	9,084	9,090	9,127	9,165

a. See SSWD 2020 UWMP Table 7-5.

b. See Table 2-4.

3.4 Multiple Dry Years Water Supply and Demand Comparison

Table 3-3 provides a projected water supply and demand comparison for multiple dry years through the year 2045. Purchased surface water supplies from Placer County Water Agency, United States Bureau of Reclamation, and the City of Sacramento are reduced to zero and groundwater is the primary source of supply in dry years with some dry year supply from San Juan Water District and from City of Sacramento exchange (groundwater substitution transfer). As can be seen in Table 3-3, SSWD has the supplies to meet multiple dry year demands of the existing service area and the Project.

Table 3-3. Multiple Dry Years Water Supply and Demand Comparison, ac-ft/yr						
		2025	2030	2035	2040	2045
First year	Supply [a]	48,000	48,000	48,000	48,000	48,000
	Demand [b]	38,010	38,916	38,910	38,873	38,835
	Supply minus demand, surplus/(deficit)	9,990	9,084	9,090	9,127	9,165
Second year	Supply [a]	48,000	48,000	48,000	48,000	48,000
	Demand [b]	38,010	38,916	38,910	38,873	38,835
	Supply minus demand, surplus/(deficit)	9,990	9,084	9,090	9,127	9,165
Third year	Supply [a]	48,000	48,000	48,000	48,000	48,000
	Demand [b]	38,010	38,916	38,910	38,873	38,835
	Supply minus demand, surplus/(deficit)	9,990	9,084	9,090	9,127	9,165
Fourth year	Supply [a]	48,000	48,000	48,000	48,000	48,000
	Demand [b]	38,010	38,916	38,910	38,873	38,835
	Supply minus demand, surplus/(deficit)	9,990	9,084	9,090	9,127	9,165
Fifth year	Supply [a]	48,000	48,000	48,000	48,000	48,000
	Demand [b]	38,010	38,916	38,910	38,873	38,835
	Supply minus demand, surplus/(deficit)	9,990	9,084	9,090	9,127	9,165

a. *See SSWD 2020 UWMP Table 7-6.*

b. *See Table 2-4.*

Section 4

Conclusion

In accordance with the requirements of California Water Code sections 10910 through 10915, this WSA verifies that sufficient water supplies are available to serve the Project as well as the other projected demands within SSWD's service area. SSWD's projected water supplies are sufficient under non-drought (normal year) and drought (single and multiple dry years) conditions.

Section 5

References

Brown and Caldwell, SSWD Urban Water Management Plan. June 2021.

Brown and Caldwell, SSWD Water System Master Plan. April 2017.

Sacramento Suburban Water District, California Department of Water Resources Water Use Efficiency Data – 2022 SSWD UWUO Interim Report DWR Reporting Forms.xlxs. February 13, 2024. https://wuedata.water.ca.gov/uwuo_plans

APPENDIX UTIL-4: SACRAMENTO AREA SEWER DISTRICT ABILITY TO SERVE CORRESPONDENCE

THESE CORRESPONDENCES INCLUDED FOUR ADDITIONAL SITES THAT ARE LONGER INCLUDED IN THE PROJECT. ADDITIONALLY, NUMBERING OF THE CANDIDATE REZONE SITES HAVE BEEN MODIFIED SINCE THE OCCURRENCE OF THESE CORRESPONDENCES.

Todd Smith, Planning Director
Planning and Environmental Review

Troy Givans, Director
Department of Community Development

County of Sacramento

January 4, 2024

Mike Huot, Director of Policy and Planning
Sacramento Area Sewer District
10060 Goethe Road
Sacramento, CA 95827
huotm@sacsewer.com / sasddevservices@sacsewer.com / srcsddevservices@sacsewer.com

Subject: Request for Ability to Serve the Sacramento County Regional Housing Needs Allocation (RHNA) Rezone Project (Control No. PLNP2020-00042)

Dear Mike Huot,

Planning and Environmental Review (PER) is currently preparing the environmental analysis associated with the Sacramento County Regional Housing Needs Allocation (RHNA) Rezone Project (Project). The Project's revised Notice of Preparation (NOP) was released on December 22, 2023, and may be viewed online at: https://planning.saccounty.gov/PlansandProjectsIn-Progress/Pages/Countywide-Rezone-Program.aspx.

The Sacramento County Housing Element of 2021-2029 identifies a shortfall of 2,884 units for the lower-income category (includes the low, very low, and extremely low income categories; incomes ranging from $0 to $69,050 annually) in the County. Simply, there is insufficient appropriately-zoned sites to accommodate the County's RHNA obligation for the lower-income category. As such, PER is undertaking a rezone of ±248.33 acres comprising 83 candidate rezone sites within the unincorporated County to provide additional lower-income (to fulfill the RHNA obligation and increase the buffer) and moderate income (to increase the buffer) category housing opportunities. The Project does not propose to construct new residential or other development on the ±248.33 acres proposed to be rezoned; rather, it provides capacity for future development of housing units to meet the County's remaining unmet RHNA of 2,884 lower income category units, consistent with State law. The planning horizon year for the Project is 2029.

All 83 candidate rezone sites are located within the Sacramento Area Sewer District's and the Sacramento Regional County Sanitation District's (collectively known as SacSewer) service area. Attachment 1 provides a list of the candidate rezone sites (Sites 1-83) and information regarding site acreage, existing and proposed zoning designations, and net increase in units. The net increase in residential units is calculated as the difference between an existing zoning designation's maximum density and the proposed zoning designation's maximum density. For example, a 1-acre site currently zoned RD-20 (maximum density of 20 units per acre) with a proposed zoning of RD-30 (maximum density of 30 units per acre) nets 10 additional units with a rezone. Attachment 2 depicts the locations of these candidate rezone sites within the SacSewer service

area. In total, the Project is anticipated to result in a net increase of 4,345 units (4,143 lower-income units and 202 moderate-income units) within the SacSewer service area.

It is noted that SacSewer exempts certain types of developments that include deed restricted affordable units from various impact fees. At this time, no development is proposed with the Project; thus, PER is specifically concerned with overall system-wide supply and infrastructure capacity. Pursuant to California *Government Code Section 65583.2(b)(5*), projects implementing our approved Housing Element, including this Project, require the County to describe existing or planned sewer supply, including the availability and access to distribution facilities. Parcels included in the affordable inventory must have sufficient sewer supply available and accessible to support housing development or be included in an existing general plan program or other mandatory program or plan, including a program or plan of a public or private entity providing sewer service, to secure sufficient sewer supply to support housing development. Therefore, PER requests the following information:

1. Whether the projected sewer demand associated with the Project was included as part of an adopted sewer management plan, or similar; and
2. If the Project's sewer demand was not included as part of the most recently adopted sewer management plan, does SacSewer have adequate capacities to serve the Project?

Additionally, PER requests any comments (including conditions of approval or advisories) SacSewer may have for the Project. If you have any questions or would like to set up a meeting to further discuss the Project, please contact me at shenj@saccounty.gov or 916.875.3711.

Sincerely,



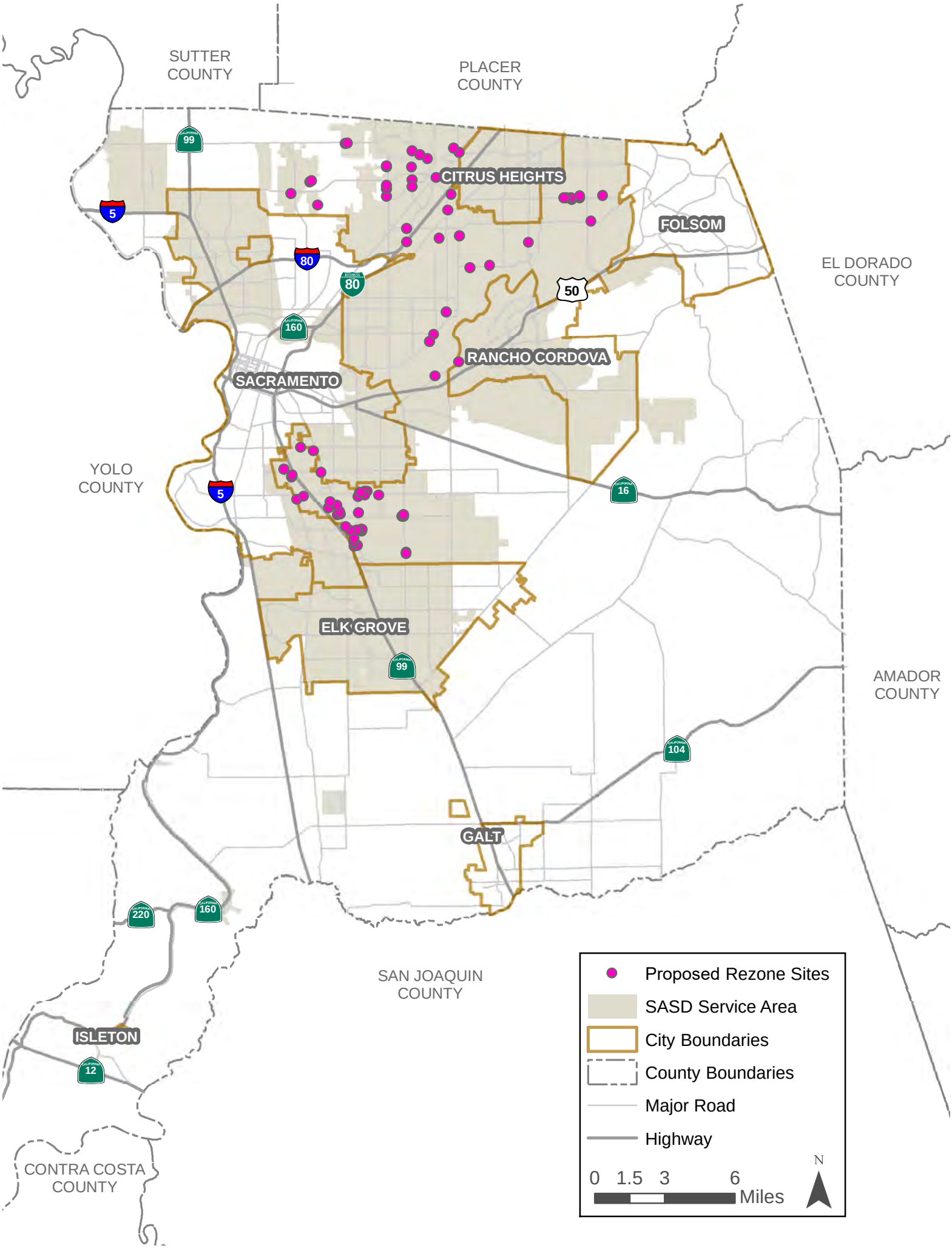
Jessie Shen
Senior Planner

Attachments

Attachment 1 – SacSewer List of Candidate Rezone Sites
Attachment 2 – Maps of Candidate Rezone Sites

Site #	APN	Address/Siting Description	Lot size / Portion of Lot Rezoned (net acres)	Zoning Designation/SPA/ Specific or Master Plan Area (Current)	Zoning Designation (Proposed)	Net Increase
1	203-0110-047-0000	0.3 miles W of Antelope Road/Walerga Road	10.00	RD-20	RD-30	100
2	203-0110-069-0000	0.2 miles S of Elverta Road/Walerga Road	4.66	UR	RD-30	138
3	203-0120-089-0000	S Antelope Road/Elverta Road	9.69	RD-20	RD-40	194
4	203-0260-064-0000	7907 Antelope North Road	5.80	RD-20/RD-7/O	RD-30	58
5	209-0720-027-0000	370 feet N Roseville Road/Antelope Road	5.28	MP	RD-40	211
6	268-0010-007-0000, 268-0010-008-0000 & 268-0010-009-0000	2328 Edison Avenue, 2332 Edison Avenue & 2336 Edison Avenue	1.98	RD-20	RD-30	20
7	220-0025-002-0000	6344 Verner Avenue	1.80	RD-5	RD-30	45
8	220-0311-019-0000	5804 Garfield Avenue	0.89	RD-20	RD-30	9
9	230-0091-056-0000	4921 Hemlock Street	1.32	RD-20	RD-30	13
10	236-0051-073-0000	5817 Muldrow Road	1.33	RD-5	RD-10	7
11	240-0050-026-0000	5108 Pasadena Avenue	3.01	RD-2	RD-15	39
12	247-0220-004-0000	8545 Fair Oaks Boulevard	3.00	RD-2	RD-30	84
13	283-0020-016-0000 & 283-0020-017-0000	2421 Garfield Avenue & 2413 Garfield Avenue	1.84	RD-5	RD-30	46
14	289-0042-005-0000	5020 Arden Way	0.72	RD-2	RD-10	6
15	289-0600-022-0000	4845 Fair Oaks Boulevard	1.46	RD-4	RD-15	16
16	075-0020-015-0000	9425 Folsom Boulevard	11.45	RD-20/O	RD-40/O	229
17	075-0440-024-0000	450 feet NE Folsom Boulevard/Paseo Rio Way	2.45	RD-20(PC)	RD-40	49
18	235-0060-010-0000 & 235-0060-011-0000	8933 Madison Avenue & 8937 Madison Avenue	1.26	RD-2	RD-30	35
19	244-0058-025-0000 & 244-0058-028-0000	4746 Sunrise Boulevard & 4742 Sunrise Boulevard	1.63	BP	RD-30	16
20	219-0032-004-0000	NW Walerga Road/Blackjack Way	0.97	BP	RD-20	0
21	219-0033-001-0000	SW Walerga Road/Don Julio Boulevard	5.70	RD-20/BP	RD-30	57
22	219-0042-019-0000	NW Walerga Road/Galbraith Drive	3.36	BP	RD-30	33
23	222-0024-001-0000 & 222-0024-041-0000	E Roseville Road/Elkhorn Boulevard overpass	9.96	RD-10	RD-30	199
24	228-0182-005-0000	5140 Harrison Street	1.22	BP	RD-30	12
25	223-0092-028-0000	6321 Chestnut Avenue	2.18	RD-2	RD-30	61
26	261-0210-013-0000	6245 Beech Avenue	1.05	RD-10	RD-40	32
27	203-0080-021-0000	120 feet W of Elverta Road/Bellingrath Drive	1.15	RD-5	RD-30	29
28	203-0080-027-0000	480 feet W of Elverta Road/Bellingrath Drive	5.86	AR-5	RD-30	174
29	214-0092-019-0000	232 Elkhorn Boulevard	1.52	RD-20	RD-30	15
30	214-0160-061-0000	5919 Dry Creek Road	3.54	RD-20	RD-30	36
31	022-0252-018-0000	4541 Fruitridge Road	1.77	RD-20	RD-30	18
32	026-0102-023-0000	5903 Southwest Avenue	2.13	RD-20	RD-40	43
33	037-0242-027-0000 & 037-0242-028-0000	SE 45th Avenue/Franklin Boulevard & 6301 Franklin Boulevard	1.73	LC	RD-30	0
34	039-0054-001-0000	4001 48th Avenue	3.51	RD-20	RD-30	35
35	039-0072-016-0000	NE 49th Avenue/Wesley Avenue	1.39	RD-20	RD-30	14
36	039-0241-001-0000	240 feet W of 47th Avenue/Stockton Boulevard	2.14	RD-20	RD-30	22
37	050-0010-076-0000	180 feet SE of Franklin Boulevard/Meadowgate Drive	1.05	GC	RD-40	11
38	050-0010-077-0000	7236 E Parkway	2.08	RD-20	RD-30	21
39	050-0311-028-0000	630 feet W of 66th Avenue/Stockton Boulevard	4.39	RD-20	RD-40	88
40	050-0331-003-0000	6130 Orange Avenue	2.35	RD-5	RD-30	59
41	050-0391-006-0000	6707 Stacy Avenue	1.10	RD-5	RD-30	28
42	051-0160-014-0000	NE Stockton Boulevard/Walter Avenue	1.68	RD-20	RD-40	34
43	051-0200-017-0000 & 051-0200-018-0000	7525 Power Inn Road & 7521 Power Inn Road	1.43	RD-20	RD-30	14
44	051-0630-021-0000	NE Stockton Boulevard/Whitewillow Drive	3.21	RD-20	RD-40	64
45	065-0070-009-0000	7572 Elk Grove Florin Road	2.31	A-10	RD-30	68
46	065-0070-010-0000	7590 Elk Grove Florin Road	1.99	A-10	RD-30	58
47	065-0070-011-0000	8831 Gerber Road	2.71	A-10	RD-30	80
48	115-0061-007-0000	7604 Elsie Avenue	1.22	RD-5	RD-15	12
49	115-0062-026-0000	7825 Robinette Road	3.08	RD-5	RD-40	108
50	115-0073-001-0000	SE Elsie Avenue/Power Inn Road	1.78	RD-5	RD-15	18
51	115-0073-010-0000	SW Elsie Avenue/Iona Way	0.73	RD-5	RD-15	7
52	115-0073-011-0000	140 feet W of Elsie Avenue/Iona Way	0.84	RD-5	RD-15	8
53	115-0073-012-0000	220 feet S of Elsie Avenue/Iona Way	0.94	RD-5	RD-15	10
54	115-0073-013-0000	350 feet S of Elsie Avenue/Iona Way	1.87	RD-5	RD-15	19
55	115-0201-012-0000	7901 Stevenson Avenue	6.51	RD-5	RD-30	163
56	115-0201-018-0000	7516 Rangeview Lane	6.98	RD-5	RD-40	245
57	115-0202-018-0000 & 115-0202-019-0000	8016 Stevenson Avenue & 540 feet S of Stevenson Avenue/Power Inn Road	2.65	RD-5	RD-30	66
58	115-0210-010-0000	540 feet W of Lenhart Road/Power Inn Road	4.13	RD-5	RD-15	41
59	115-1980-003-0000	7333 Elsie Avenue	3.64	RD-20	RD-40	73
60	121-0120-001-0000	8207 Elk Grove Florin Road	2.42	UR	RD-30	71
61	121-0120-002-0000	8225 Elk Grove Florin Road	2.39	UR	RD-30	70
62	051-0640-049-0000	NE Stockton Boulevard/Orange Avenue	2.26	RD-20/NPA (Stockton Blvd)	RD-40	45
63	115-0202-002-0000 & 115-0202-005-0000	8095 E Stockton Boulevard & 8099 E Stockton Boulevard	4.66	RD-5/NPA (Victory Avenue)	RD-30	116
64	261-0160-018-0000	8553 Greenback Lane	0.68	SPA (Greenback Ln - RD-5)	RD-15	7
65	261-0160-020-0000	NE Greenback Lane/Kenneth Avenue	0.69	SPA (Greenback Ln - RD-2)	RD-10	5
66	261-0160-034-0000	300 feet E of Greenback Lane/Almond Avenue	0.85	SPA (Greenback Ln - RD-2)	RD-10	7
67	261-0210-019-0000	NW Beech Avenue/Greenback Lane	1.31	SPA (Greenback Ln - RD-10)	RD-40	39
68	261-0220-038-0000	8646 Greenback Lane	1.17	SPA (Greenback Ln - BP)	RD-30	12

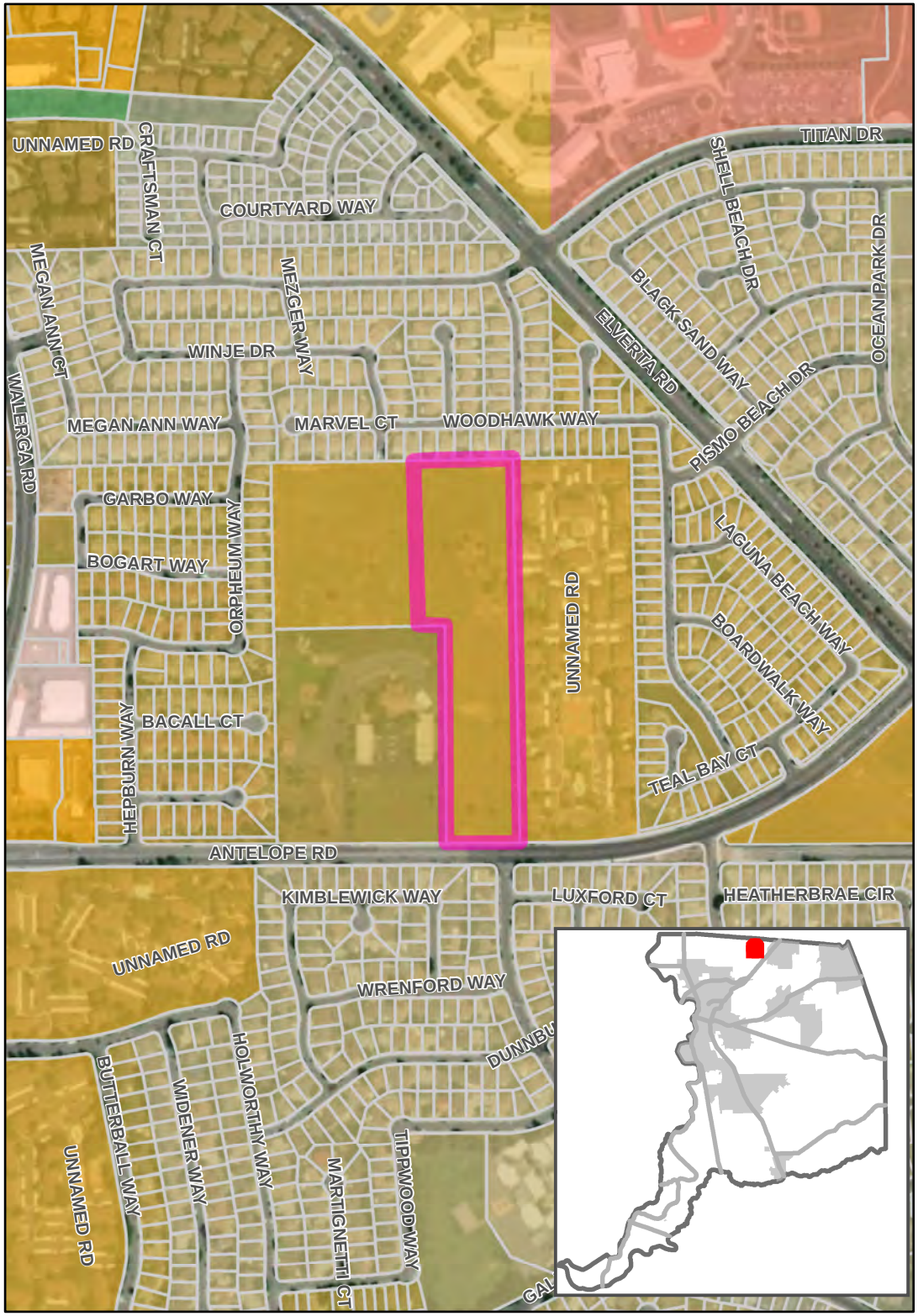
69	207-0141-015-0000	970 Oak Lane	3.70	SPA (Downtown Rio Linda - RD-20/NMU)	RD-30	37
70	207-0300-009-0000	864 Oak Lane	3.00	SPA (Downtown Rio Linda - RD-20/NMU)	RD-30	30
71	260-0310-025-0000	7904 Fair Oaks Boulevard	1.25	SPA (Fair Oaks Central - BP)	RD-30	12
72	208-0122-066-0000	500 feet N of Watt Avenue/Q Street	3.06	SPA (North Watt - RMU-1)	RD-40	46
73	208-0132-008-0000	7235 Watt Avenue	4.62	SPA (North Watt - RMU-1)	RD-40	69
74	208-0162-018-0000	0.2 miles S Watt Avenue/Elkhorn Boulevard	5.15	SPA (North Watt - RMU-2)	RD-30	51
75	208-0162-027-0000	0.1 miles N Watt Avenue/I Street	6.35	SPA (North Watt - RMU-1)	RD-30	32
76	215-0062-057-0000	6233 Watt Avenue	2.13	SPA (North Watt - RMU-1)	RD-40	32
77	043-0070-005-0000	8149 Florin Road	2.80	SPA (Old Florin Town - MUR)	RD-30	28
78	043-0070-034-0000	8165 Florin Road	4.70	SPA (Old Florin Town - MUR)	RD-30	47
79	043-0230-021-0000	90 feet N of Augusta Way/Bacchini Avenue	2.43	SPA (Old Florin Town - MUR)	RD-30	24
80	043-0230-022-0000	430 feet N of McCurdy Lane/Florin Road	4.70	SPA (Old Florin Town - MUR)	RD-30	47
81	051-0030-012-0000	SE Power Inn Road/Florin Road	5.82	SPA (Old Florin Town - MUR/MUC)	RD-30	58
82	051-0061-018-0000	180 feet E of Florin Road/Kara Drive	2.26	SPA (Old Florin Town - MUR/MUC)	RD-40	45
83	065-0020-012-0000 & 065-0020-045-0000	8475 Florin Road & 180 feet S of Florin Road/Simon Street	2.51	SPA (Old Florin Town - MUR)	RD-30	25


SUTTER COUNTY
PLACER COUNTY
EL DORADO COUNTY
YOLO COUNTY
AMADOR COUNTY
SAN JOAQUIN COUNTY
CONTRA COSTA COUNTY
CITRUS HEIGHTS
FOLSOM
RANCHO CORDOVA
SACRAMENTO
ELK GROVE
GALT
ISLETON
99
5
80
50
160
16
104
220
12
Proposed Rezone Sites
SASD Service Area
City Boundaries
County Boundaries
Major Road
Highway
0 1.5 3 6
Miles
N

Site 1

APN 203-0110-047-0000

0.3 miles West of Antelope Road/Walerga Road, Antelope



Legend

Proposed Rezone Site

Zoning

- GC General Commercial
- LC Light Commercial
- O Recreation
- RD-10 Residential
- RD-20 Multiple Family Residential
- RD-30 Multiple Family Residential
- RD-5 Residential
- RD-7 Residential
- SC Shopping Center
- UR Urban Reserve

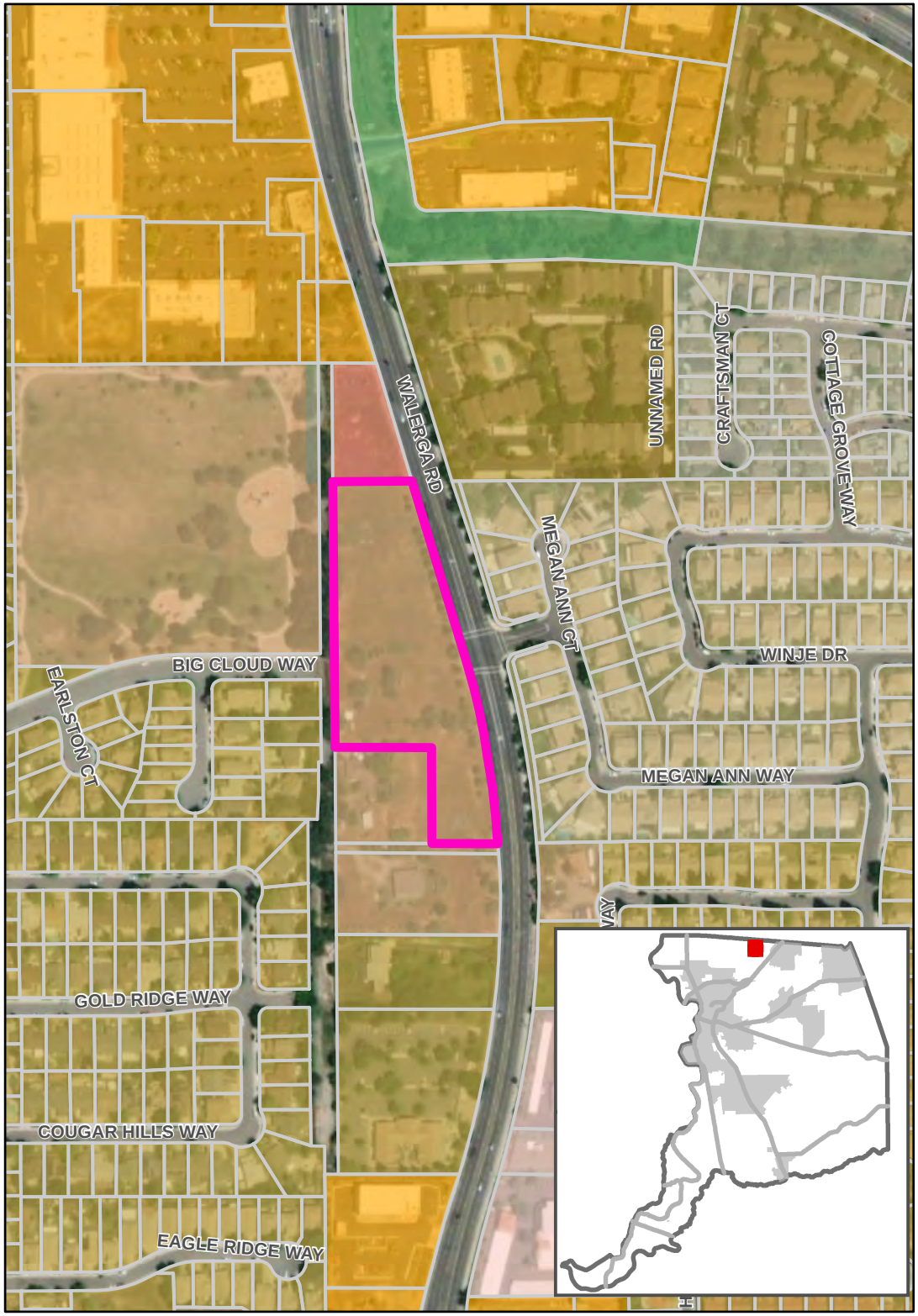
N

0 0.05 0.1 0.2 Miles

Site 2

APN 203-0110-069-0000

0.2 miles South of Elverta Road/Walerga Road, Antelope



Legend

- Proposed Rezone Site

Zoning

- GC General Commercial
- LC Light Commercial
- O Recreation
- RD-10 Residential
- RD-30 Multiple Family Residential
- RD-5 Residential
- RD-7 Residential
- SC Shopping Center
- UR Urban Reserve

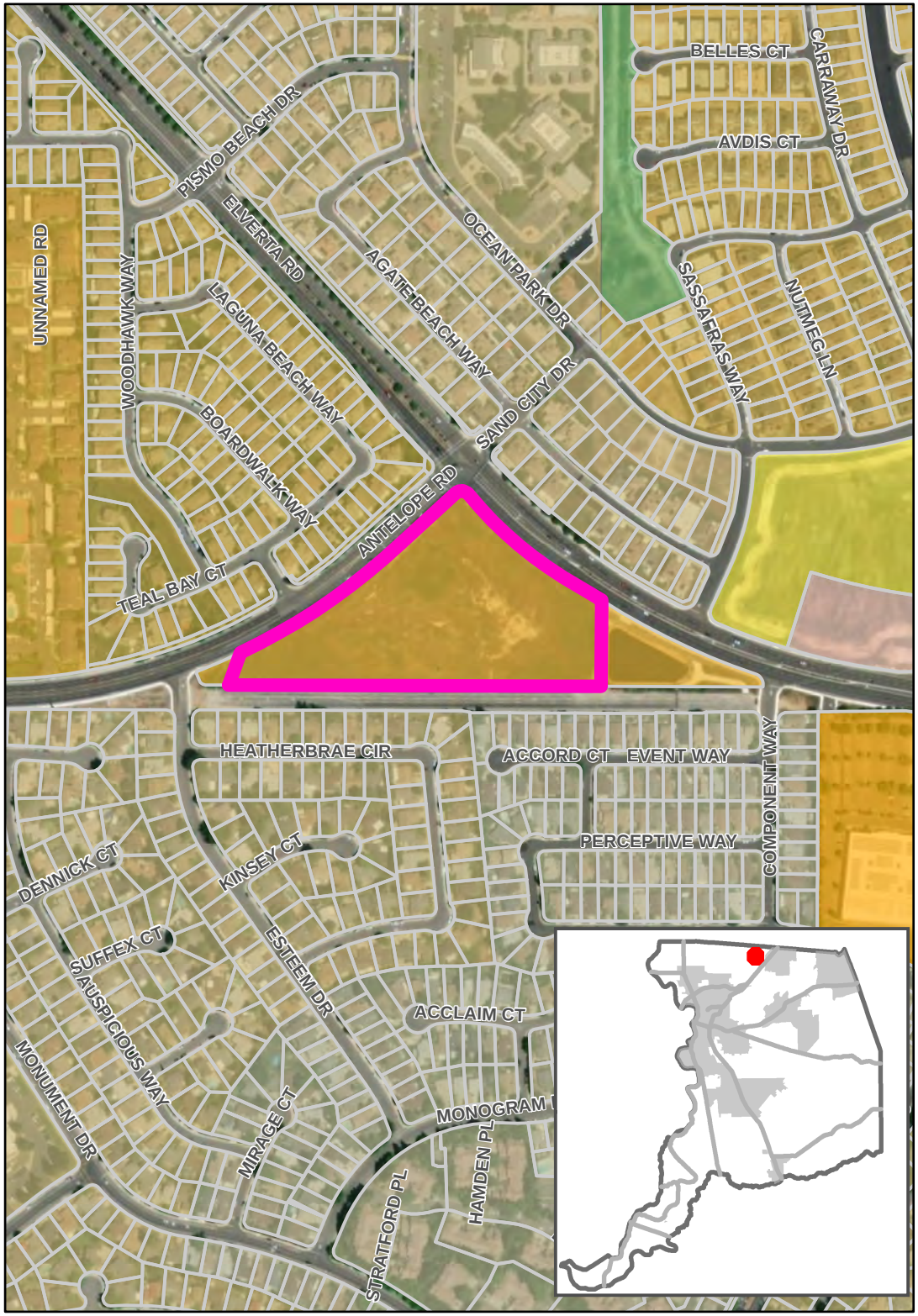
N

0 0.05 0.1 0.2 Miles

Site 3

APN 203-0120-089-0000

South Antelope Road/Elverta Road, Antelope



Legend

- Proposed Rezone Sites

Zoning

- GC General Commercial
- O Recreation
- RD-10 Residential
- RD-20 Multiple Family Residential
- RD-25 Multiple Family Residential
- RD-5 Residential
- RD-7 Residential
- SC Shopping Center

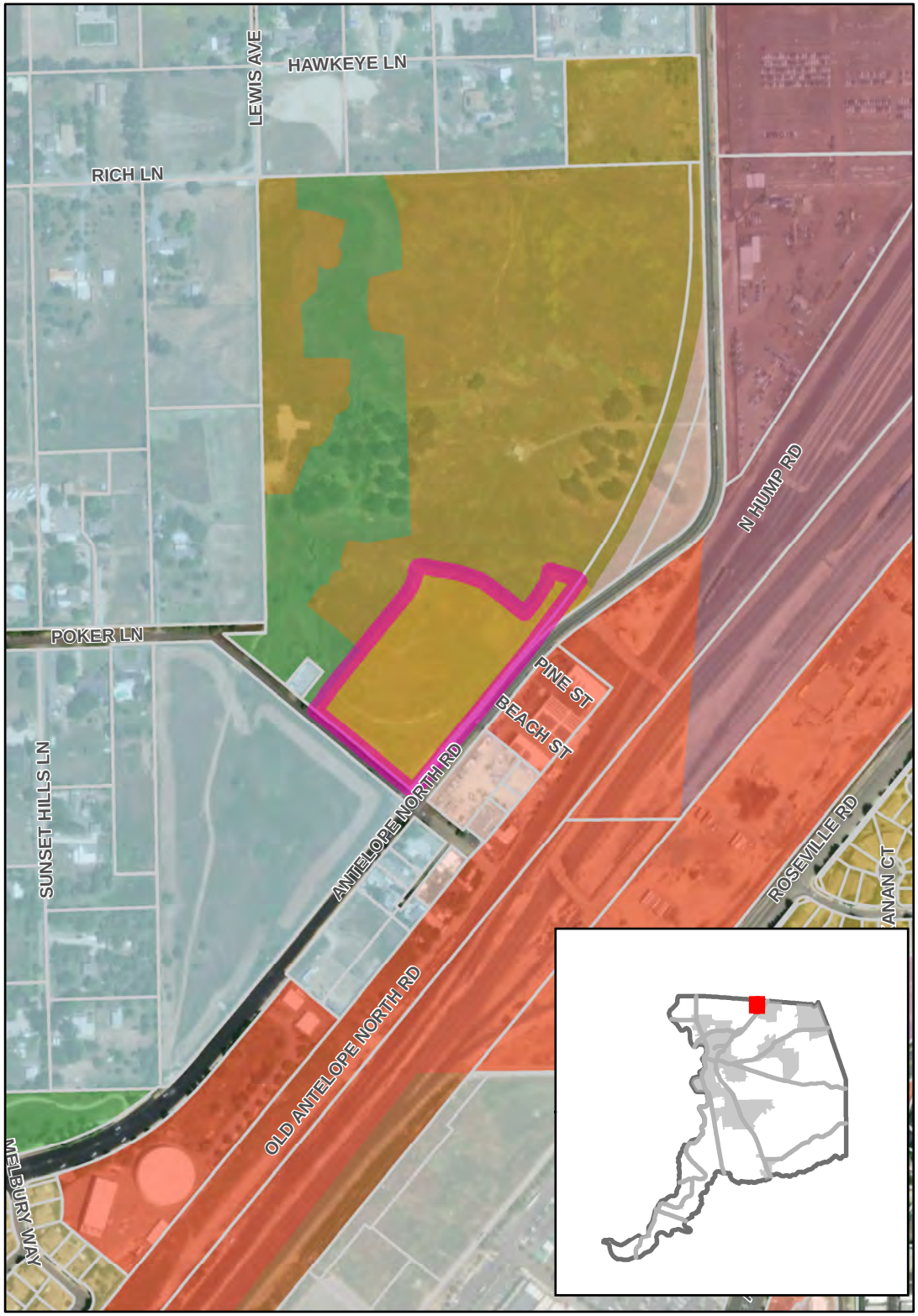
N

0 0.05 0.1 0.2 Miles

Site 4

APN 203-0260-064-0000 7907

Antelope North Road, Antelope



Legend

Proposed Rezone Site

Zoning

- AR-2 Agricultural-Residential - 2 Acres
- GC General Commercial
- IR Interim-Agricultural Reserve
- LC Light Commercial
- M-1 Light Industrial
- M-2 Heavy Industrial
- MP Industrial - Office Park
- O Recreation
- RD-20 Multiple Family Residential
- RD-7 Residential
- SPA Special Planning Area

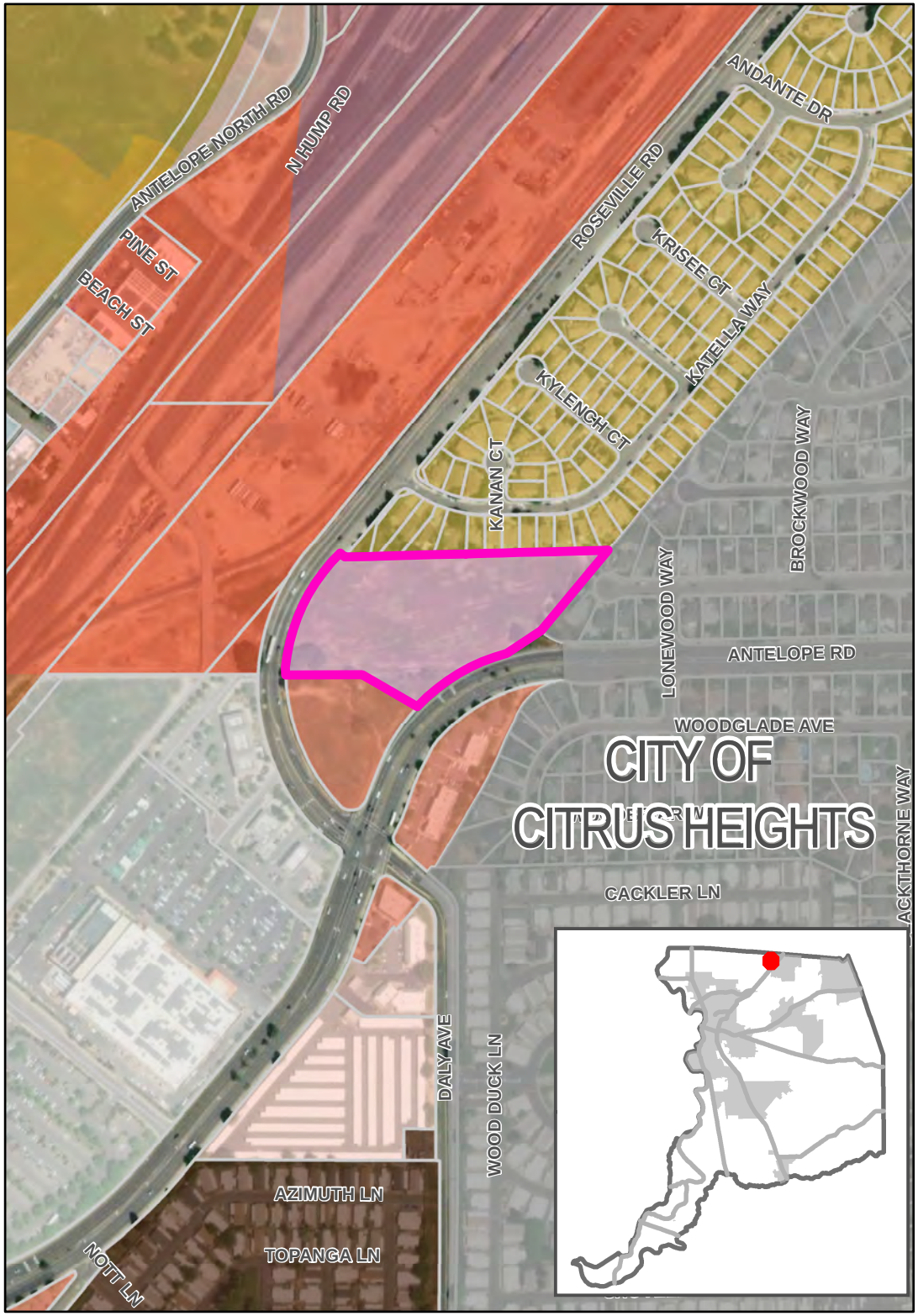
N

0 0.05 0.1 0.2 Miles

Site 5

APN 209-0720-027-0000

370 feet North of Roseville Road/Antelope Road, Antelope



Legend

- Proposed Rezone Site

Zoning

- AR-2 Agricultural-Residential - 2 Acres
- GC General Commercial
- IR Interim-Agricultural Reserve
- LC Light Commercial
- M-1 Light Industrial
- M-2 Heavy Industrial
- MP Industrial - Office Park
- RD-20 Multiple Family Residential
- RD-7 Residential
- RM-1 Mobile Home Subdivision
- SPA Special Planning Area

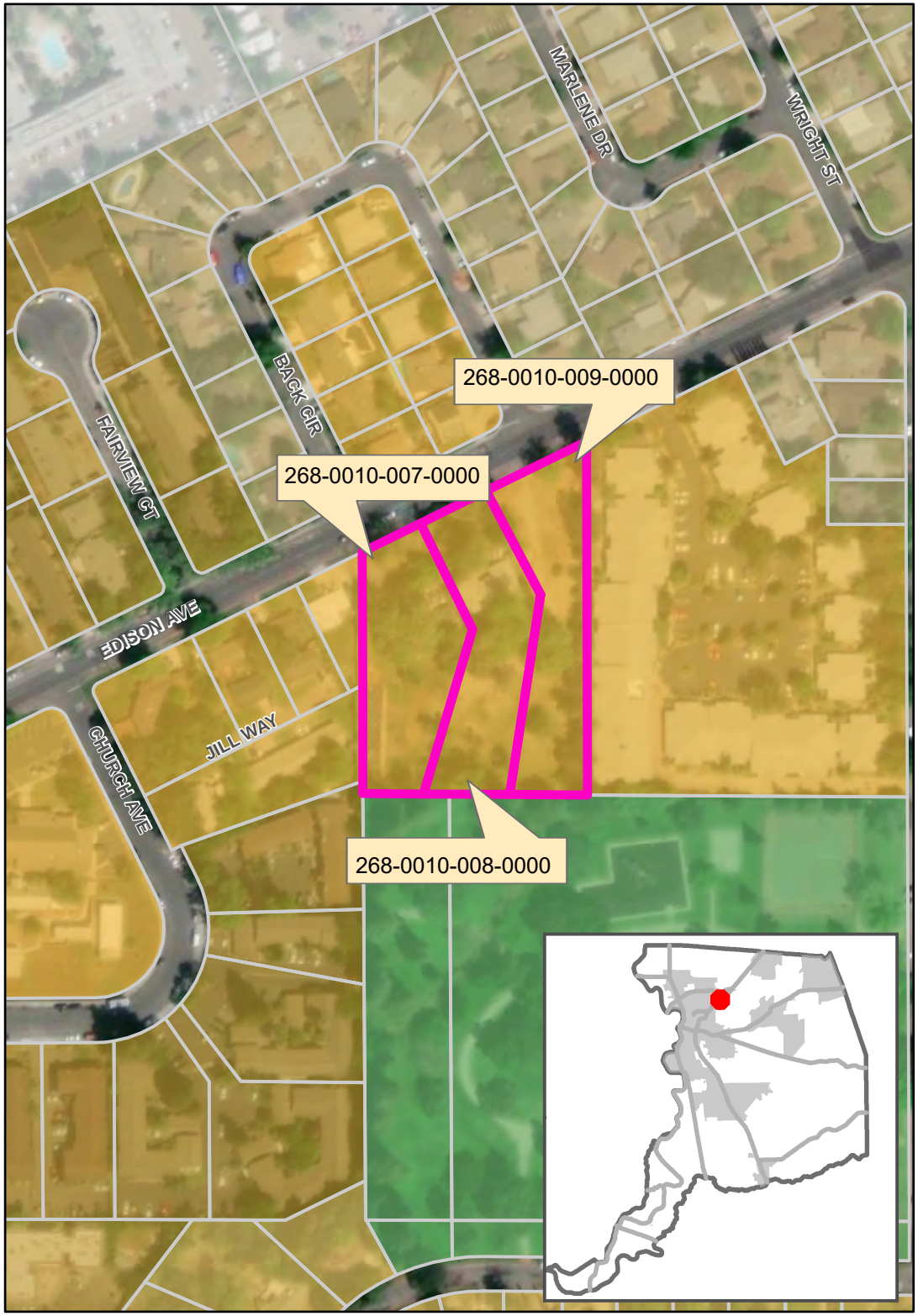
N

0 0.05 0.1 0.2 Miles

Site 6

APNs 268-0010-007-0000,
268-0010-008-0000 &
268-0010-009-0000

2328, 2332, & 2336 Edison Avenue,
Arden Arcade



Legend

Proposed Rezone Site

Zone

- O Recreation
- RD-20 Multiple Family Residential
- RD-30 Multiple Family Residential
- RD-4 Residential
- RD-5 Residential
- SPA Special Planning Area

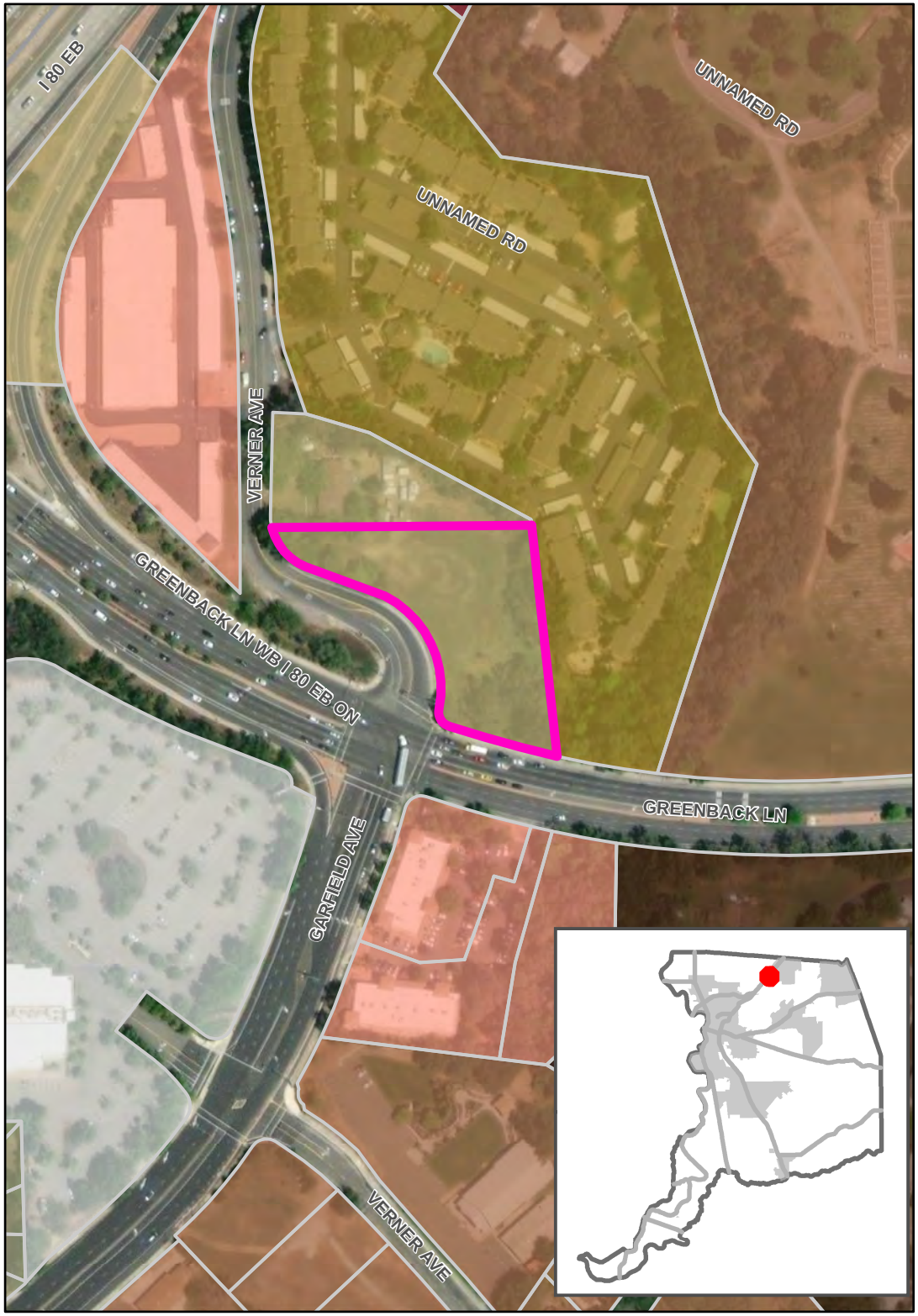
N

0 0.025 0.05 0.1
Miles

Site 7

APN 220-0025-002-0000

6344 Verner Avenue,
Carmichael/Old Foothill Farms



Legend

Proposed Rezone Site

Zoning

- BP Business and Professional Office
- LC Light Commercial
- RD-10 Residential
- RD-2 Residential
- RD-30 Multiple Family Residential
- RD-5 Residential
- RM-1 Mobile Home Subdivision
- SPA Special Planning Area

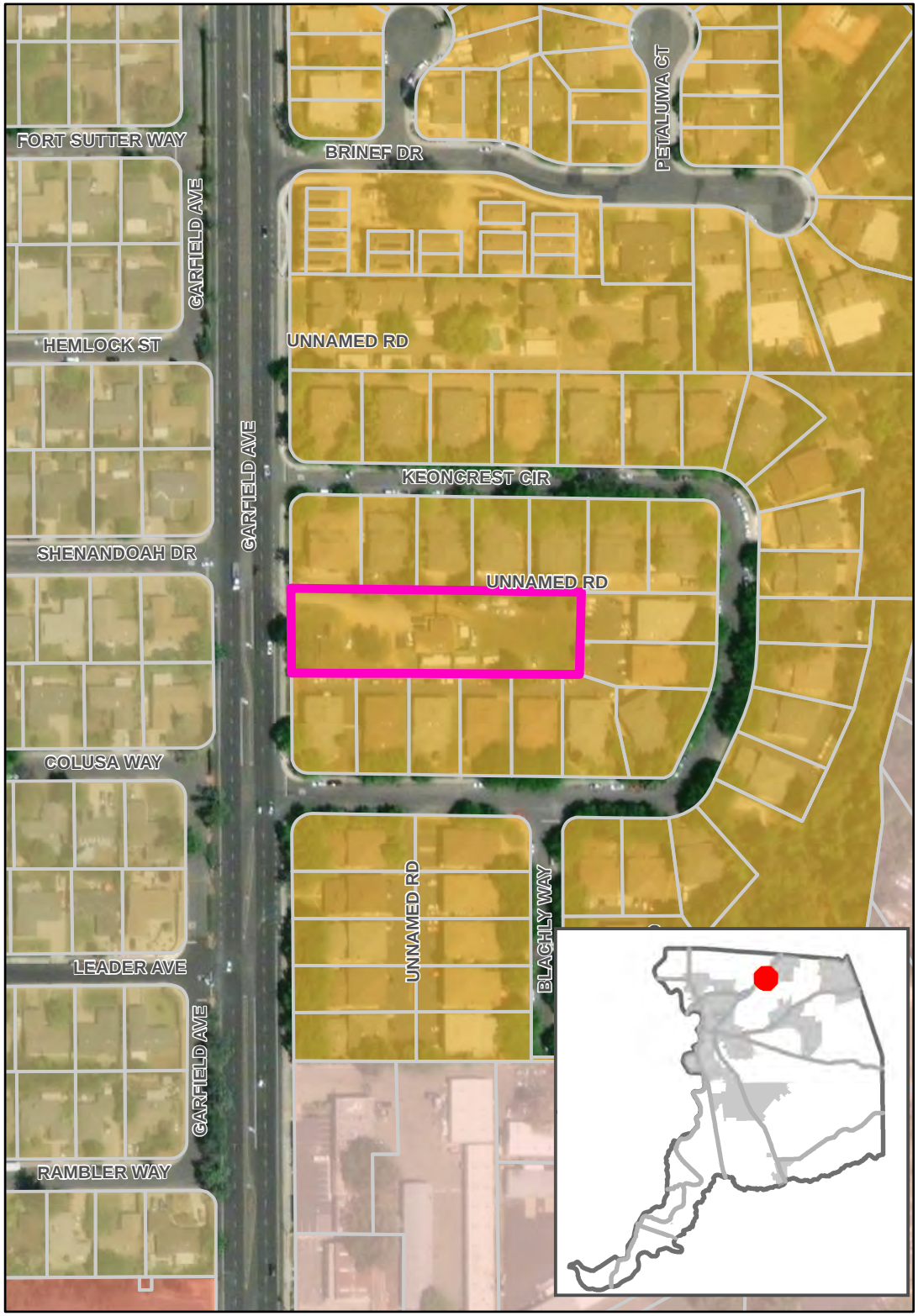
N

0 0.025 0.05 0.1 Miles

Site 8

APN 220-0311-019-0000

5804 Garfield Avenue,
Carmichael/Old Foothill Farms



Legend

Proposed Rezone Site

Zoning

- GC General Commercial
- LC Light Commercial
- RD-20 Multiple Family Residential
- RD-5 Residential

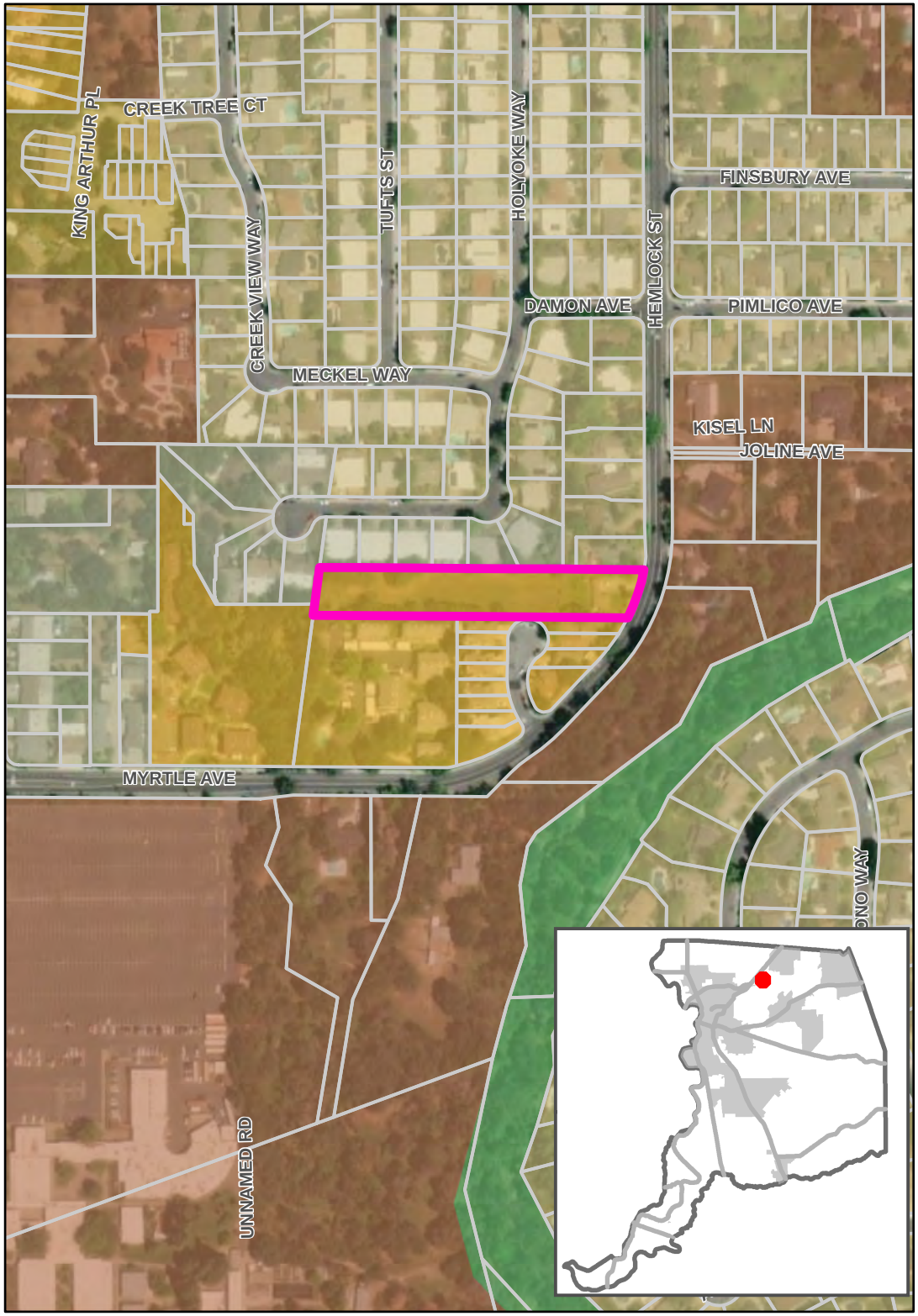
N

0 0.025 0.05 0.1 Miles

Site 9

APN 230-0091-056-0000

4921 Hemlock Street,
Carmichael/Old Foothill Farms



Legend

Proposed Rezone Site

Zoning

- O Recreation
- RD-10 Residential
- RD-2 Residential
- RD-20 Multiple Family Residential
- RD-5 Residential
- RD-7 Residential

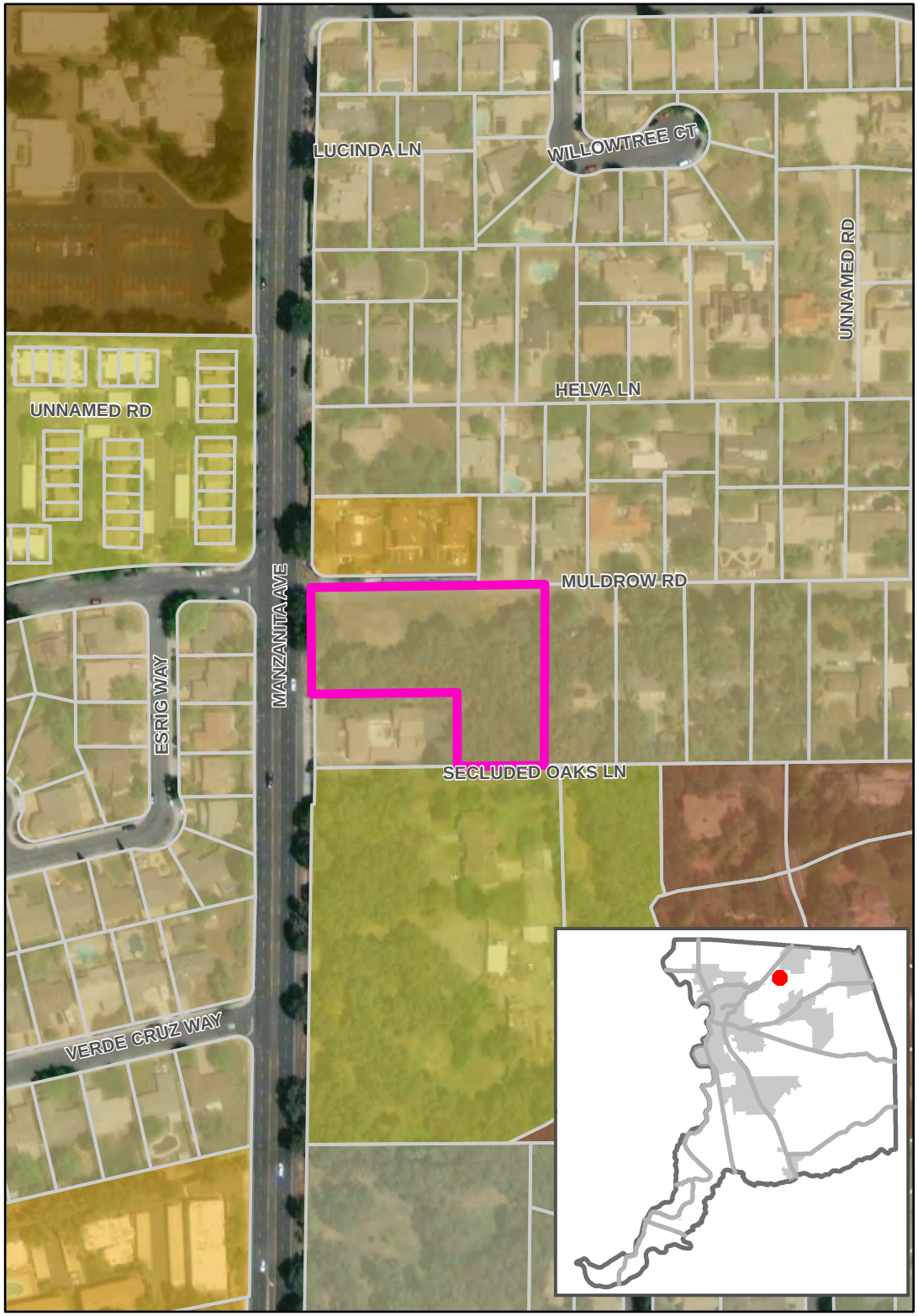
N

0 0.05 0.1 0.2 Miles

Site 10

APN 236-0051-073-0000

5817 Muldrow Road,
Carmichael/Old Foothill Farms



Legend

Proposed Rezone Site

Zoning

- R-2-A Multiple Family Residential Zone
- RD-1 Residential
- RD-10 Residential
- RD-2 Residential
- RD-20 Multiple Family Residential
- RD-40 Multiple Family Residential
- RD-5 Residential

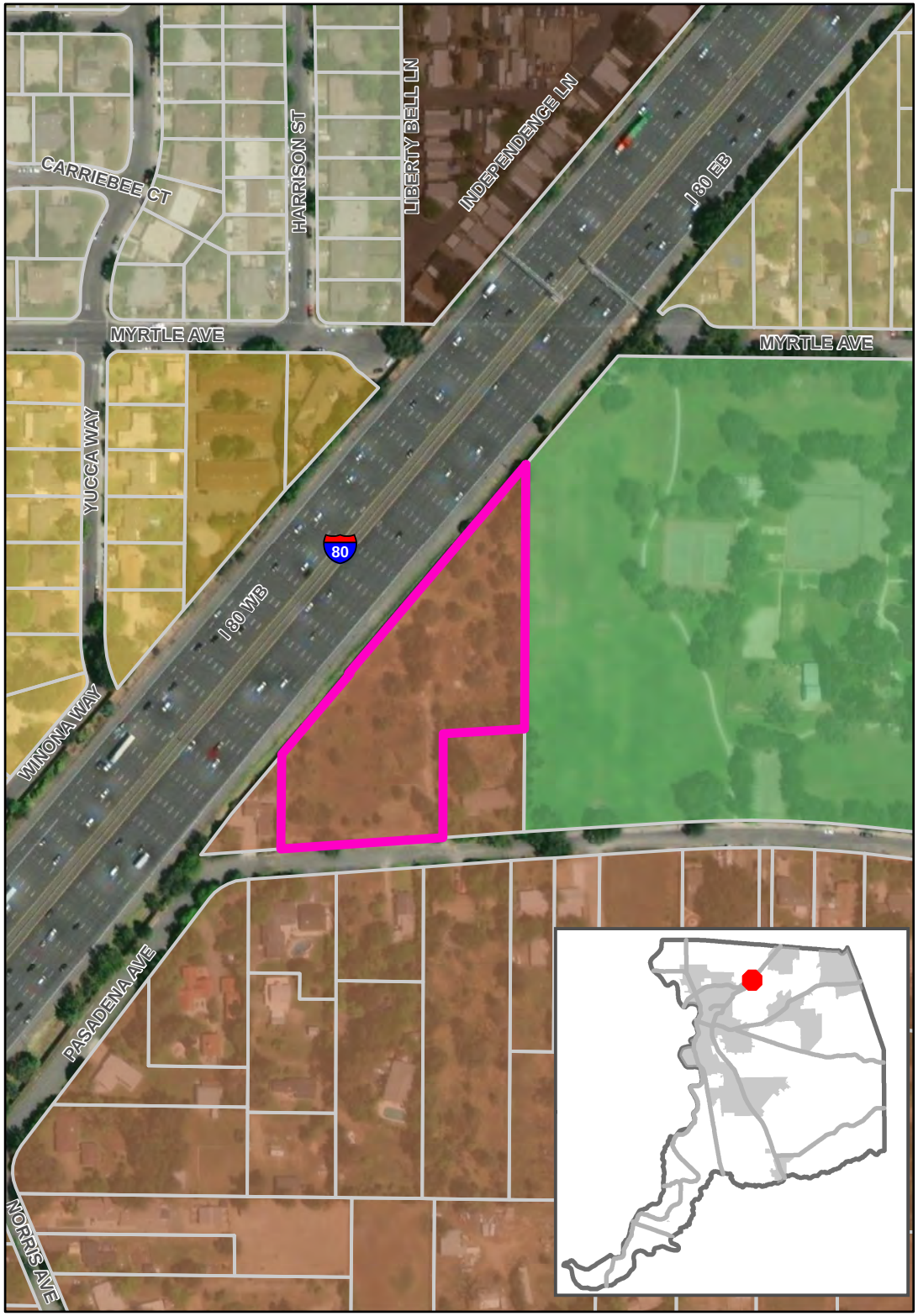
N

0 0.025 0.05 0.1 Miles

Site 11

APN 240-0050-026-0000

5108 Pasadena Avenue,
Carmichael/Old Foothill Farms



Legend

- Proposed Rezone Site

Zoning

- O Recreation
- RD-10 Residential
- RD-2 Residential
- RD-30 Multiple Family Residential
- RD-4 Residential
- RD-5 Residential
- RM-1 Mobile Home Subdivision

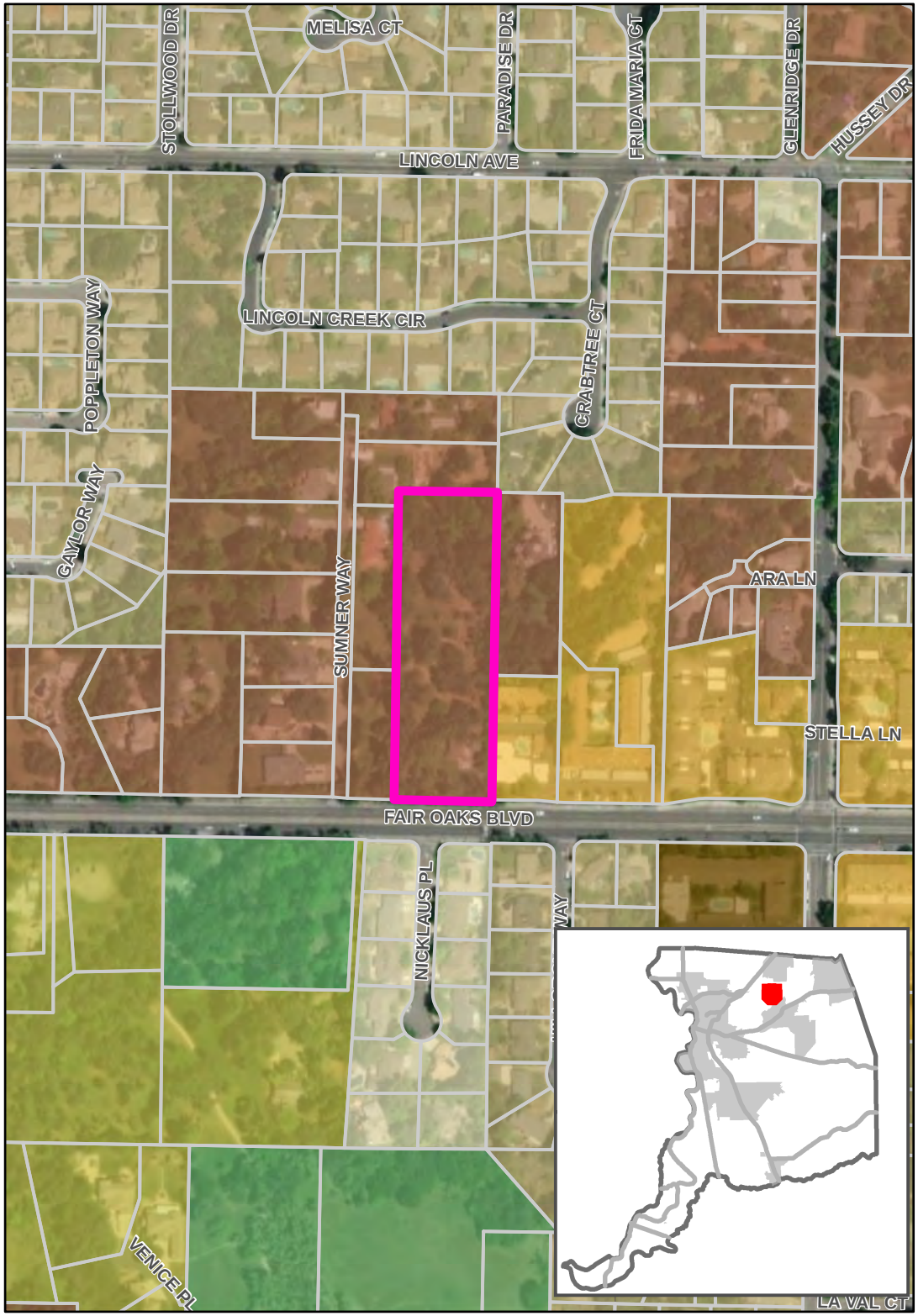
N

0 0.0375 0.075 0.15
Miles

Site 12

APN 247-0220-004-0000

8545 Fair Oaks Boulevard,
Carmichael/Old Foothill Farms



Legend

- Proposed Rezone Site

Zoning

- O Recreation
- RD-1 Residential
- RD-2 Residential
- RD-20 Multiple Family Residential
- RD-3 Residential
- RD-40 Multiple Family Residential
- RD-5 Residential

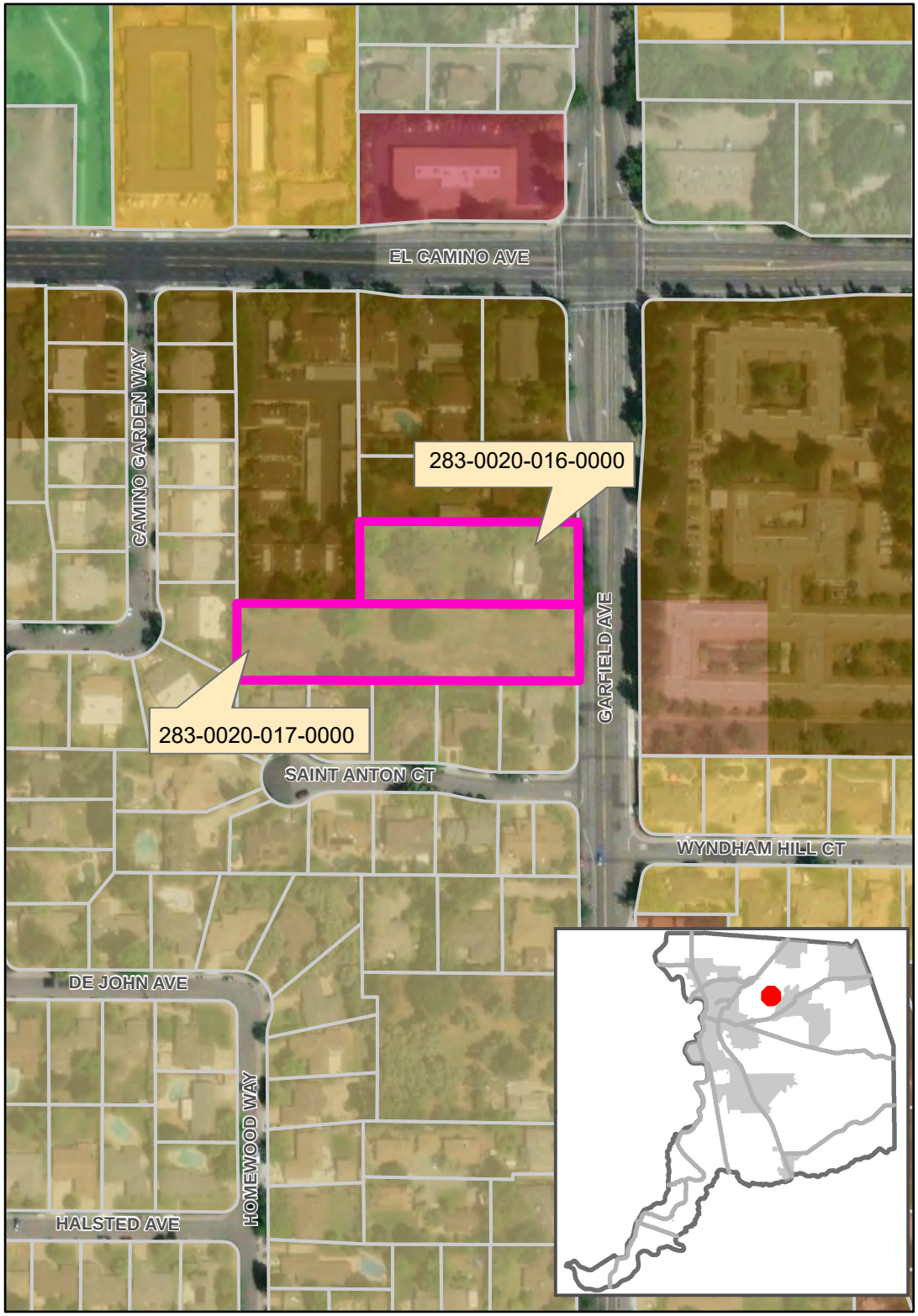
N

0 0.05 0.1 0.2 Miles

Site 13

APNs 283-0020-016-0000
& 283-0020-017-0000

2421 & 2413 Garfield Ave,
Carmichael/Old Foothill Farms



Legend

- Proposed Rezone Site

Zoning

- BP Business and Professional Office
- O Recreation
- RD-10 Residential
- RD-2 Residential
- RD-20 Multiple Family Residential
- RD-4 Residential
- RD-40 Multiple Family Residential
- RD-5 Residential

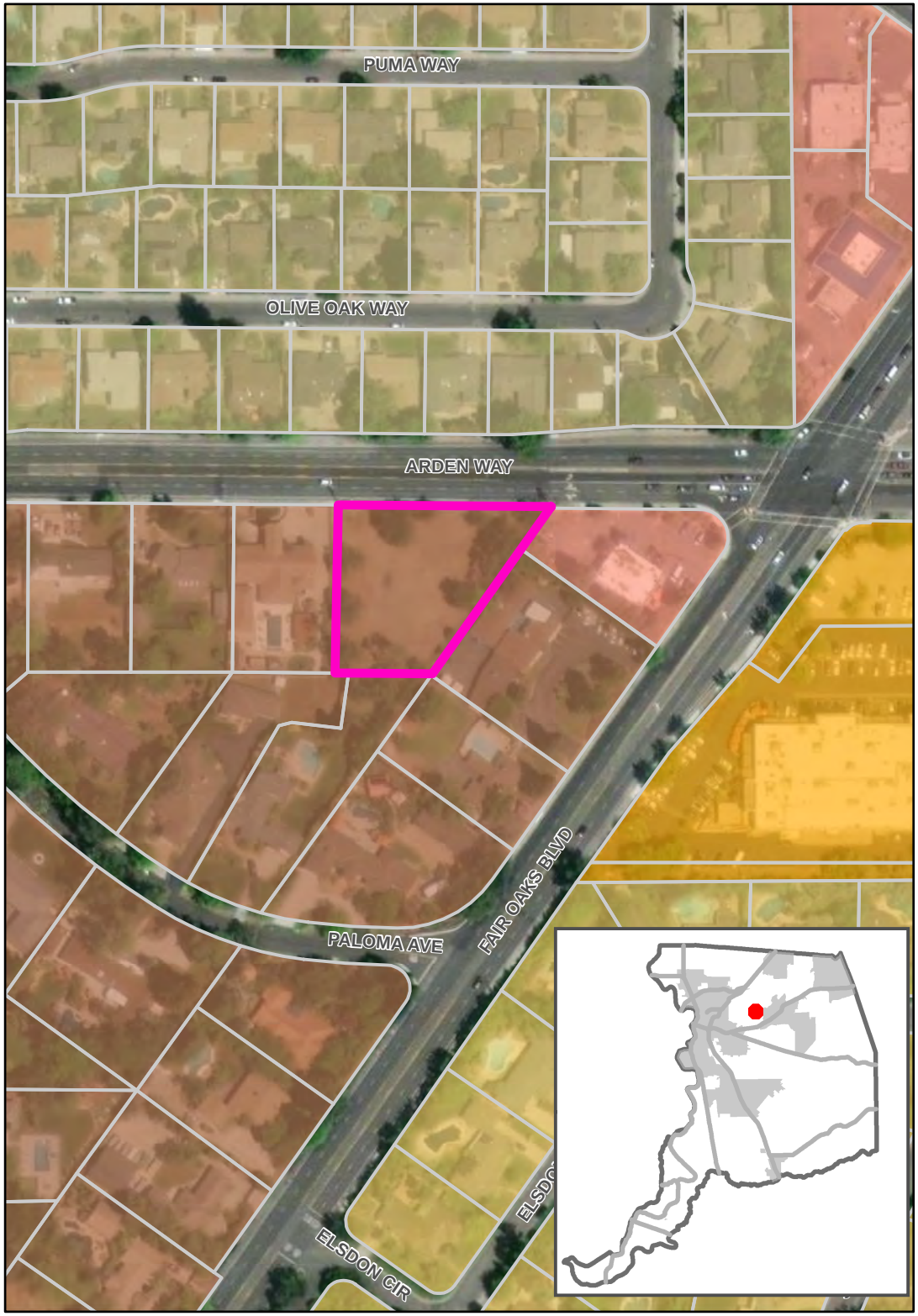
N

0 0.025 0.05 0.1 Miles

Site 14

APN 289-0042-005-0000

5020 Arden Way,
Carmichael/Old Foothill Farms



Legend

Proposed Rezone Site

Zoning

- LC Light Commercial
- RD-2 Residential
- RD-4 Residential
- RD-5 Residential
- SC Shopping Center

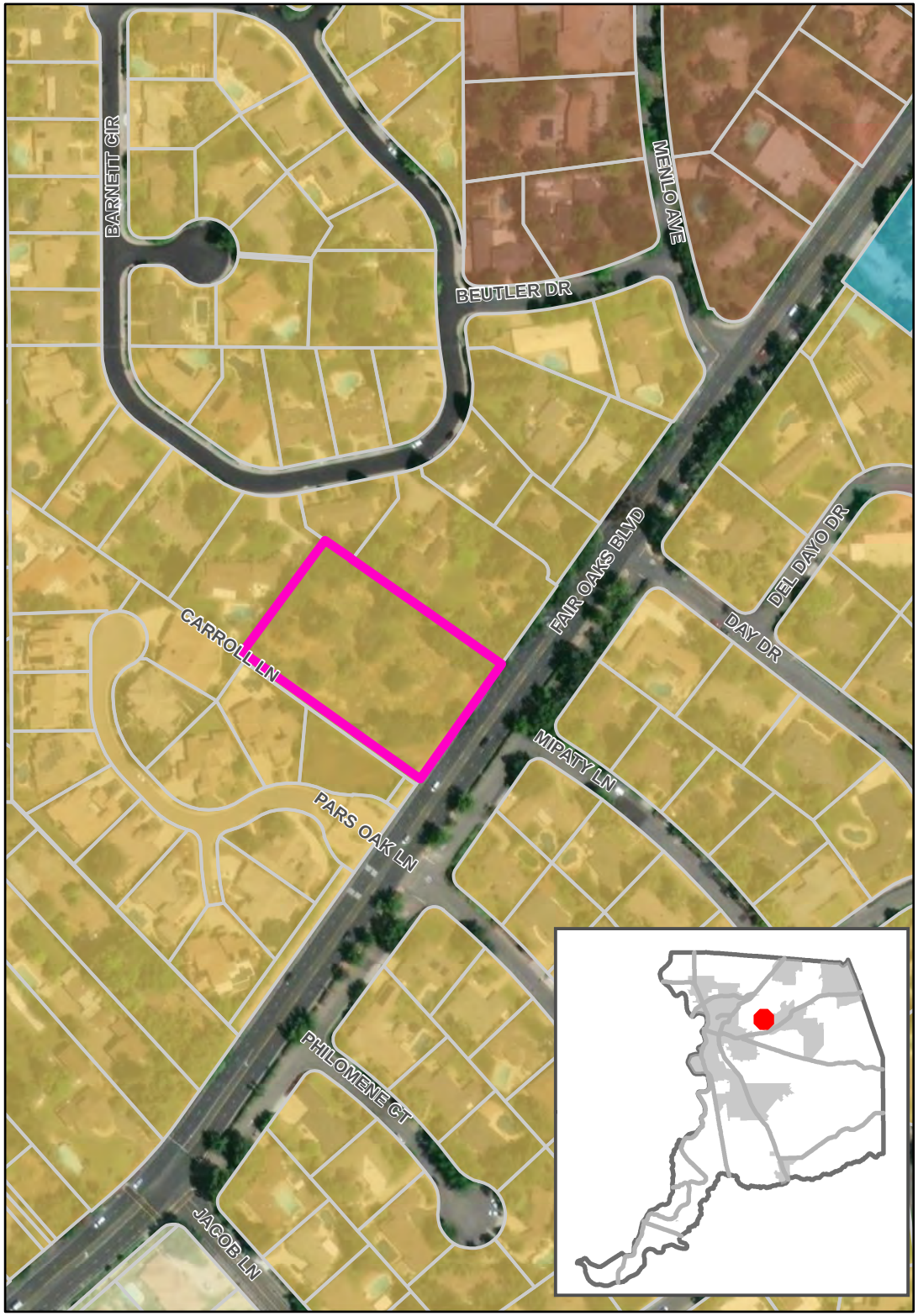
N

0 0.025 0.05 0.1 Miles

Site 15

APN 289-0600-022-0000

4845 Fair Oaks Boulevard,
Carmichael/Old Foothill Farms



Legend

Proposed Rezone Site

Zoning

- AR-1 Agricultural-Residential - 1 Acre
- RD-2 Residential
- RD-3 Residential
- RD-4 Residential

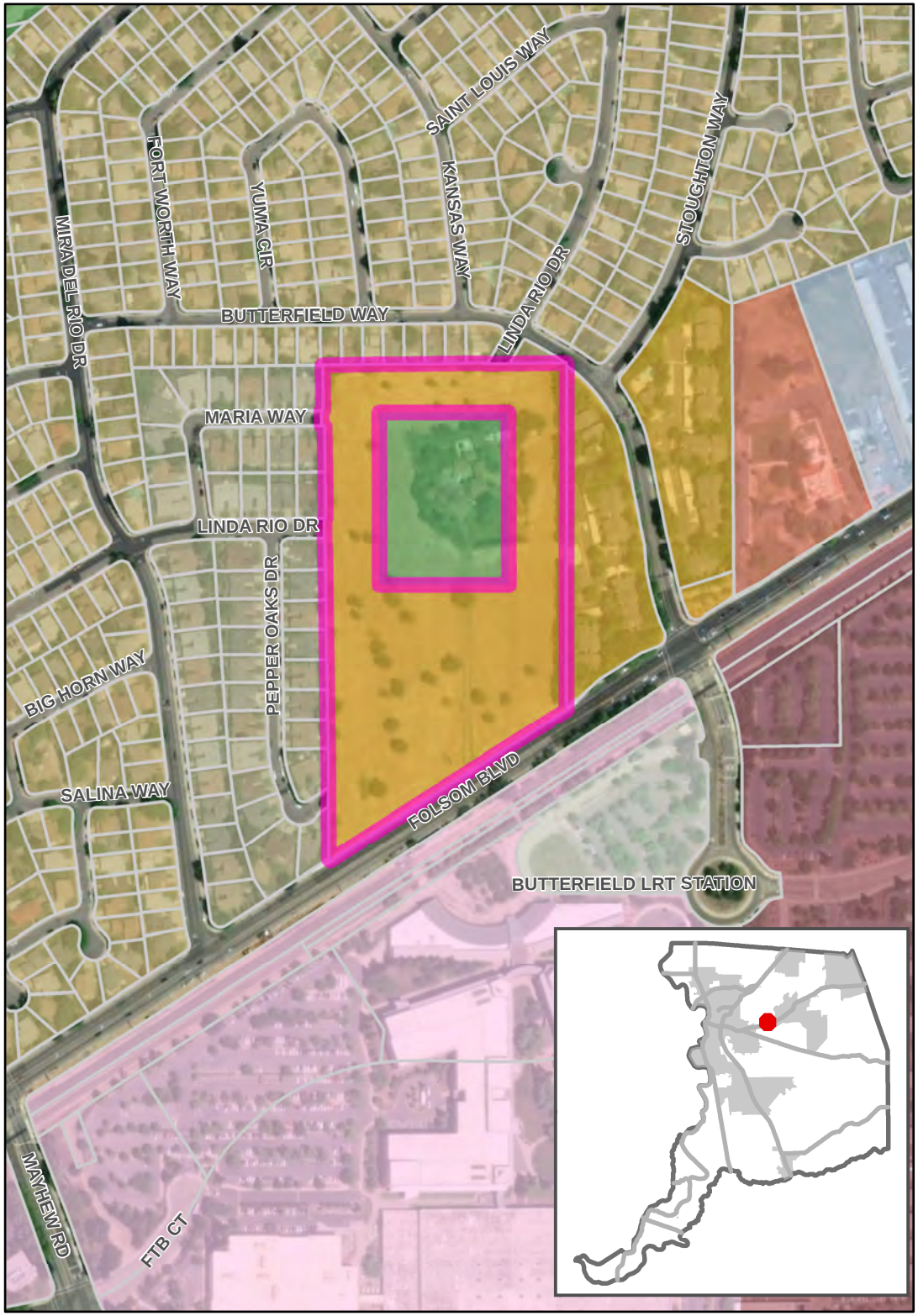
N

0 0.025 0.05 0.1 Miles

Site 16

APN 075-0020-015-0000

9425 Folsom Boulevard, Cordova



Legend

Proposed Rezone Site

Zoning

- LC Light Commercial
- M-2 Heavy Industrial
- MP Industrial - Office Park
- O Recreation
- RD-10 Residential
- RD-20 Multiple Family Residential
- RD-5 Residential
- SPA Special Planning Area
- TC Highway Travel Commercial

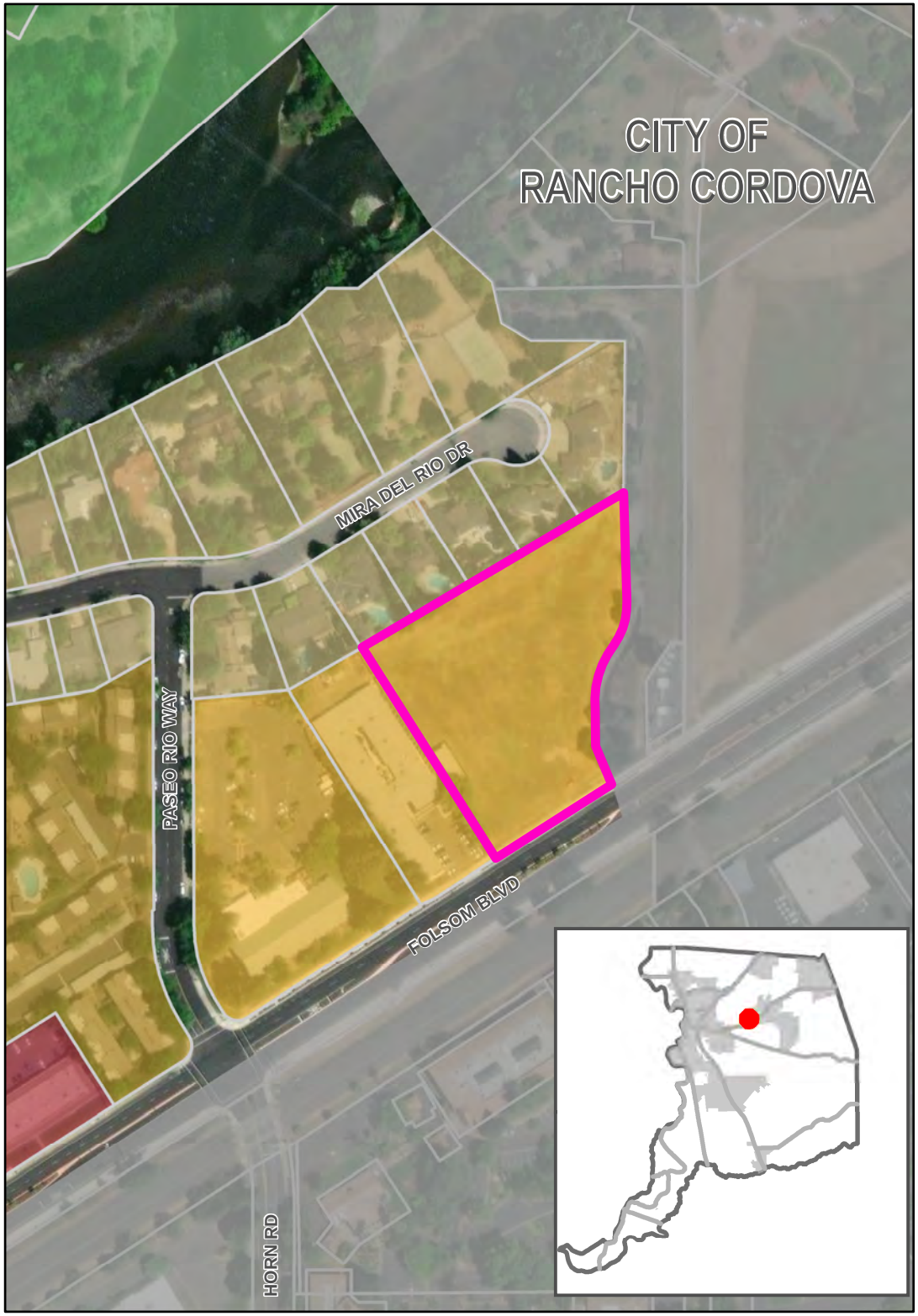
N

0 0.05 0.1 0.2 Miles

Site 17

APN 075-0440-024-0000

450 feet Northeast of Folsom Boulevard/Paseo Rio Way, Cordova



Legend

Proposed Rezone Site

Zoning

- BP Business and Professional Office
- O Recreation
- RD-20 Multiple Family Residential
- RD-30 Multiple Family Residential
- RD-5 Residential

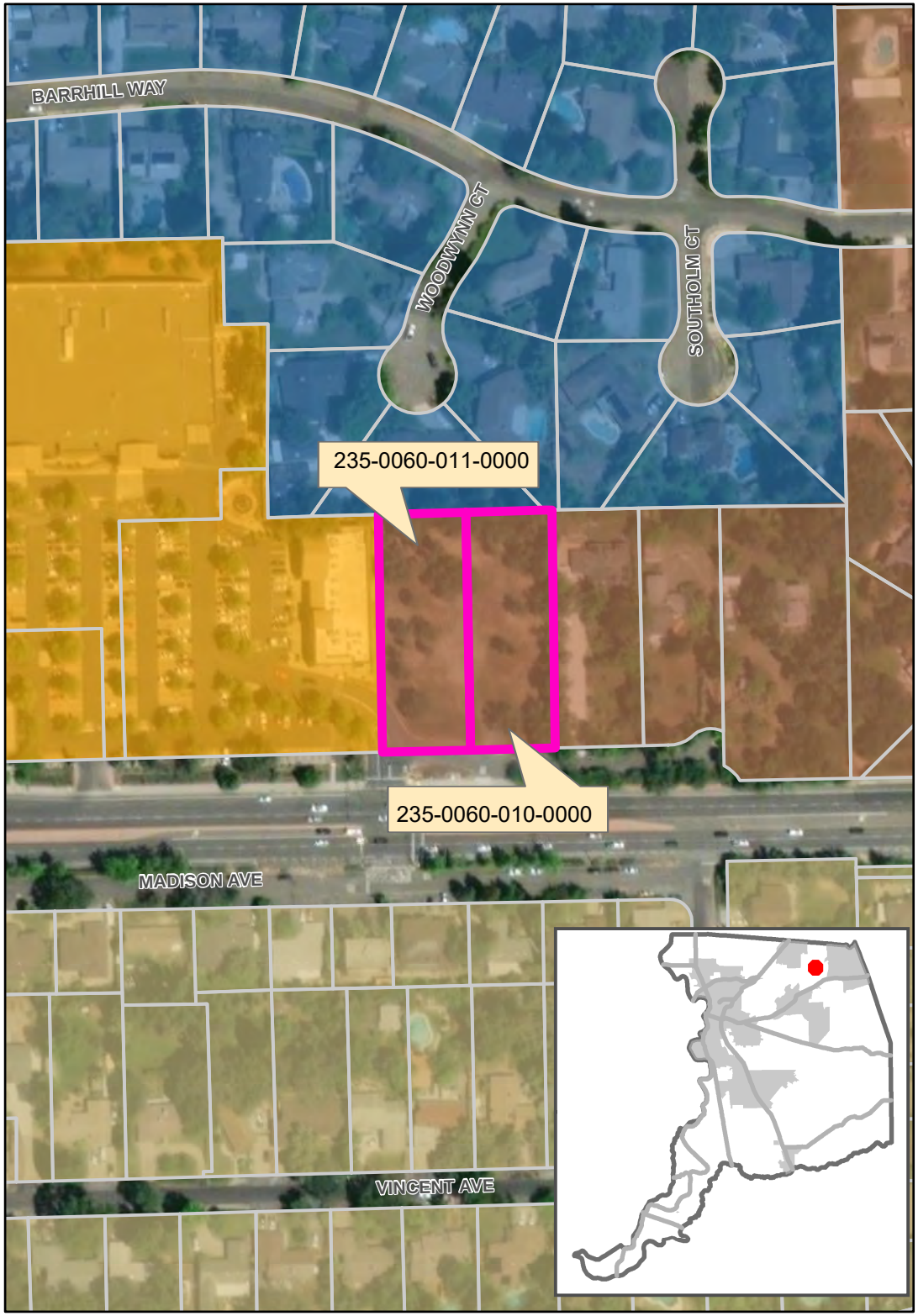
N

0 0.025 0.05 0.1 Miles

Site 18

APNs 235-0060-010-0000
& 235-0060-011-0000

8933 & 8937 Madison Avenue,
Fair Oaks



Legend

Proposed Rezone Site

Zoning

- A-1-A Limited Agricultural
- RD-2 Residential
- RD-5 Residential
- SC Shopping Center

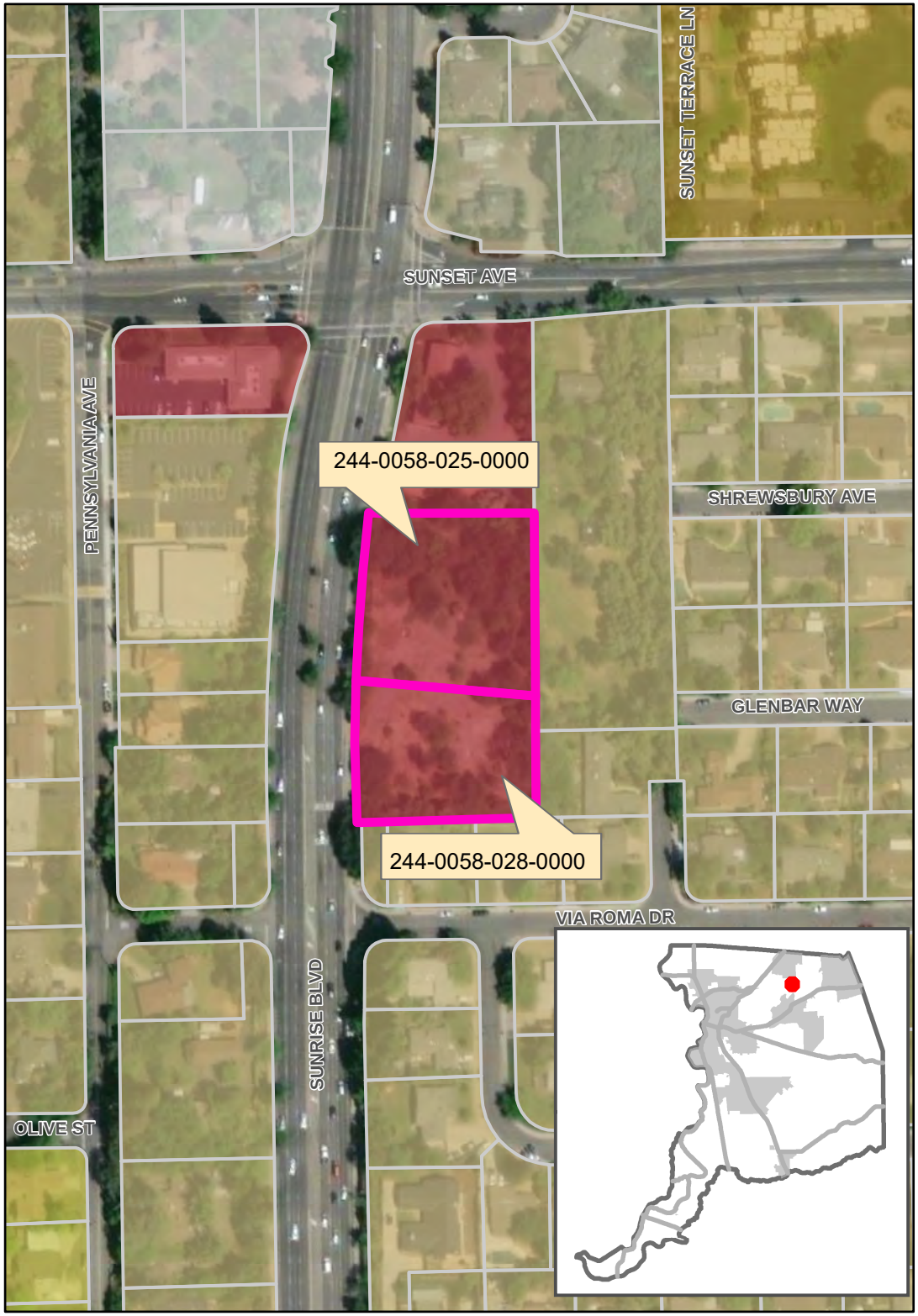
N

0 0.025 0.05 0.1
Miles

Site 19

APNs 244-0058-025-0000 &
244-0058-028-0000

4746 & 4742 Sunrise Boulevard,
Fair Oaks



Legend

Proposed Rezone Site

Zoning

- BP Business and Professional Office
- RD-1 Residential
- RD-10 Residential
- RD-30 Multiple Family Residential
- RD-5 Residential
- SPA Special Planning Area

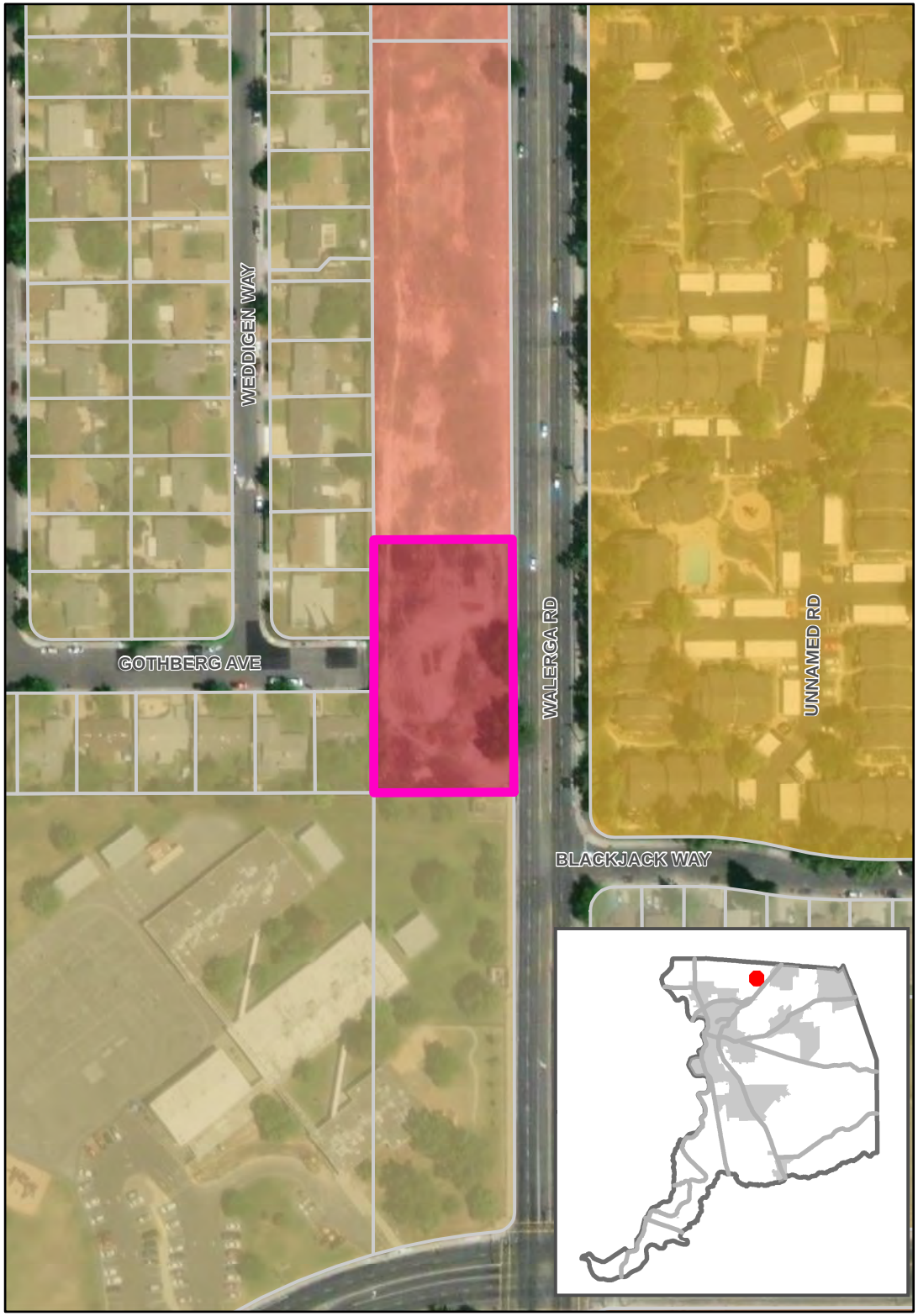
N

0 0.025 0.05 0.1
Miles

Site 20

APN 219-0032-004-0000

Northwest Walerga Road/Blackjack Way,
North Highlands



Legend

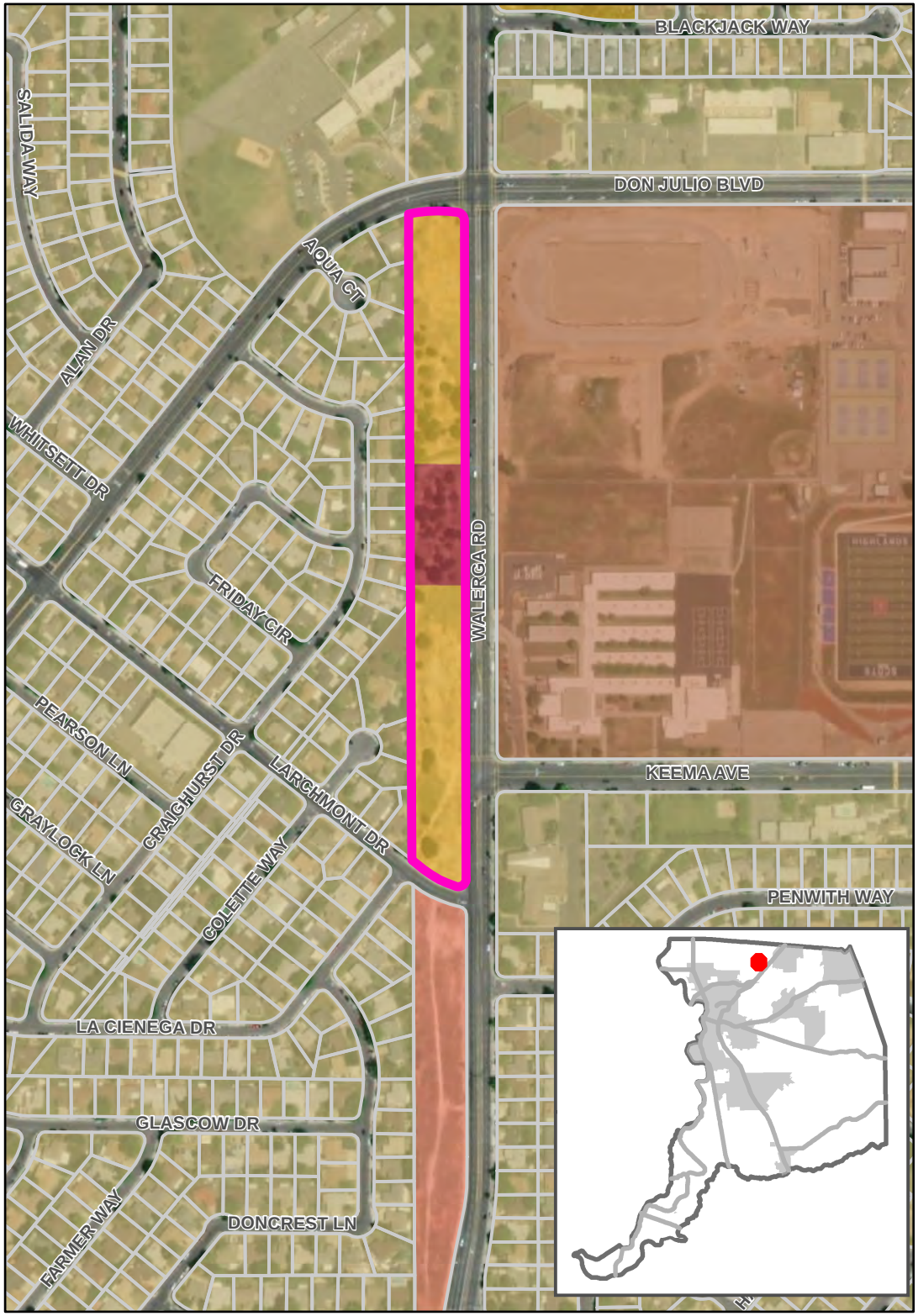
Proposed Rezone Site

Zoning

- BP Business and Professional Office
- LC Light Commercial
- RD-10 Residential
- RD-2 Residential
- RD-20 Multiple Family Residential
- RD-5 Residential

N

0 0.025 0.05 0.1
Miles



Site 21

APN 219-0033-001-0000

Southwest Walerga Road/Don Julio Boulevard, North Highlands

Legend

Proposed Rezone Site

Zoning

- BP Business and Professional Office
- LC Light Commercial
- RD-10 Residential
- RD-2 Residential
- RD-20 Multiple Family Residential
- RD-5 Residential

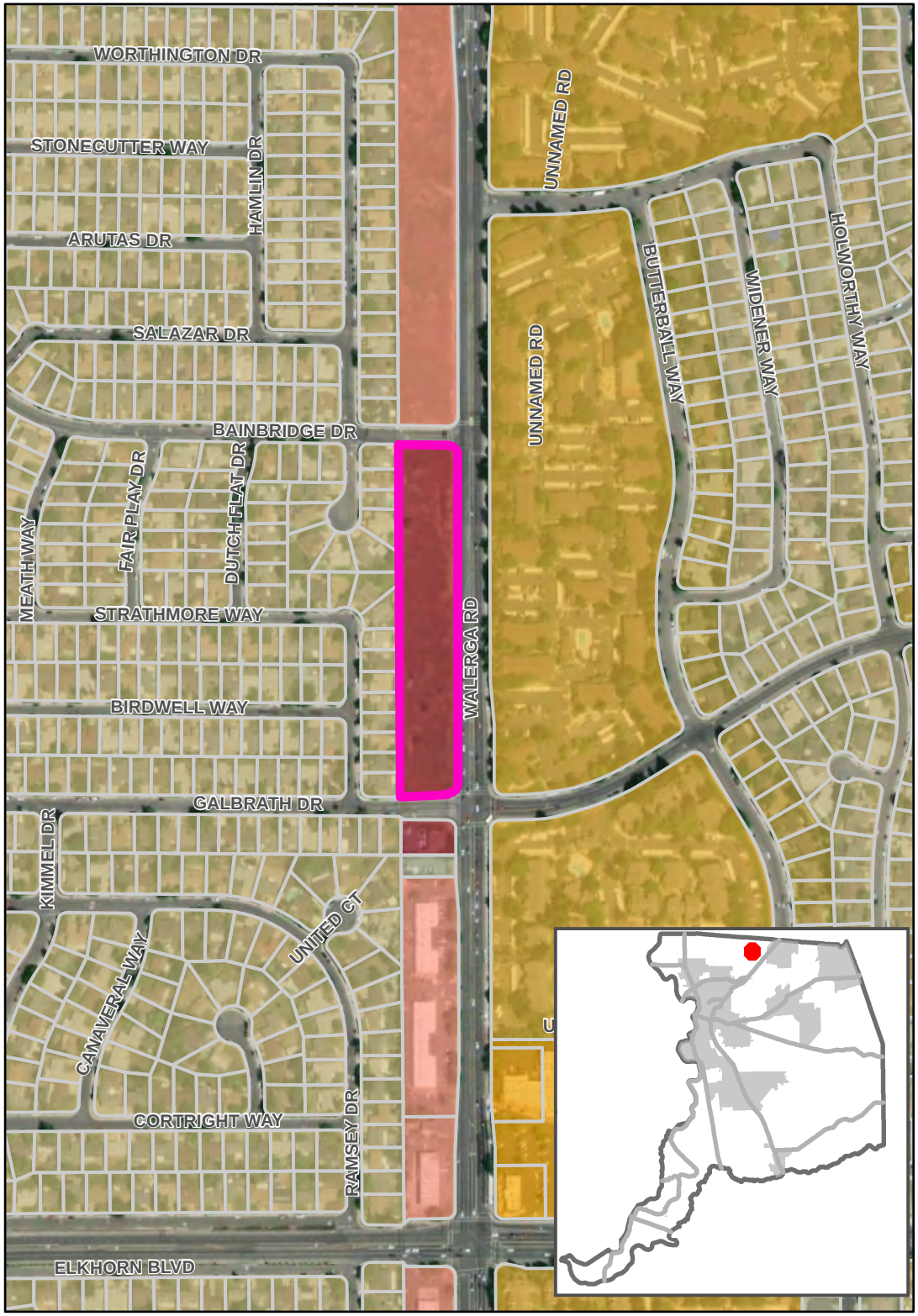
N

0 0.05 0.1 0.2 Miles

Site 22

APN 219-0042-019-0000

NW Walerga Road/Galbraith Drive,
North Highlands



Legend

Proposed Rezone Site

Zoning

- BP Business and Professional Office
- LC Light Commercial
- RD-10 Residential
- RD-20 Multiple Family Residential
- RD-5 Residential
- RD-7 Residential
- SC Shopping Center

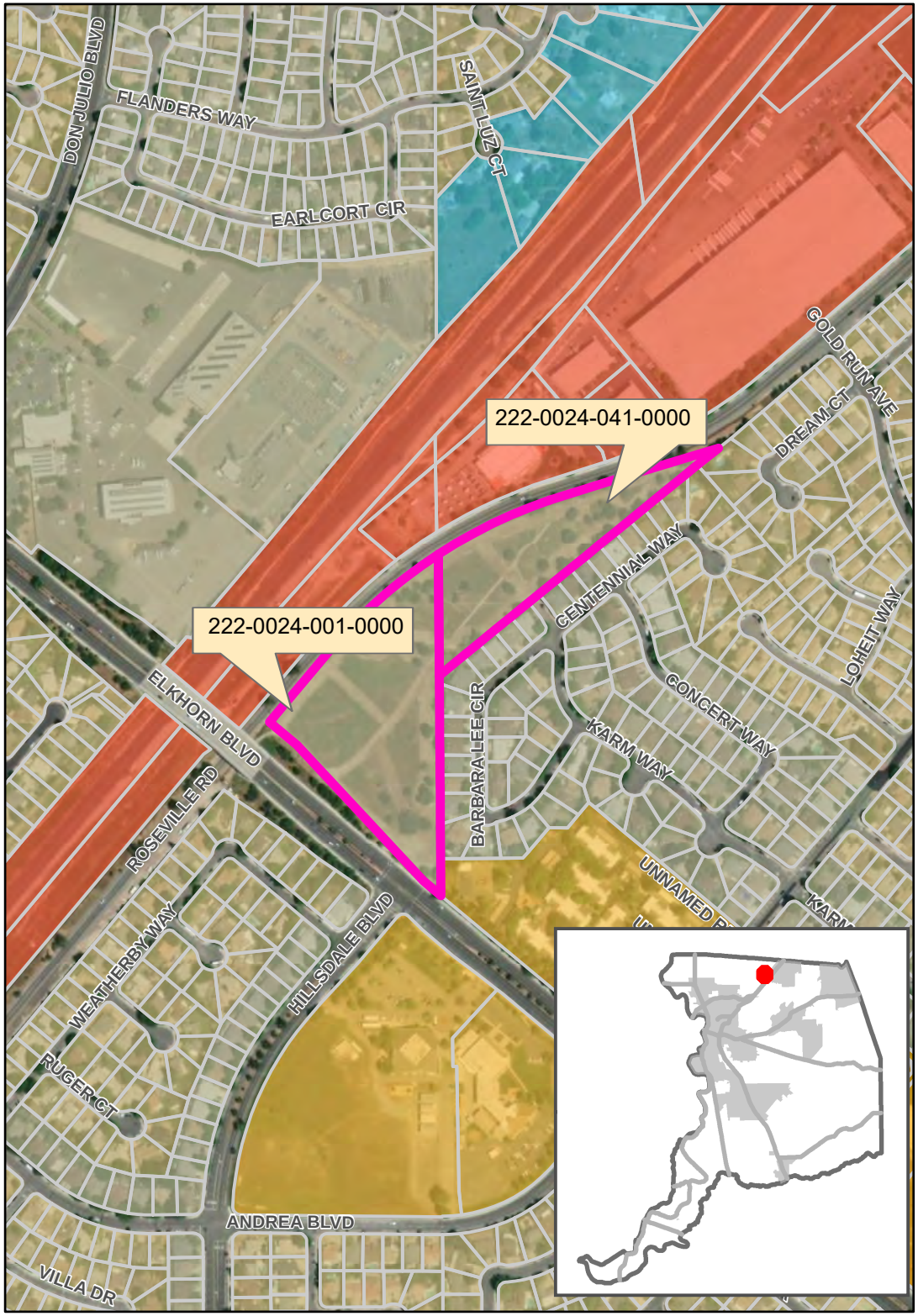
N

0 0.05 0.1 0.2 Miles

Site 23

APNs 222-0024-001-0000
& 222-0024-041-0000

East Roseville Road/
Elkhorn Boulevard Overpass,
North Highlands



Legend

- Proposed Rezone Site

Zoning

- AR-1 Agricultural-Residential - 1 Acre
- M-1 Light Industrial
- RD-10 Residential
- RD-20 Multiple Family Residential
- RD-5 Residential
- SC Shopping Center

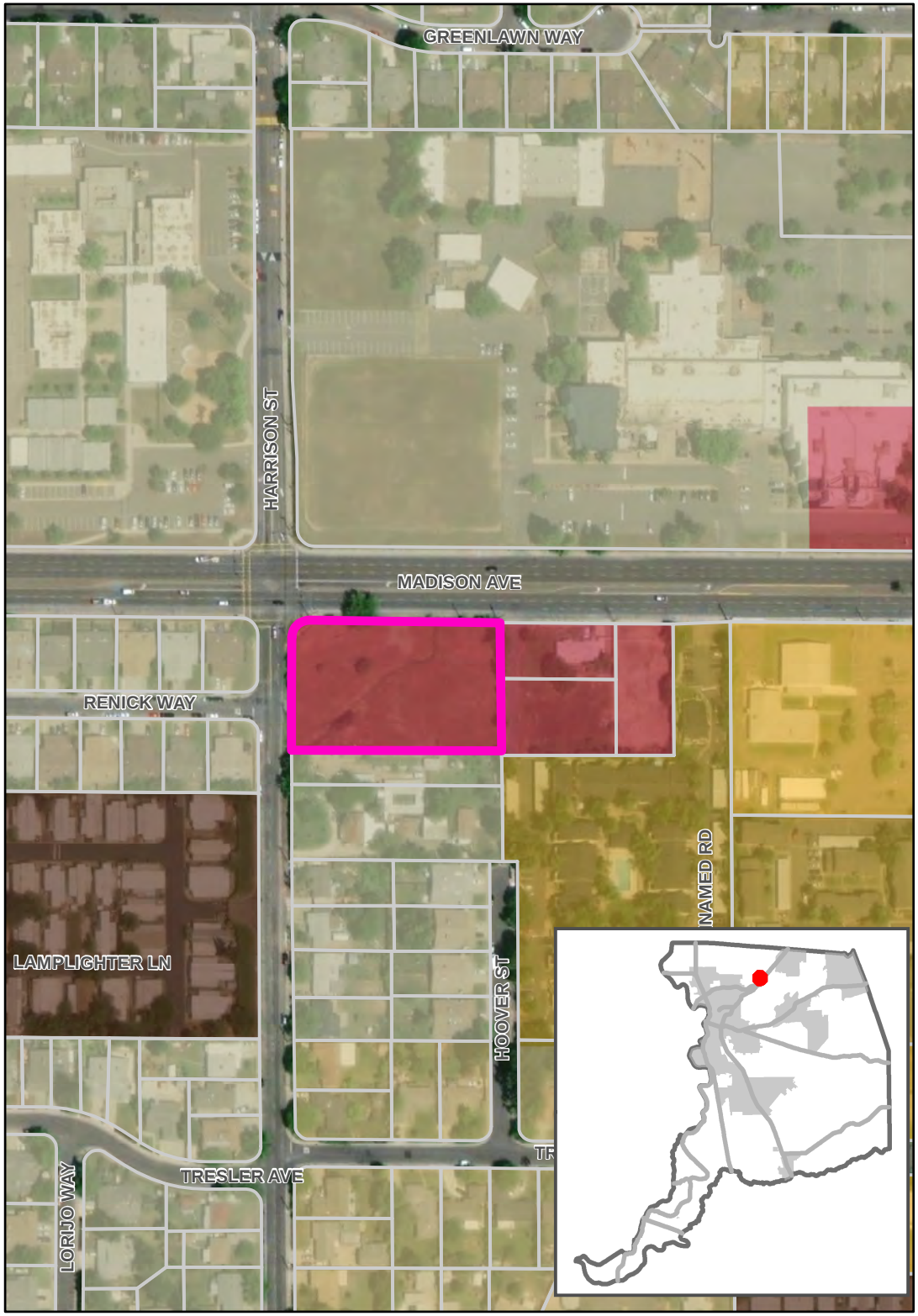
N

0 0.05 0.1 0.2 Miles

Site 24

APN 228-0182-005-0000

5140 Harrison Street,
North Highlands



Legend

Proposed Rezone Site

Zoning

- BP Business and Professional Office
- RD-10 Residential
- RD-20 Multiple Family Residential
- RD-30 Multiple Family Residential
- RD-5 Residential
- RM-1 Mobile Home Subdivision

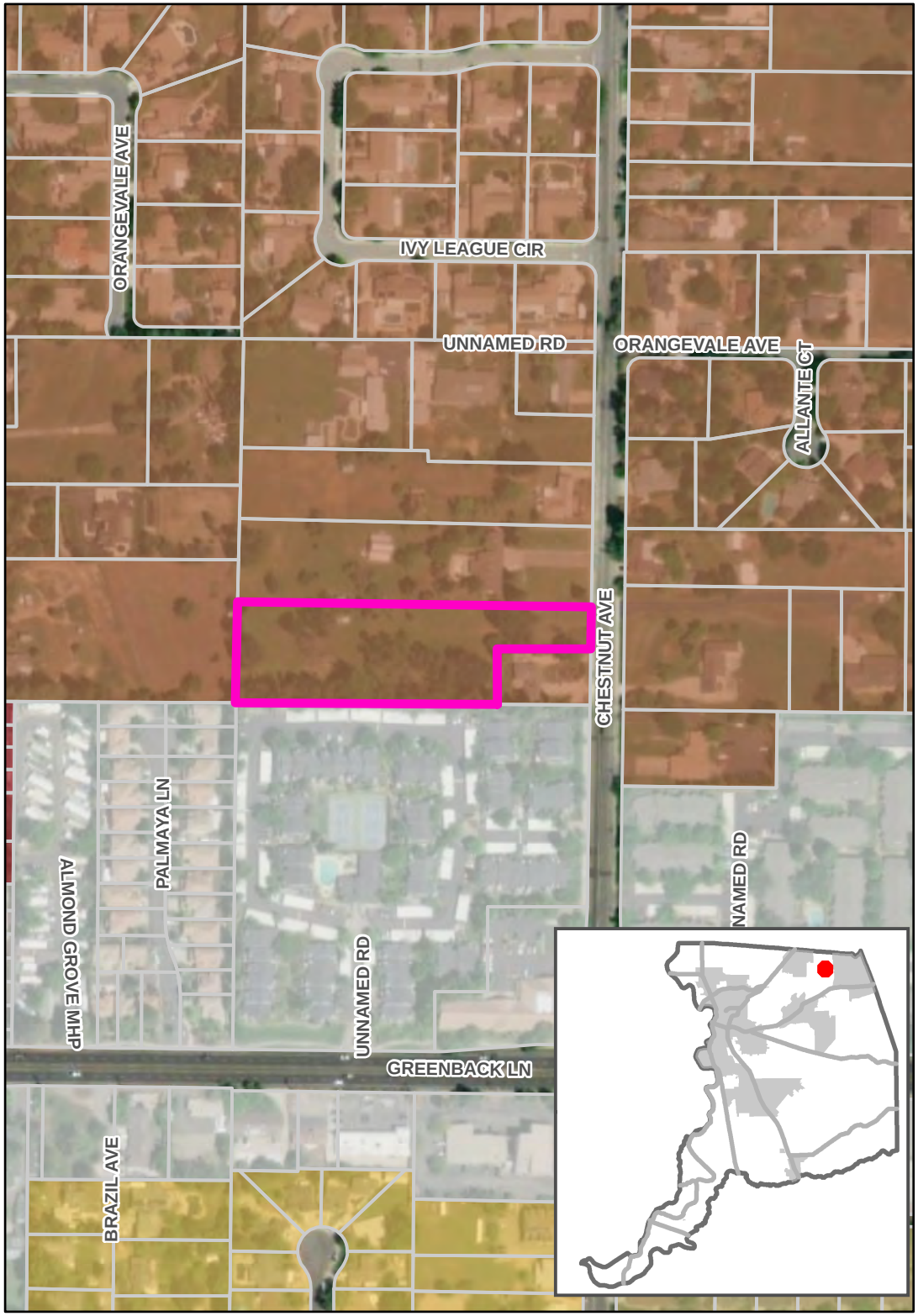
N

0 0.025 0.05 0.1 Miles

Site 25

APN 223-0092-028-0000

6321 Chestnut Avenue, Orangevale



Legend

- Proposed Rezone Site

Zoning

- BP Business and Professional Office
- RD-2 Residential
- RD-4 Residential
- RD-5 Residential
- SPA Special Planning Area

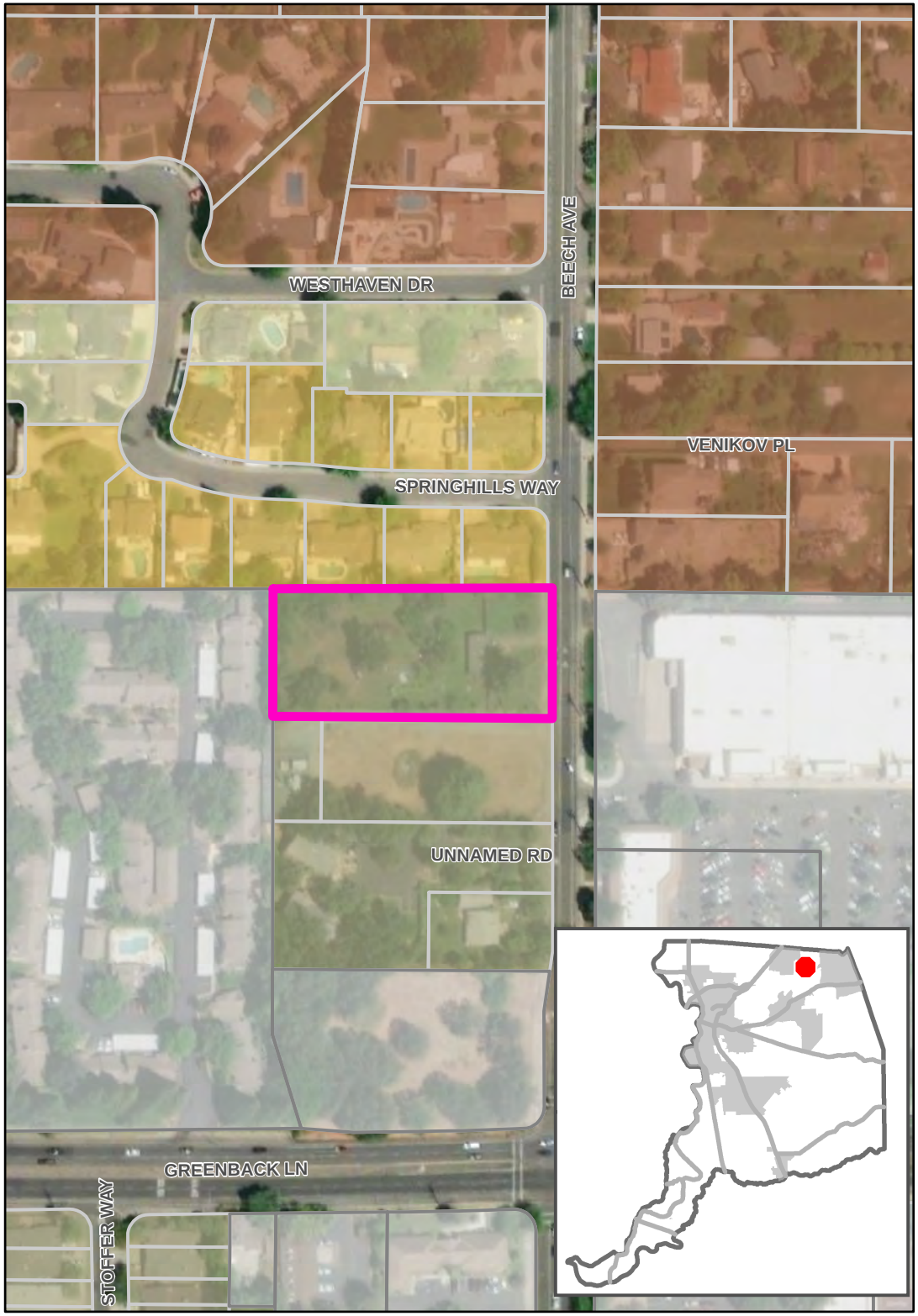
N

0 0.05 0.1 0.2 Miles

Site 26

APN 261-0210-013-0000

6245 Beech Avenue,
Orangevale



Legend

- Proposed Rezone Site

Zoning

- RD-2 Residential
- RD-3 Residential
- RD-4 Residential
- RD-5 Residential
- SPA Special Planning Area

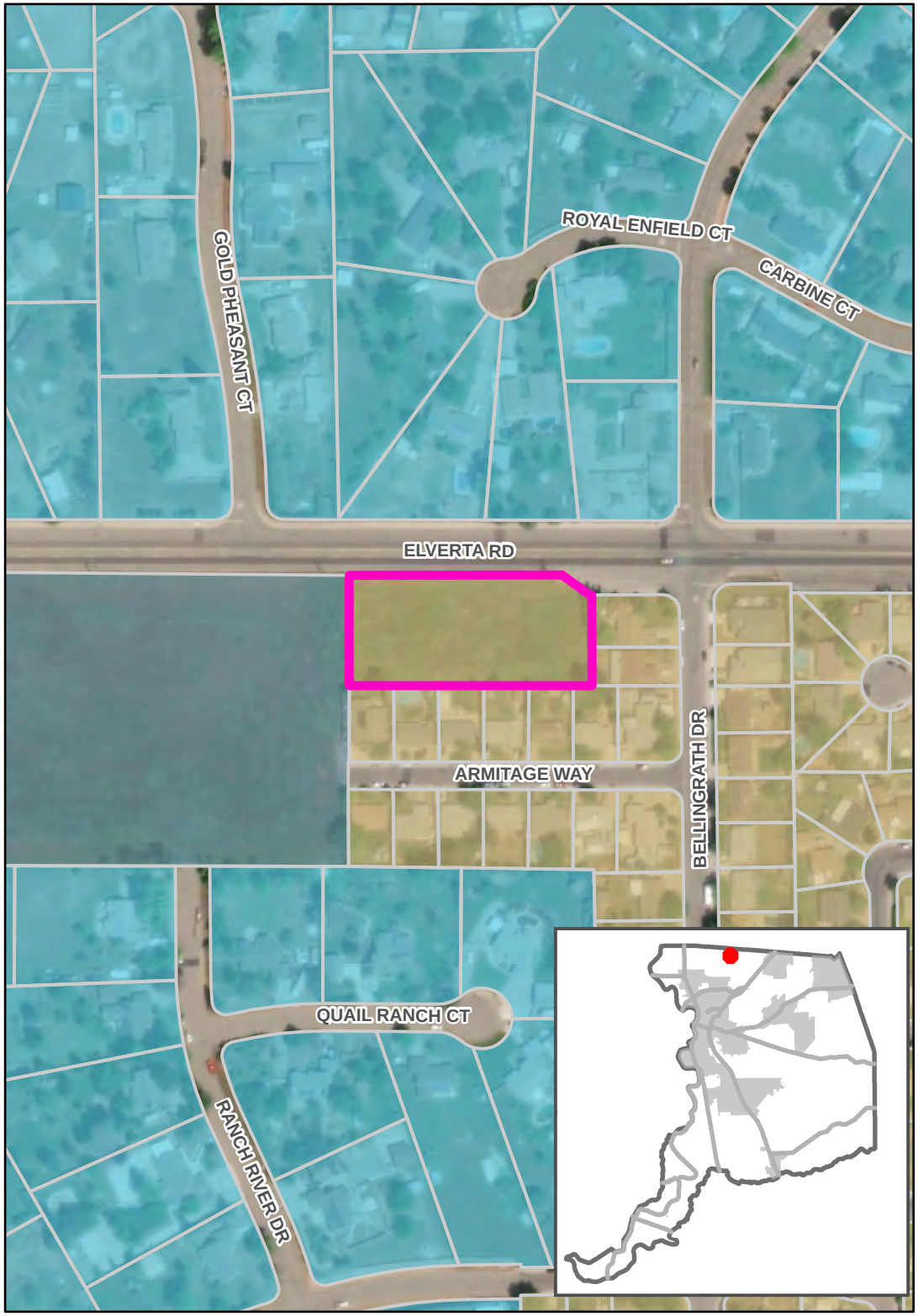
N

0 0.025 0.05 0.1 Miles

Site 27

APN 203-0080-021-0000

120 Feet West of Elverta Road/Bellingrath Drive, Rio Linda/Elverta



Legend

Proposed Rezone Site

Zoning

- AR-1 Agricultural-Residential - 1 Acre
- AR-5 Agricultural-Residential - 5 Acres
- RD-5 Residential

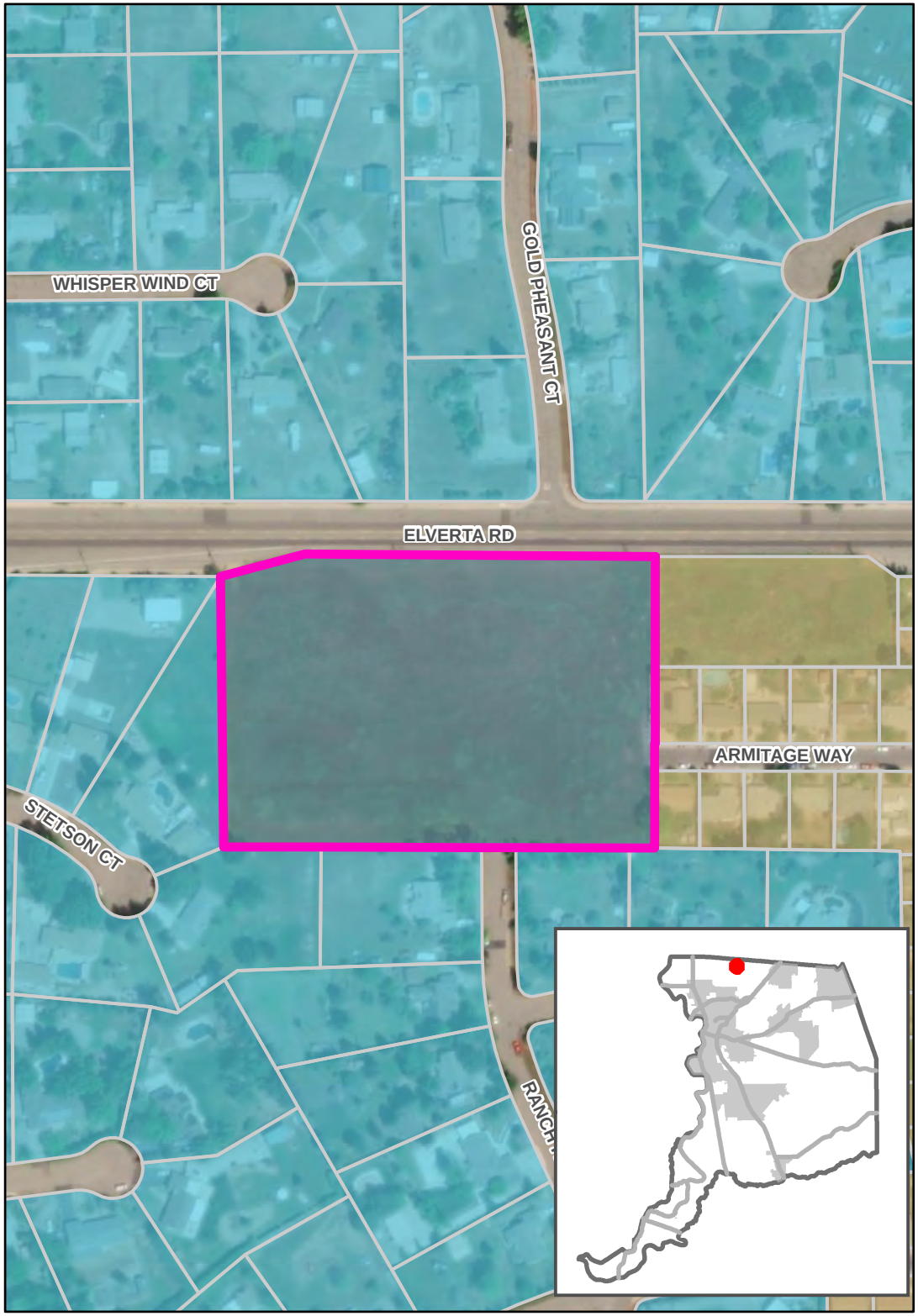
N

0 0.025 0.05 0.1 Miles

Site 28

APN 203-0080-027-0000

480 Feet West of Elverta Road/Bellingrath Drive,
Rio Linda/Elverta



Legend

Proposed Rezone Site

Zoning

AR-1 Agricultural-Residential - 1 Acre

AR-5 Agricultural-Residential - 5 Acres

RD-5 Residential

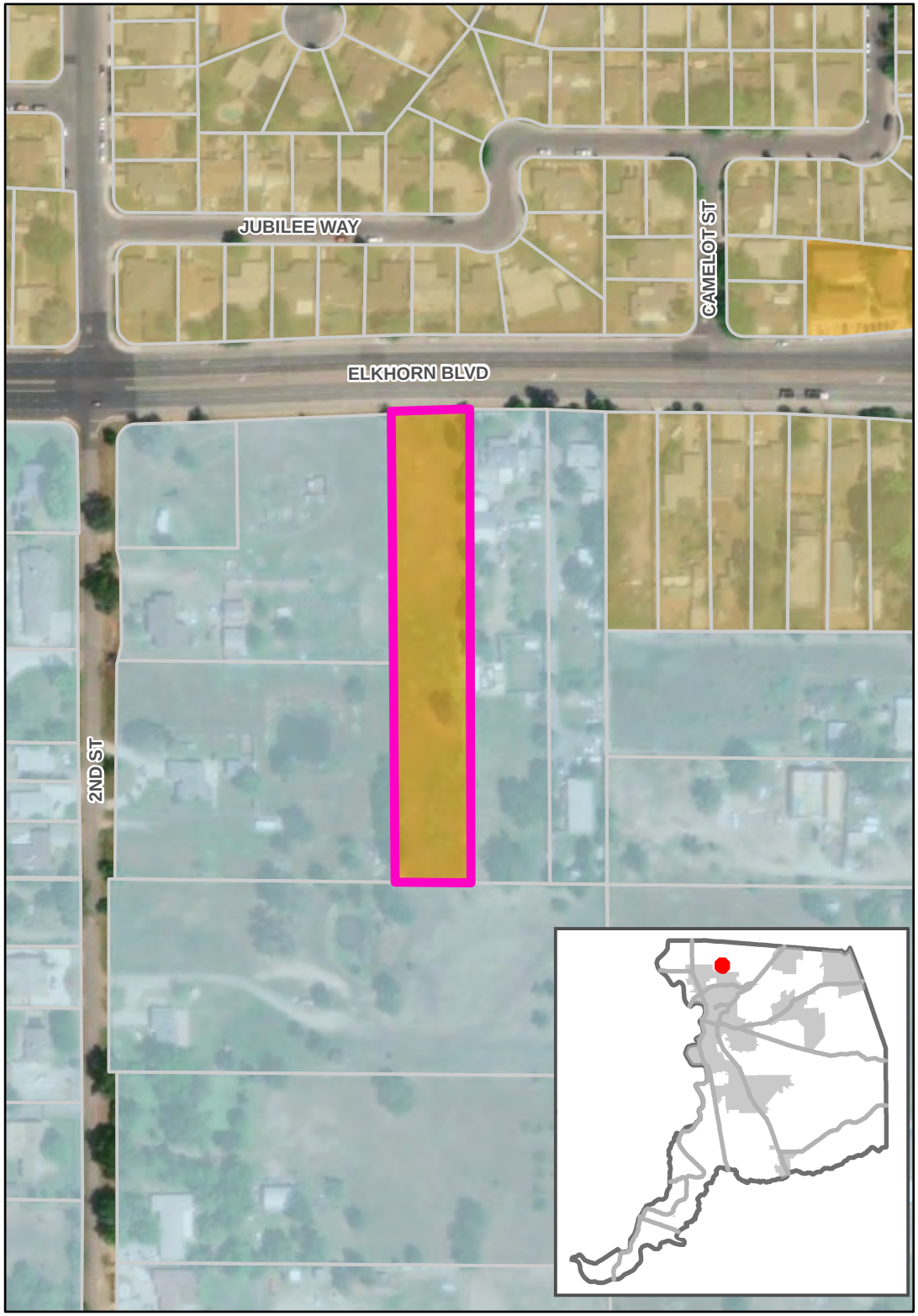
N

0 0.0375 0.075 0.15 Miles

Site 29

APN 214-0092-019-0000

232 Elkhorn Boulevard,
Rio Linda/Elverta



Legend

Proposed Rezone Site

Zoning

AR-2 Agricultural-Residential - 2 Acres

RD-20 Multiple Family Residential

RD-5 Residential

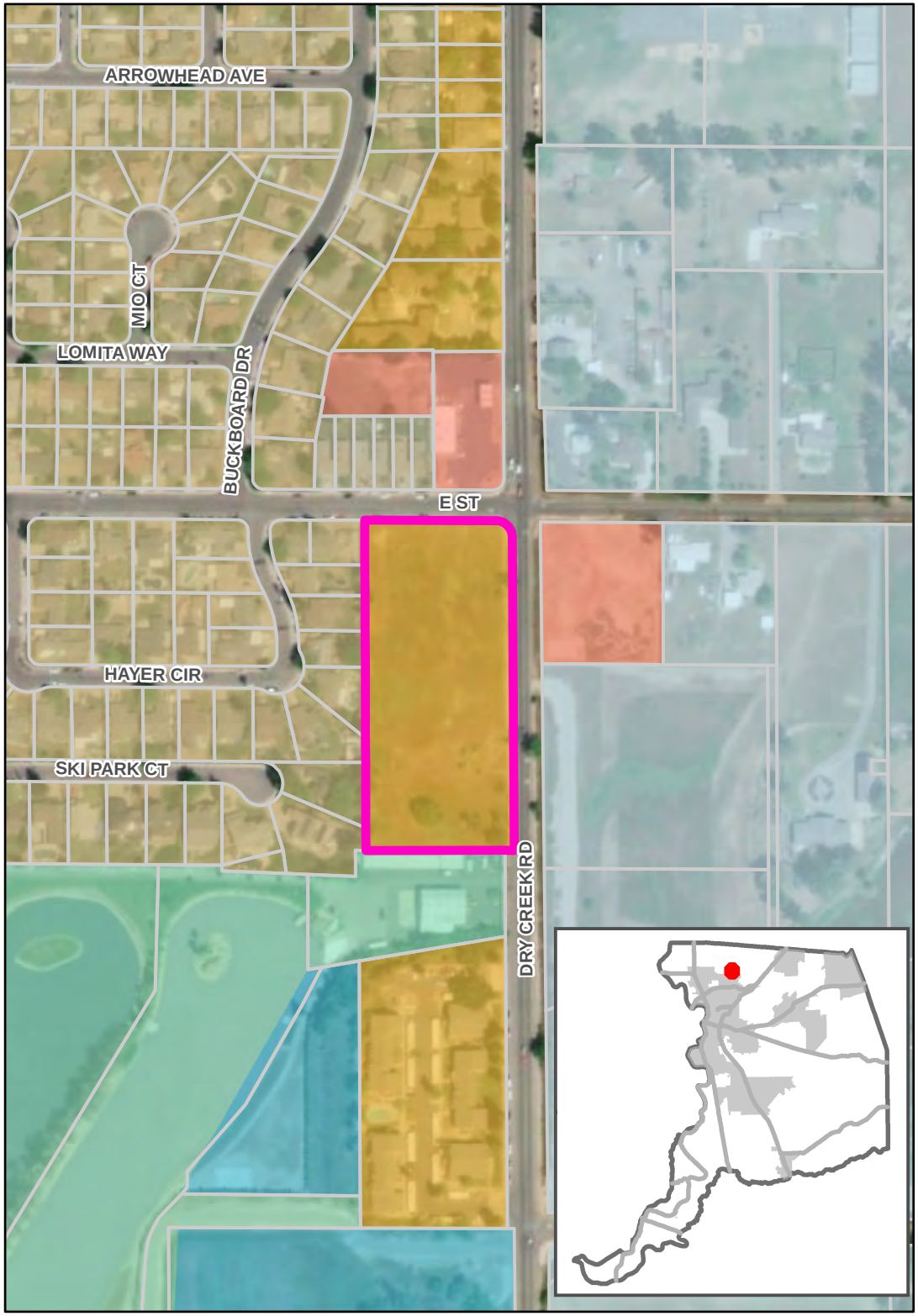
N

0 0.025 0.05 0.1 Miles

Site 30

APN 214-0160-061-0000

5919 Dry Creek Road,
Rio Linda/Elverta



Legend

- Proposed Rezone Site

Zoning

- AR-1 Agricultural-Residential - 1 Acre
- AR-2 Agricultural-Residential - 2 Acre
- C-O Commercial Recreation
- LC Light Commercial
- RD-10 Residential
- RD-20 Multiple Family Residential
- RD-5 Residential

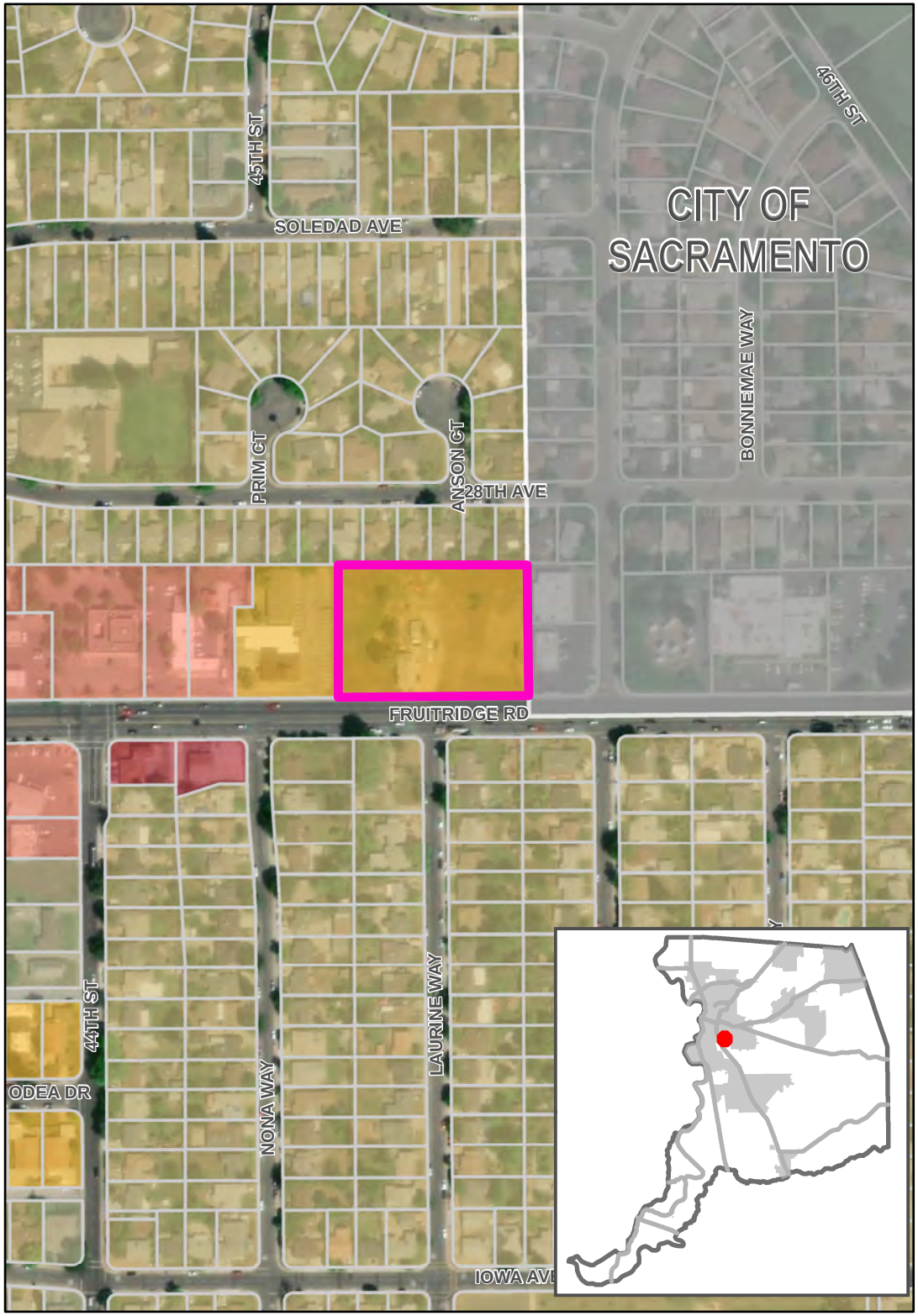
N

0 0.05 0.1 0.2 Miles

Site 31

APN 022-0252-018-0000

4541 Fruitridge Road,
South Sacramento



Legend

- Proposed Rezone Site

Zoning

- BP Business and Professional Office
- LC Light Commercial
- RD-10 Residential
- RD-20 Multiple Family Residential
- RD-5 Residential

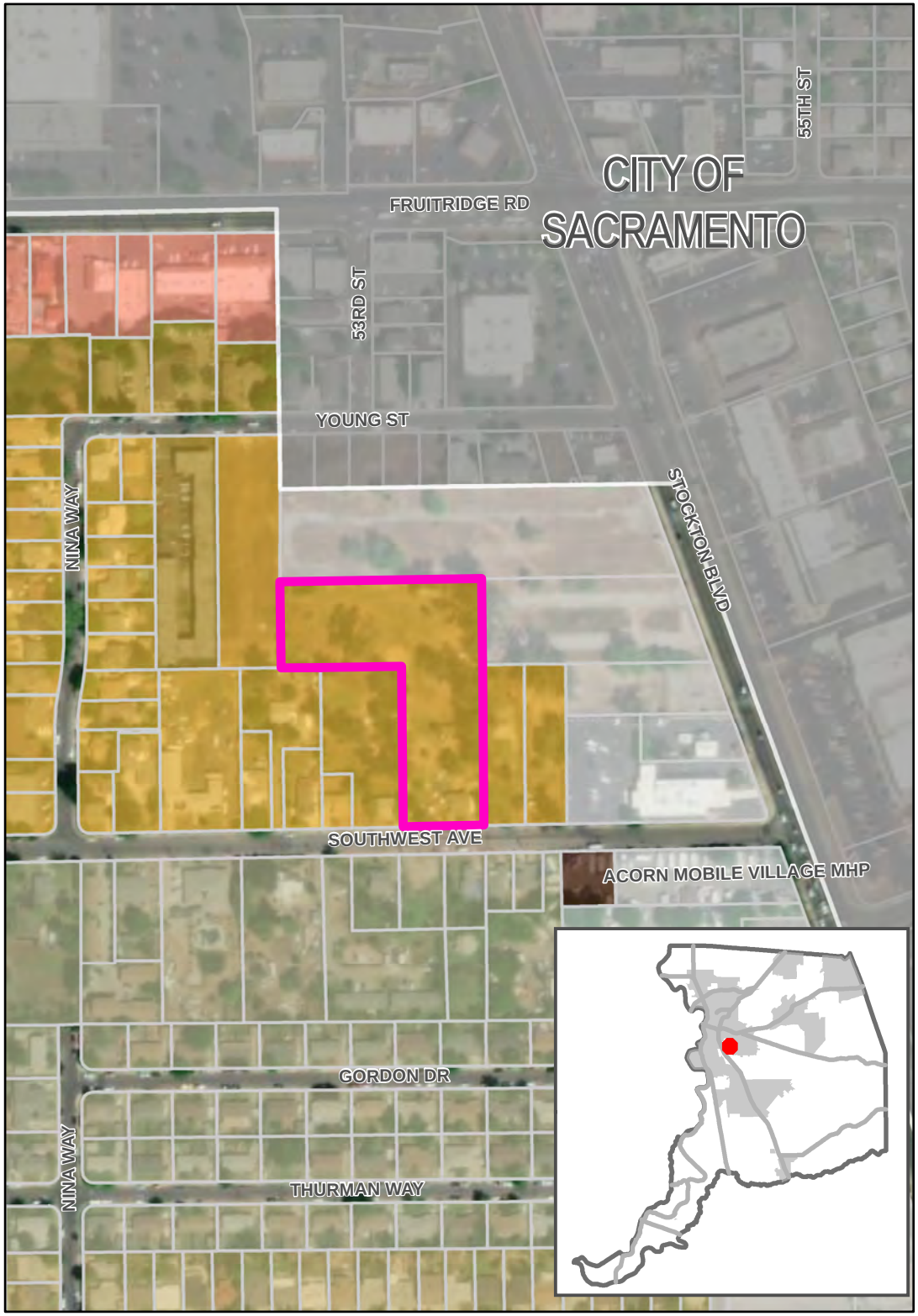
N

0 0.0375 0.075 0.15 Miles

Site 32

APN 026-0102-023-0000

5903 Southwest Avenue,
South Sacramento



Legend

Proposed Rezone Site

Zoning

- LC Light Commercial
- RD-10 Residential
- RD-20 Multiple Family Residential
- RD-30 Multiple Family Residential
- RD-5 Residential
- RM-1 Mobile Home Subdivision
- SPA Special Planning Area

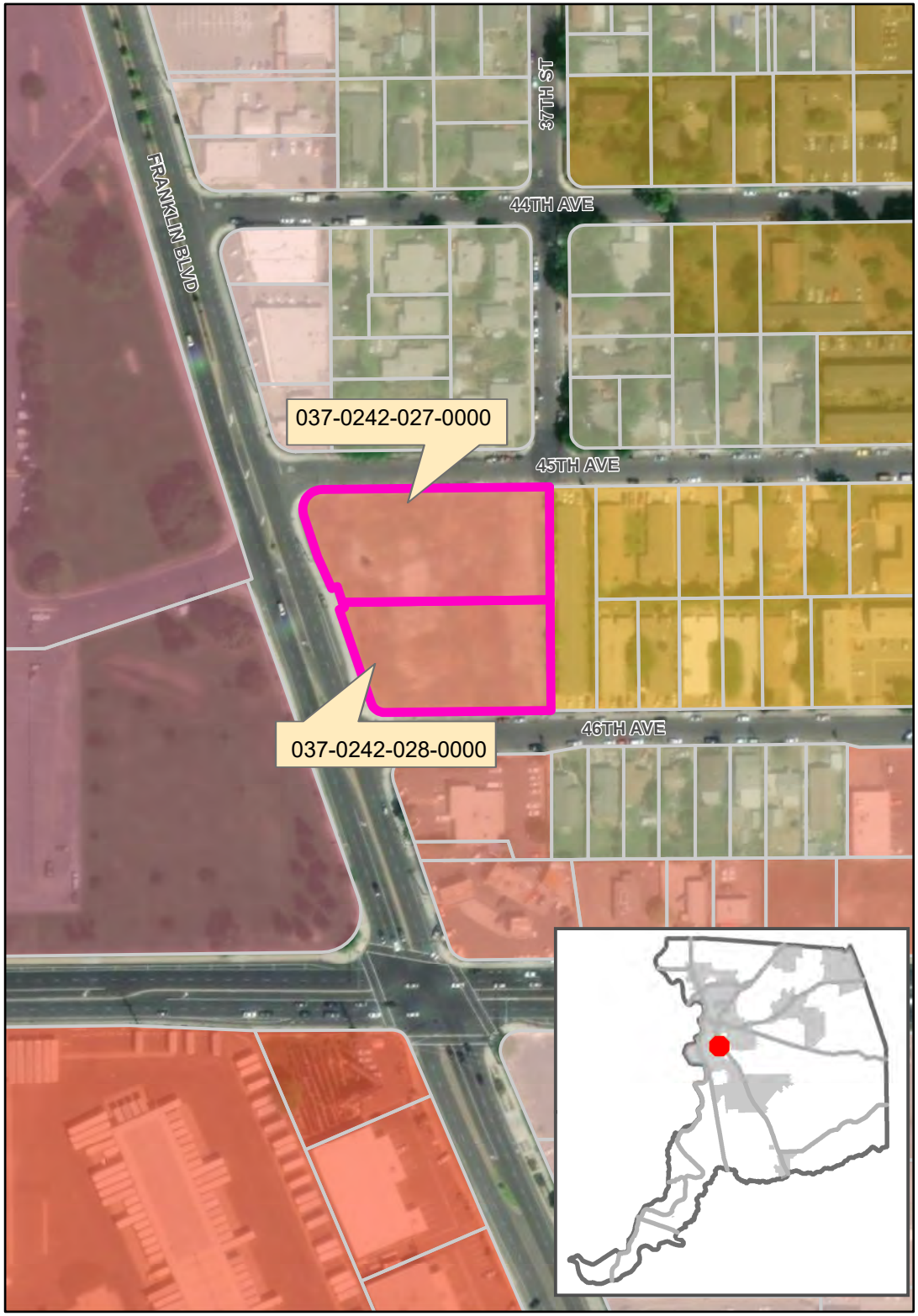
N

0 0.0375 0.075 0.15 Miles

Site 33

APNs 037-0242-027-0000
& 037-0242-028-0000

Southeast 45th Avenue/Franklin Boulevard &
6301 Franklin Boulevard,
South Sacramento



Legend

- Proposed Rezone Site

Zoning

- GC General Commercial
- LC Light Commercial
- M-1 Light Industrial
- M-2 Heavy Industrial
- RD-10 Residential
- RD-20 Multiple Family Residential
- RD-30 Multiple Family Residential

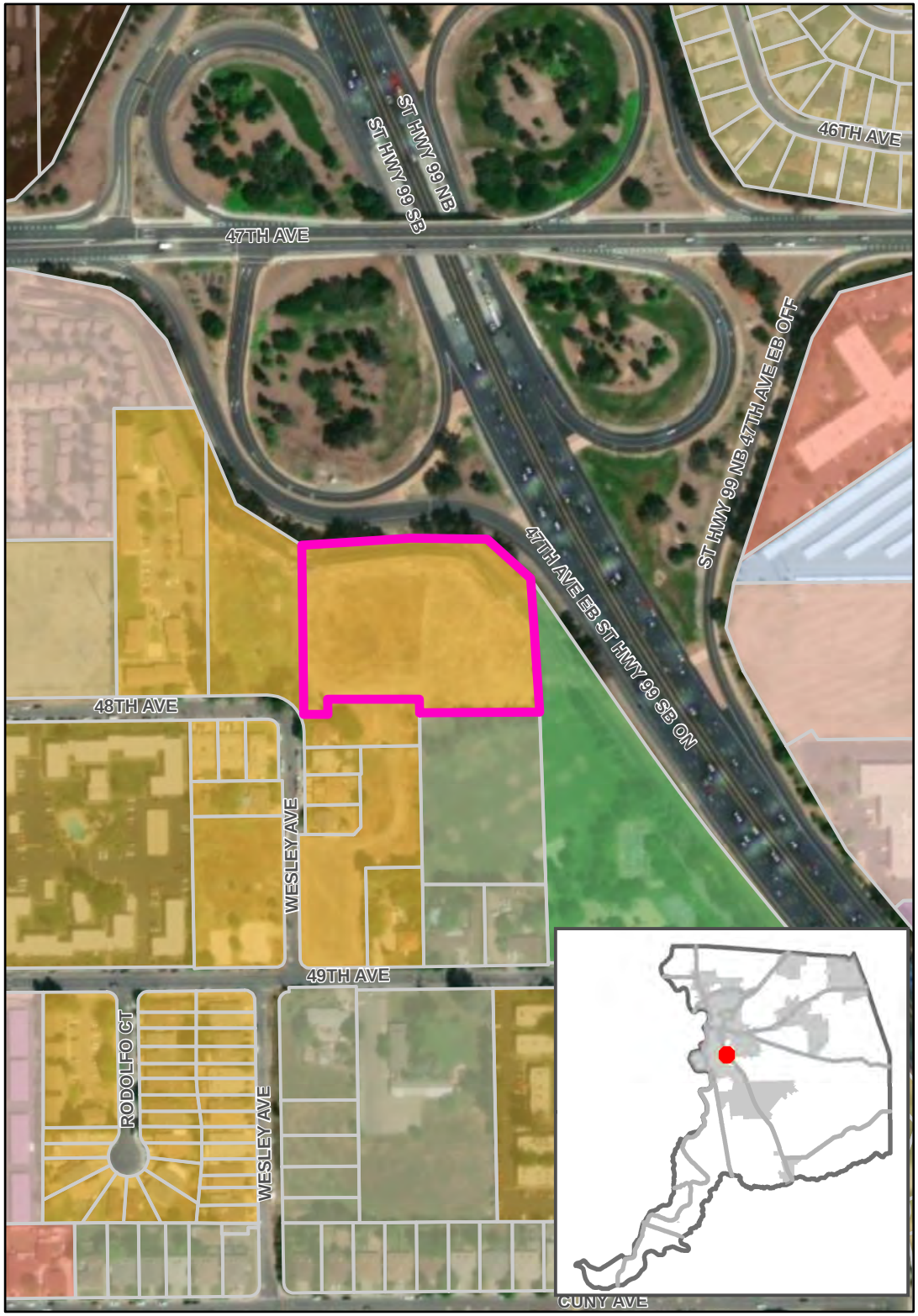
N

0 0.025 0.05 0.1 Miles

Site 34

APN 039-0054-001-0000

4001 48th Avenue,
South Sacramento



Legend

- Proposed Rezone Site

Zoning

- GC General Commercial
- LC Light Commercial
- MP Industrial - Office Park
- O Recreation
- RD-10 Residential
- RD-20 Multiple Family Residential
- RD-30 Multiple Family Residential
- RD-5 Residential
- RM-1 Mobile Home Subdivision
- TC Highway Travel Commercial

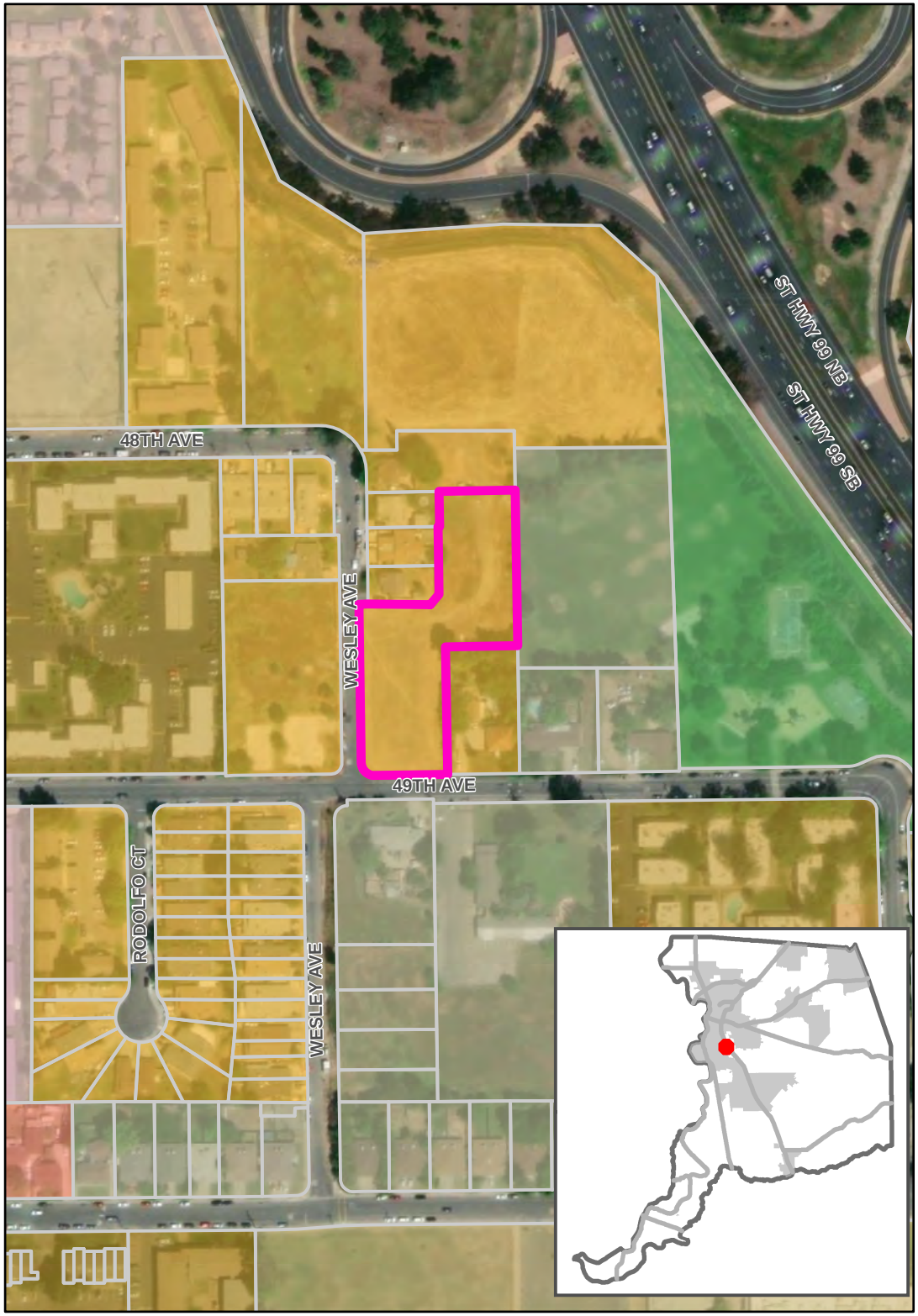
N

0 0.0375 0.075 0.15 Miles

Site 35

APN 039-0072-016-0000

NE 49th Avenue/Wesley Avenue,
South Sacramento



Legend

Proposed Rezone Site

Zoning

- GC General Commercial
- LC Light Commercial
- O Recreation
- RD-10 Residential
- RD-20 Multiple Family Residential
- RD-30 Multiple Family Residential
- RD-5 Residential

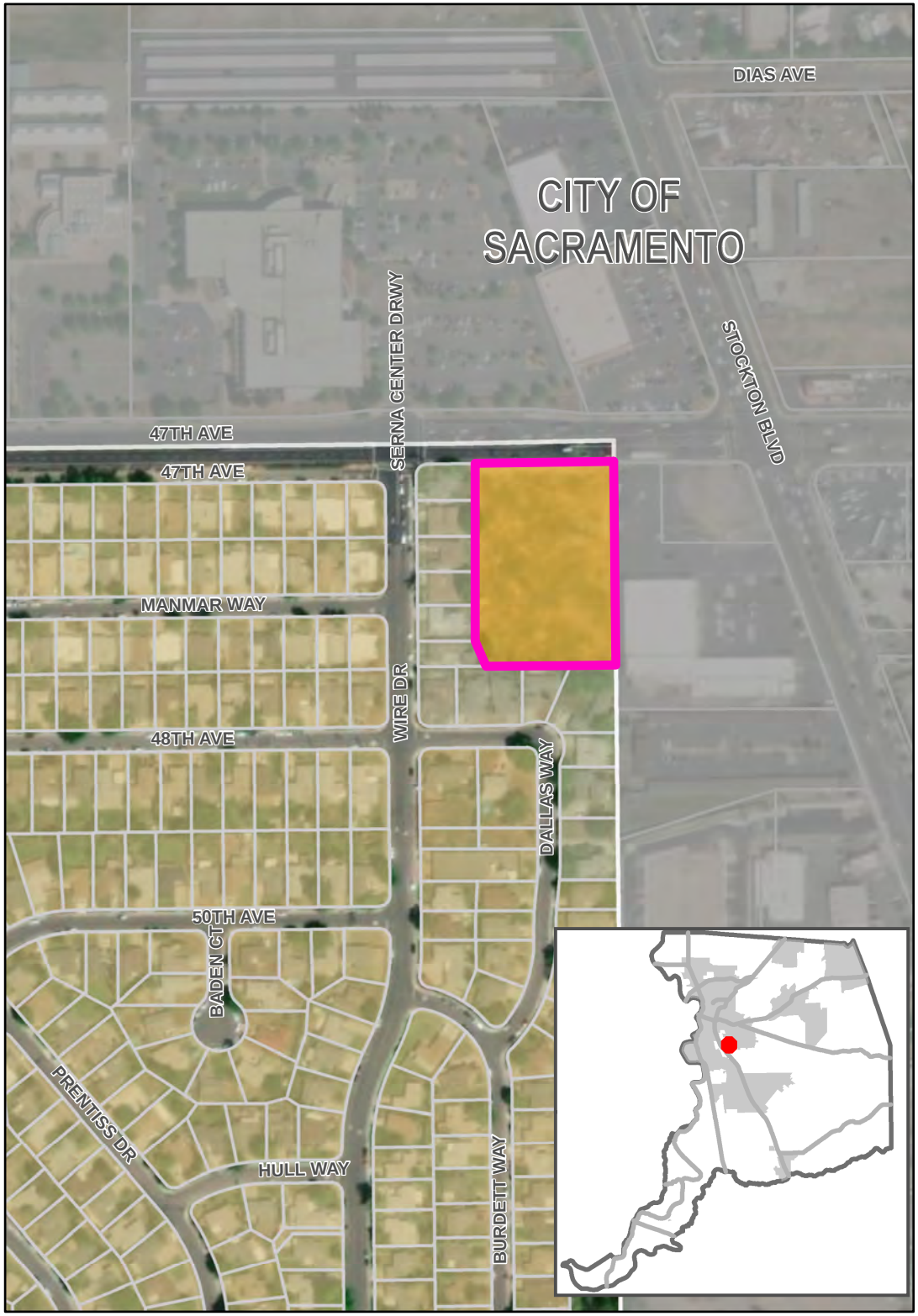
N

0 0.0375 0.075 0.15
Miles

Site 36

APN 039-0241-001-0000

240 feet West of 47th Avenue/
Stockton Boulevard,
South Sacramento



Legend

PARCELS_lyr selection

Zoning

- RD-10 Residential
- RD-20 Multiple Family Residential
- RD-5 Residential

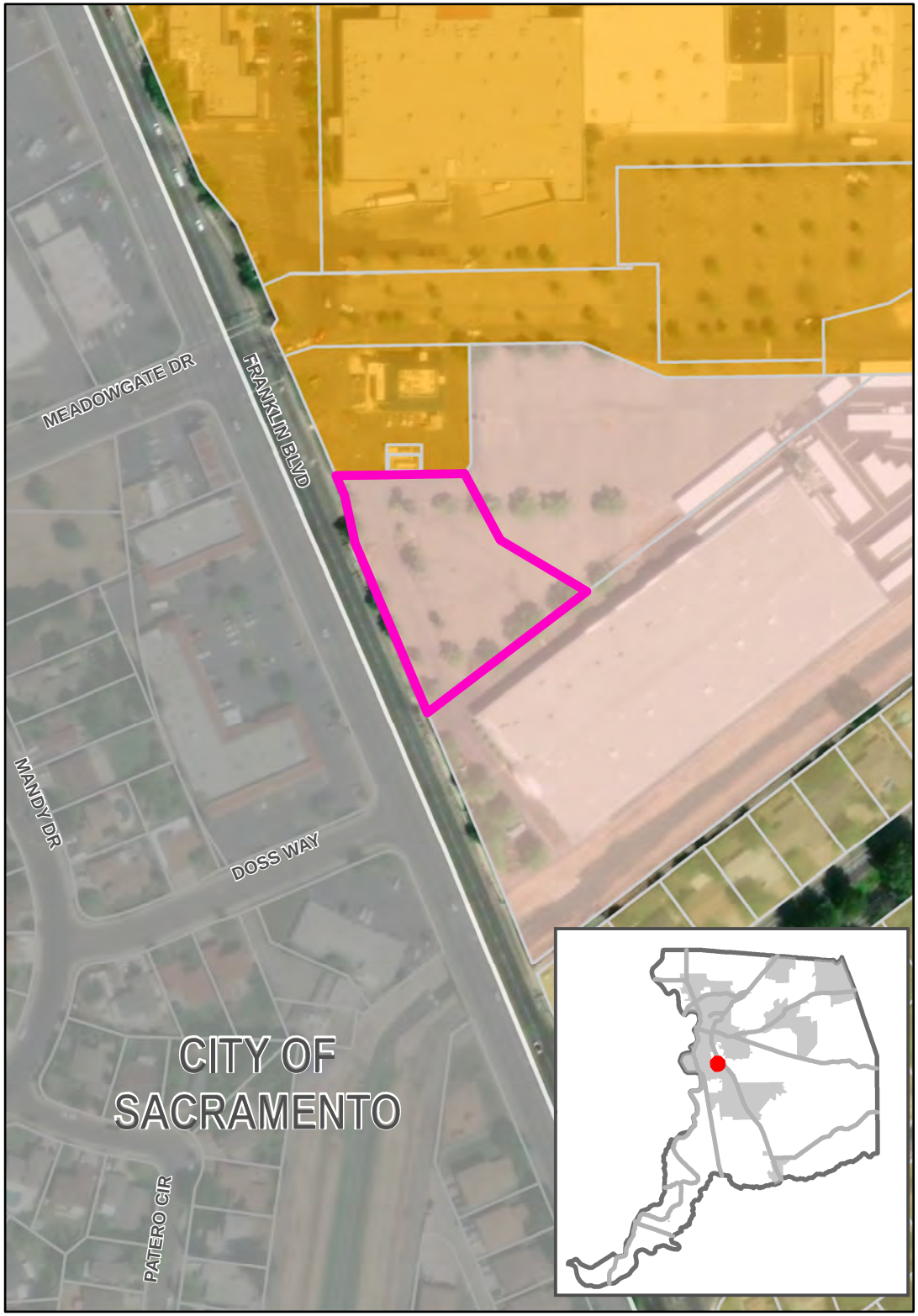
N

0 0.0375 0.075 0.15
Miles

Site 37

APN 050-0010-076-0000

180 feet Southeast of Franklin Boulevard/Meadowgate Drive, South Sacramento



Legend

Proposed Rezone Site

Zoning

GC General Commercial

RD-5 Residential

SC Shopping Center

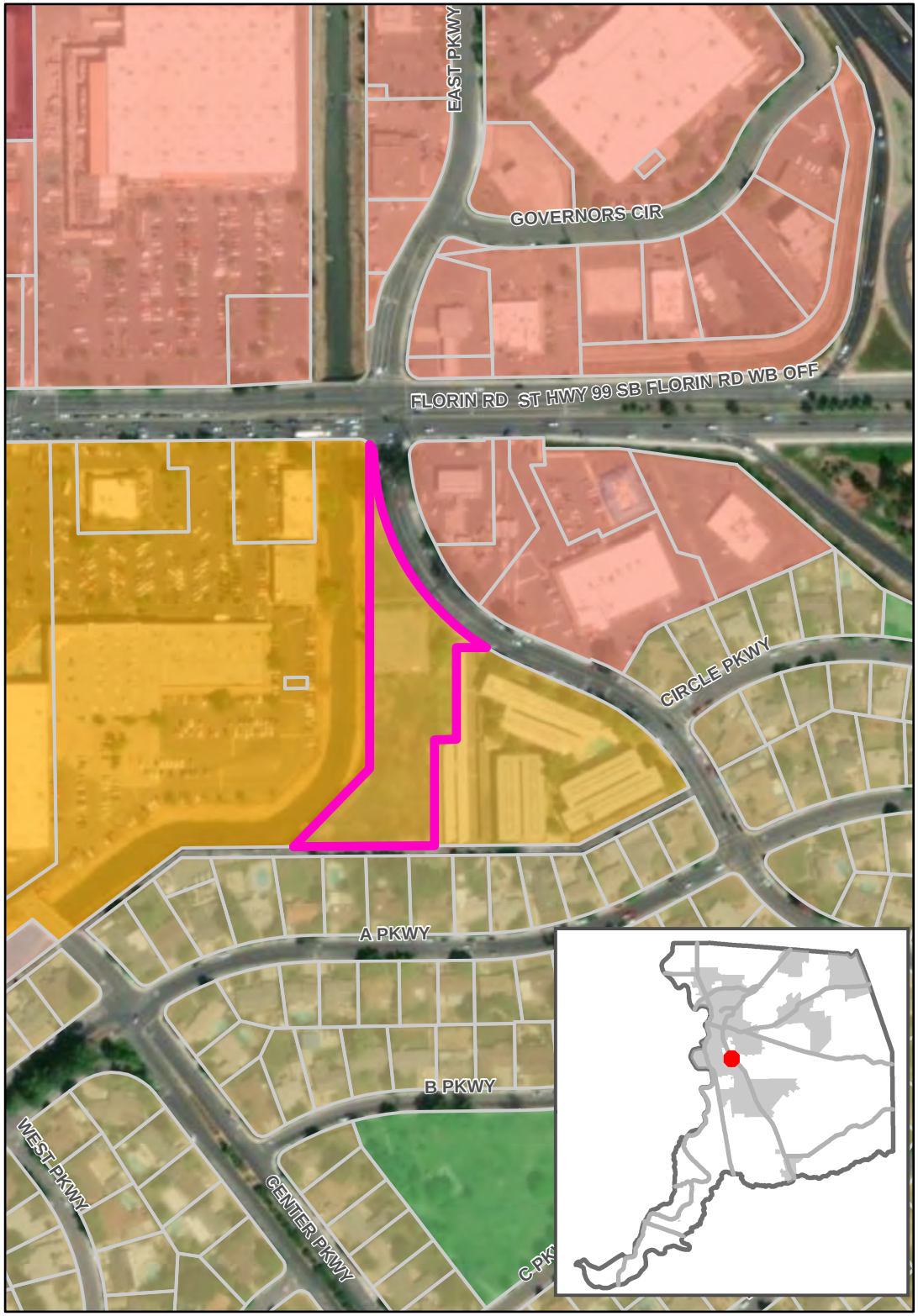
N

0 0.025 0.05 0.1 Miles

Site 38

APN 050-0010-077-0000

7236 East Parkway,
South Sacramento



Legend

Proposed Rezone Site

Zoning

- BP Business and Professional Office
- GC General Commercial
- LC Light Commercial
- O Recreation
- RD-20 Multiple Family Residential
- RD-5 Residential
- SC Shopping Center

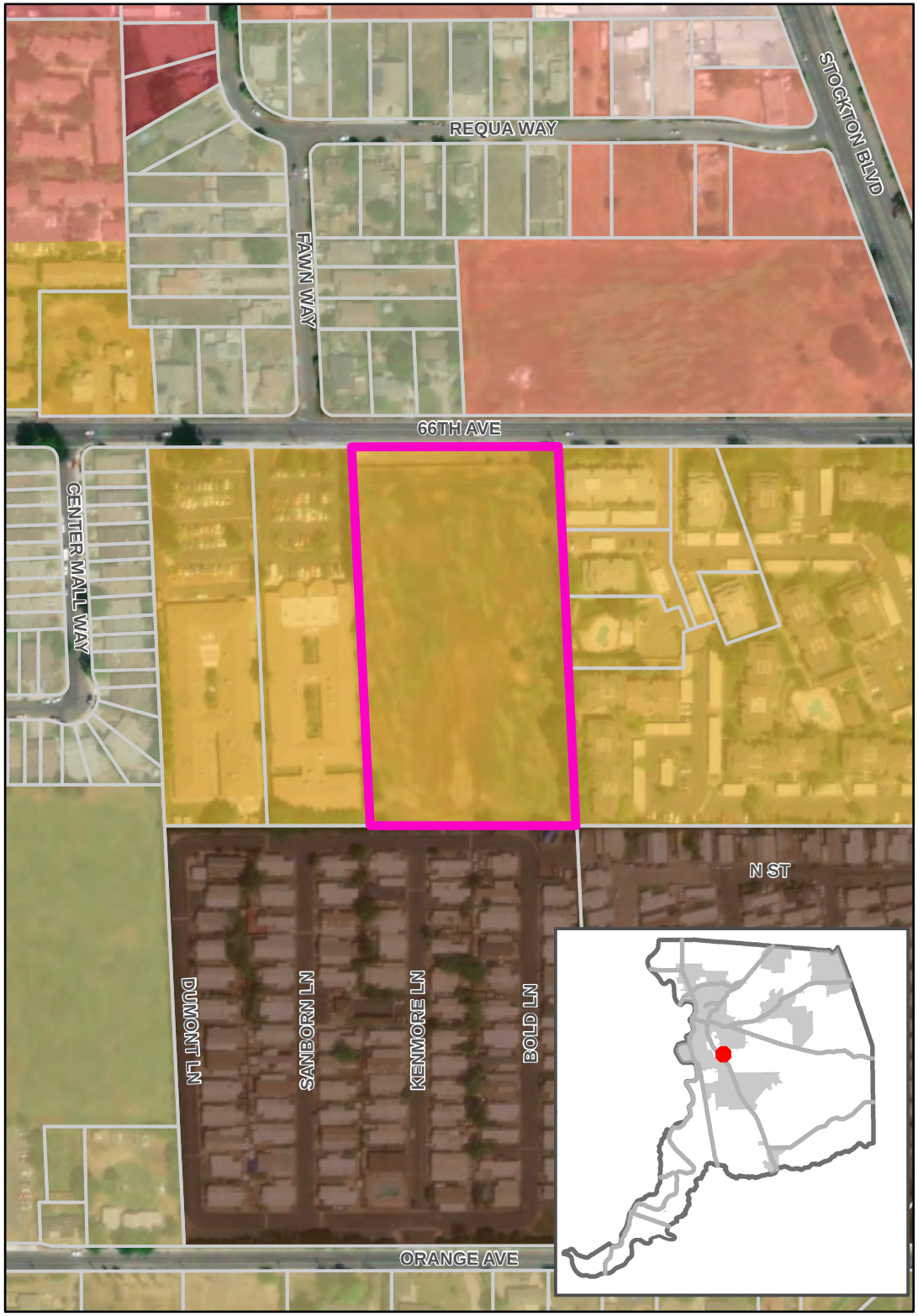
N

0 0.0375 0.075 0.15 Miles

Site 39

APN 050-0311-028-0000

630 feet W of 66th Avenue/Stockton Boulevard, South Sacramento



Legend

Proposed Rezone Site

Zoning

- AC Auto Commercial
- BP Business and Professional Office
- GC General Commercial
- LC Light Commercial
- RD-10 Residential
- RD-20 Multiple Family Residential
- RD-5 Residential
- RM-1 Mobile Home Subdivision

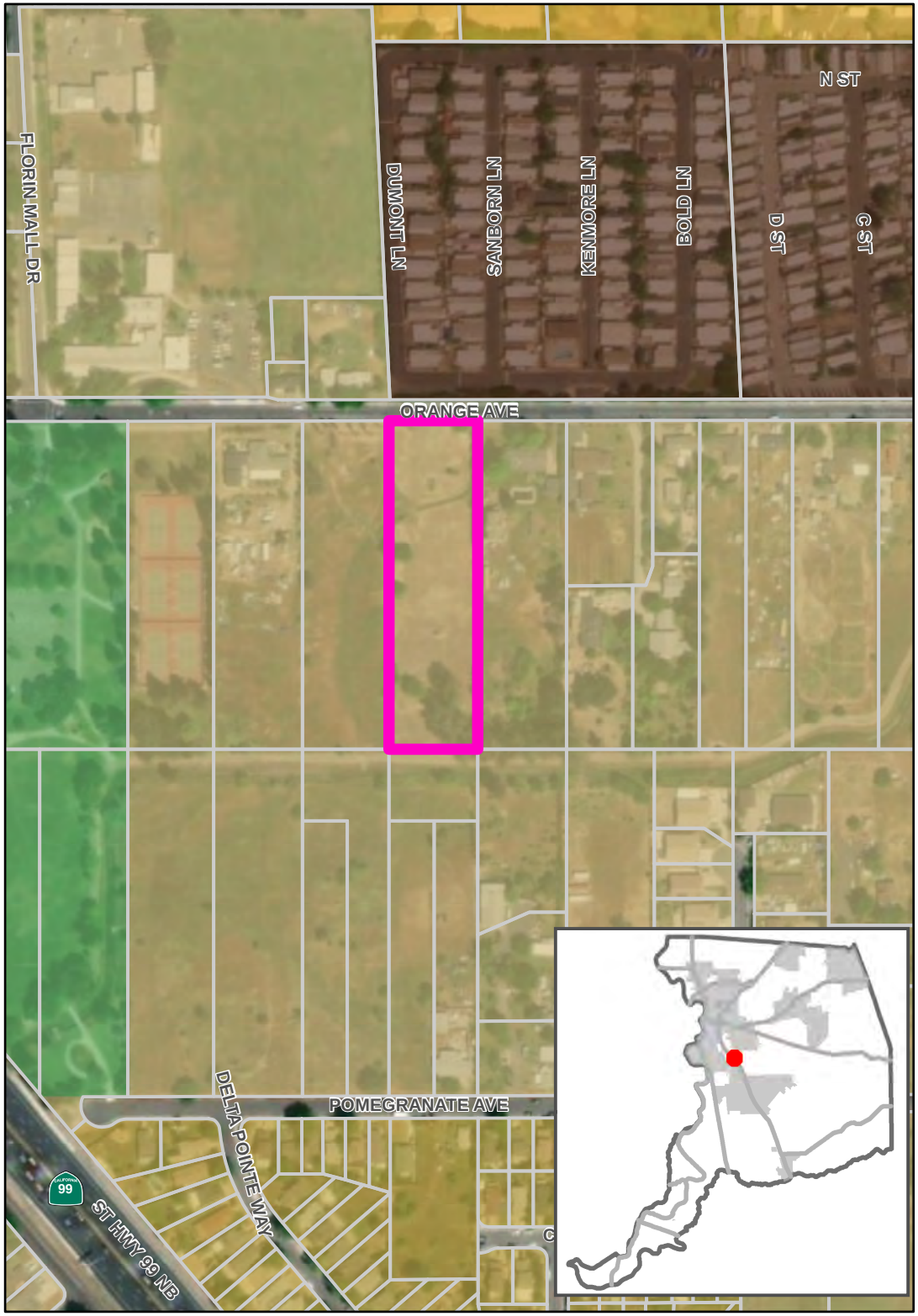
N

0 0.0375 0.075 0.15 Miles

Site 40

APN 050-0331-003-0000

6130 Orange Avenue,
South Sacramento



Legend

Proposed Rezone Site

Zoning

- O Recreation
- RD-10 Residential
- RD-20 Multiple Family Residential
- RD-5 Residential
- RD-7 Residential
- RM-1 Mobile Home Subdivision

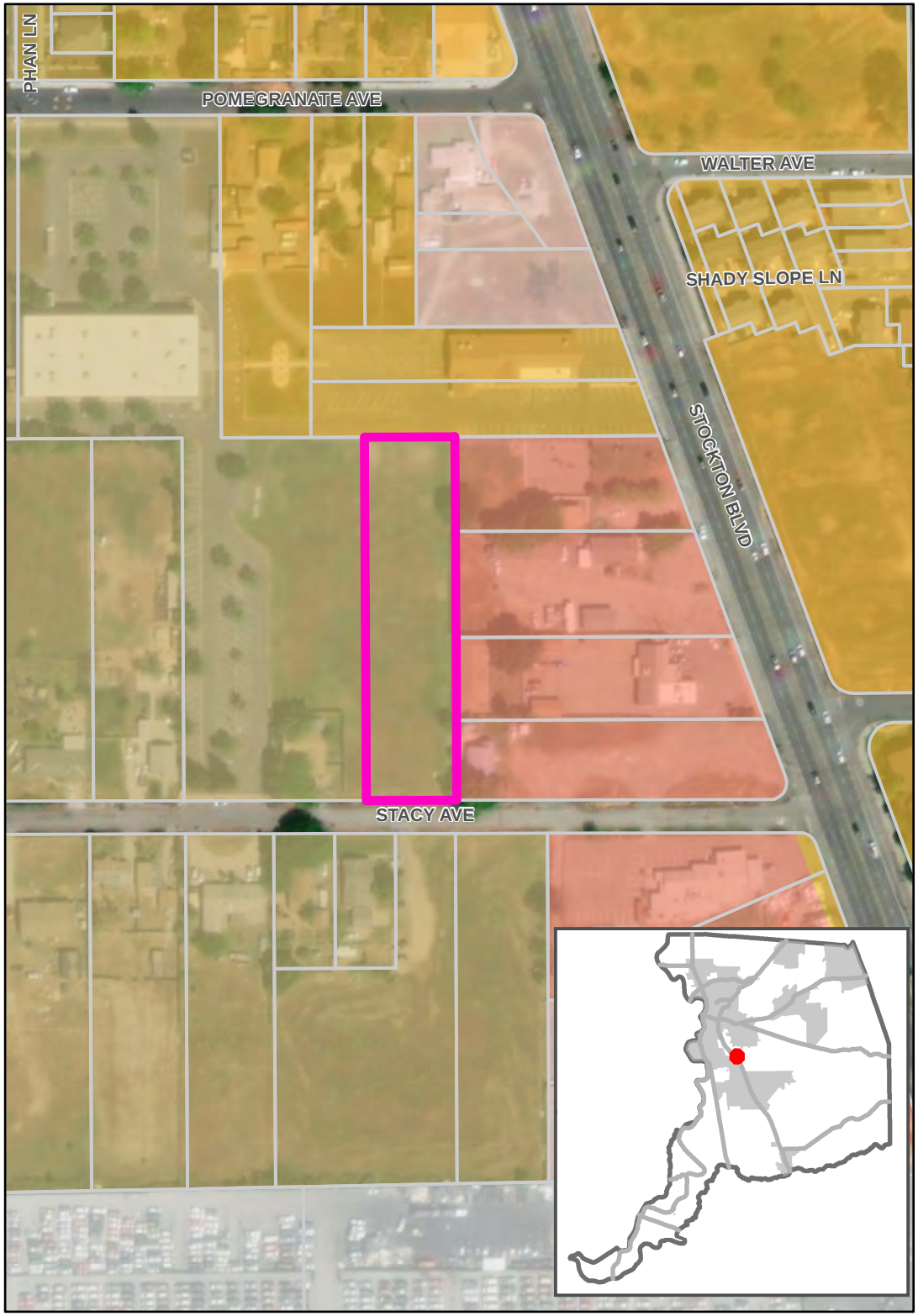
N

0 0.0375 0.075 0.15
Miles

Site 41

APN 050-0391-006-0000

6707 Stacy Avenue,
South Sacramento



Legend

Proposed Rezone Site

Zoning

- GC General Commercial
- LC Light Commercial
- RD-10 Residential
- RD-20 Multiple Family Residential
- RD-5 Residential
- RD-7 Residential
- SPA Special Planning Area

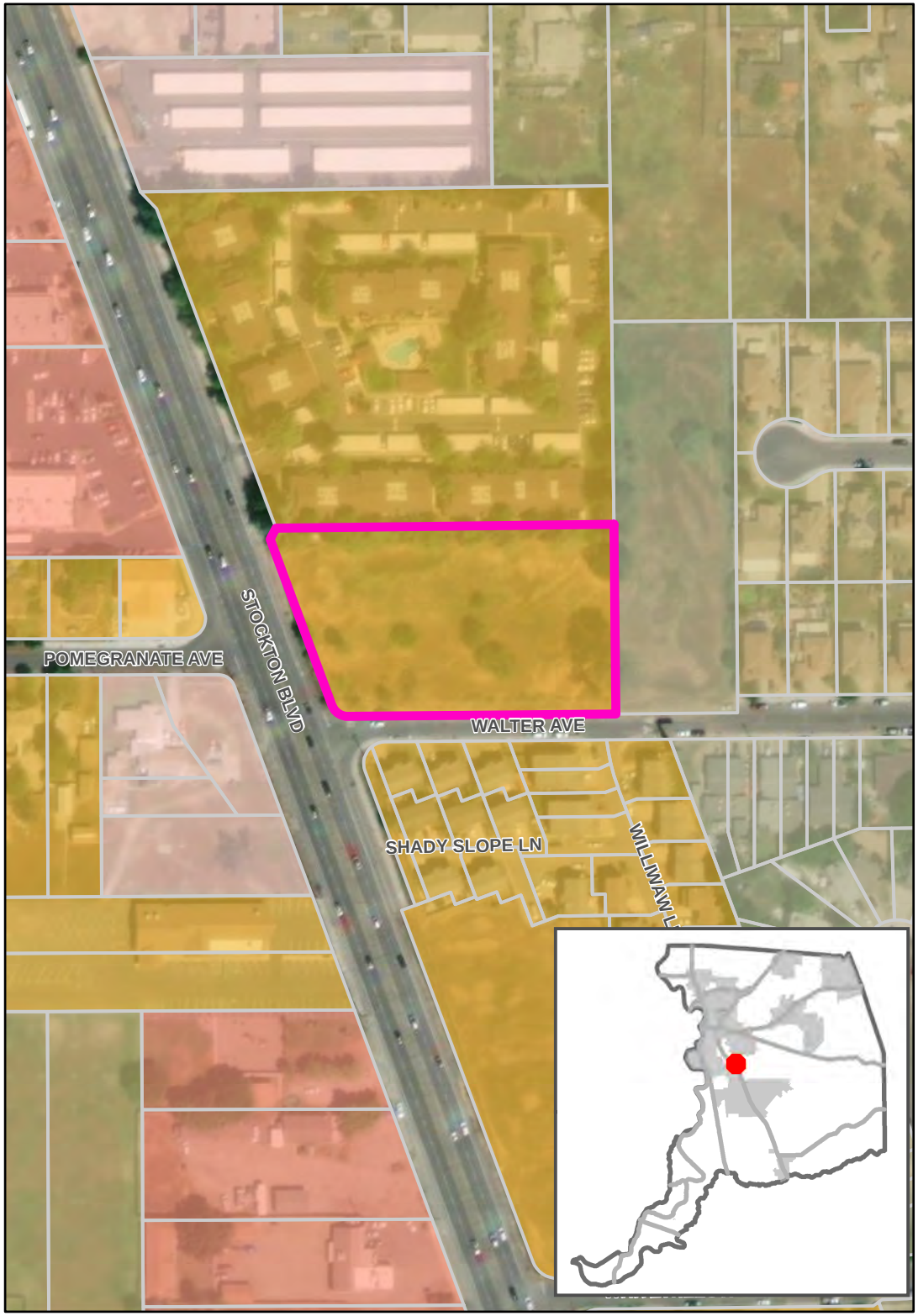
N

0 0.025 0.05 0.1 Miles

Site 42

APN 051-0160-014-0000

Northeast Stockton Boulevard/Walter Avenue, South Sacramento



Legend

Proposed Rezone Site

Zoning

- GC General Commercial
- LC Light Commercial
- RD-10 Residential
- RD-20 Multiple Family Residential
- RD-5 Residential

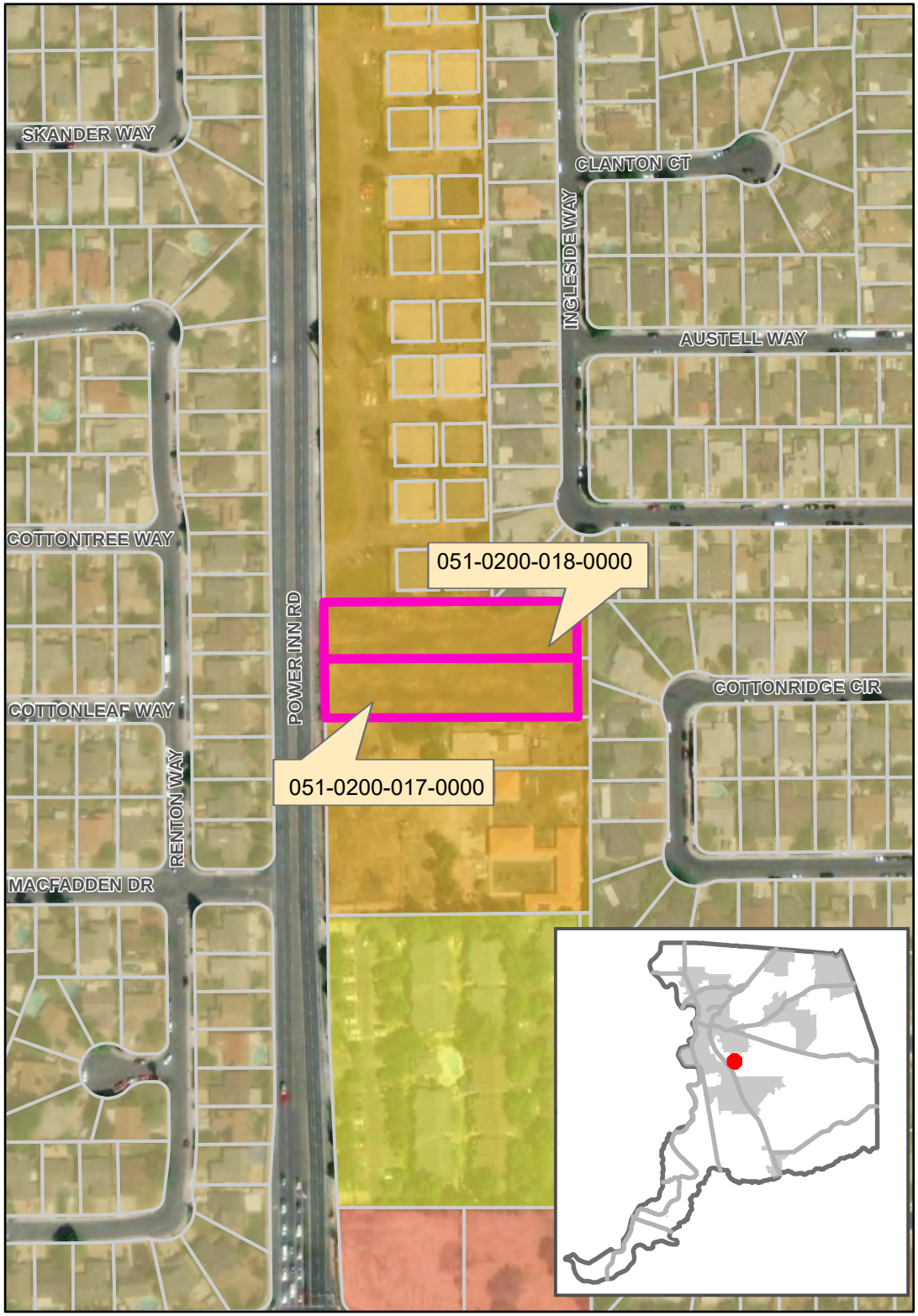
N

0 0.025 0.05 0.1 Miles

Site 43

APNs 051-0200-017-0000
& 051-0200-018-0000

7525 & 7521 Power Inn Road,
South Sacramento



Legend

Proposed Rezone Site

Zoning

- LC Light Commercial
- RD-20 Multiple Family Residential
- RD-25 Multiple Family Residential
- RD-5 Residential

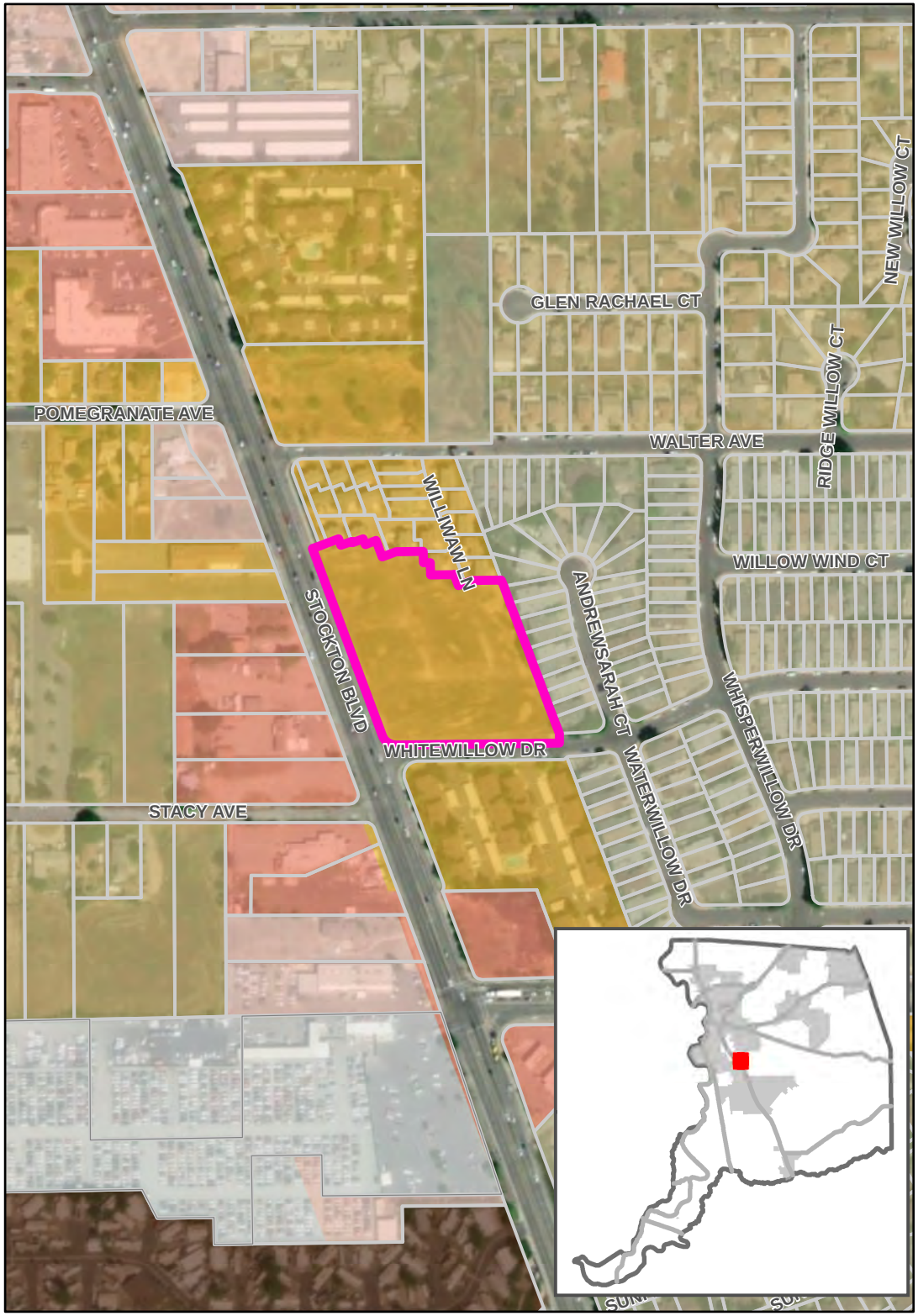
N

0 0.025 0.05 0.1 Miles

Site 44

APN 051-0630-021-0000

Northeast Stockton Boulevard/
Whitewillow Drive,
South Sacramento



Legend

Proposed Rezone Site

Zoning

- GC General Commercial
- LC Light Commercial
- RD-10 Residential
- RD-20 Multiple Family Residential
- RD-5 Residential
- RM-1 Mobile Home Subdivision
- SPA Special Planning Area

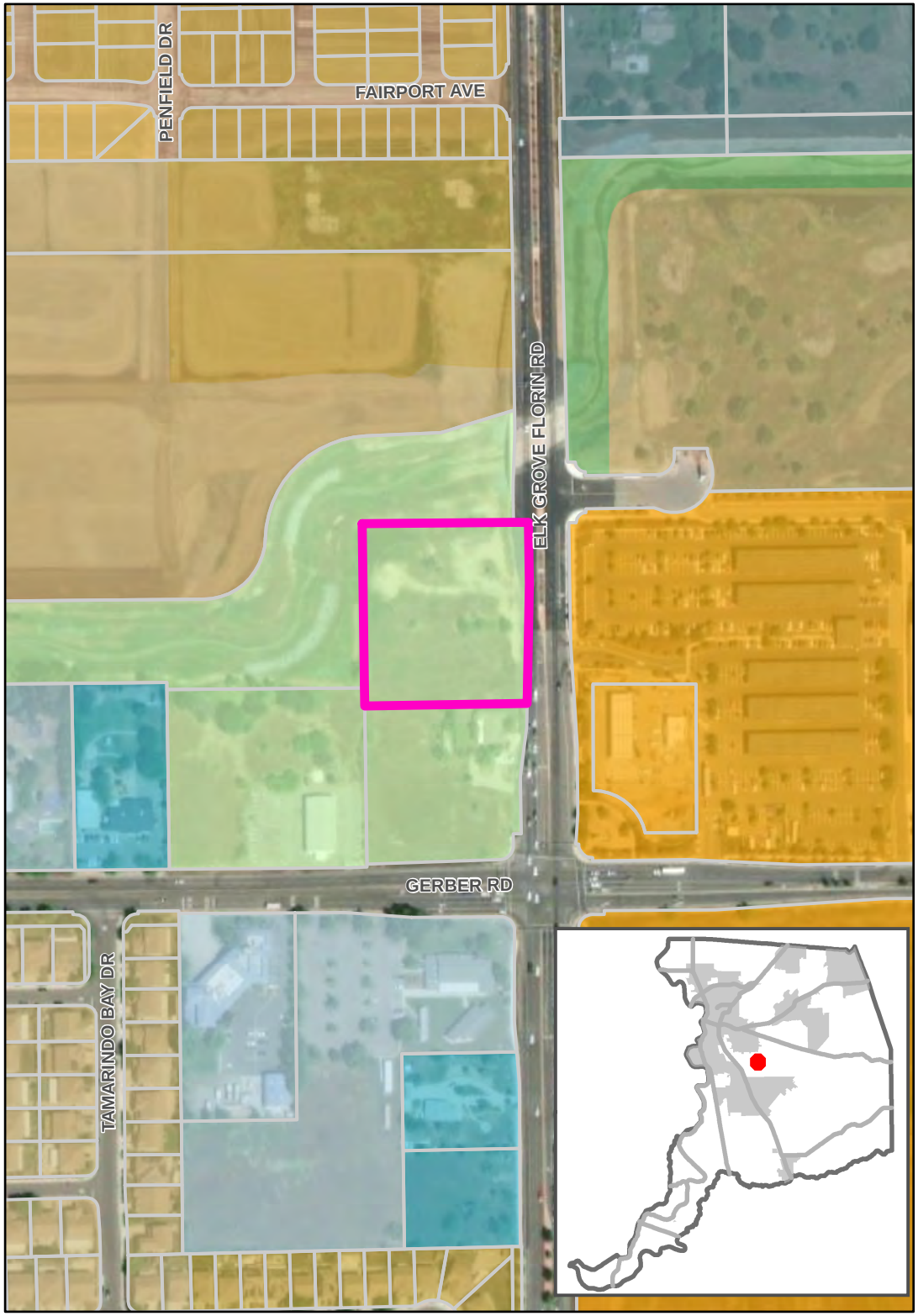
N

0 0.0375 0.075 0.15
Miles

Site 45

APN 065-0070-009-0000

7572 Elk Grove Florin Road,
South Sacramento



Legend

Proposed Rezone Site

Zoning

- A-10 Agricultural Holding Zone
- AR-1 Agricultural-Residential - 1 Acre
- AR-2 Agricultural-Residential - 2 Acres
- AR-5 Agricultural-Residential - 5 Acres
- O Recreation
- RD-4 Residential
- RD-5 Residential
- RD-7 Residential
- SC Shopping Center

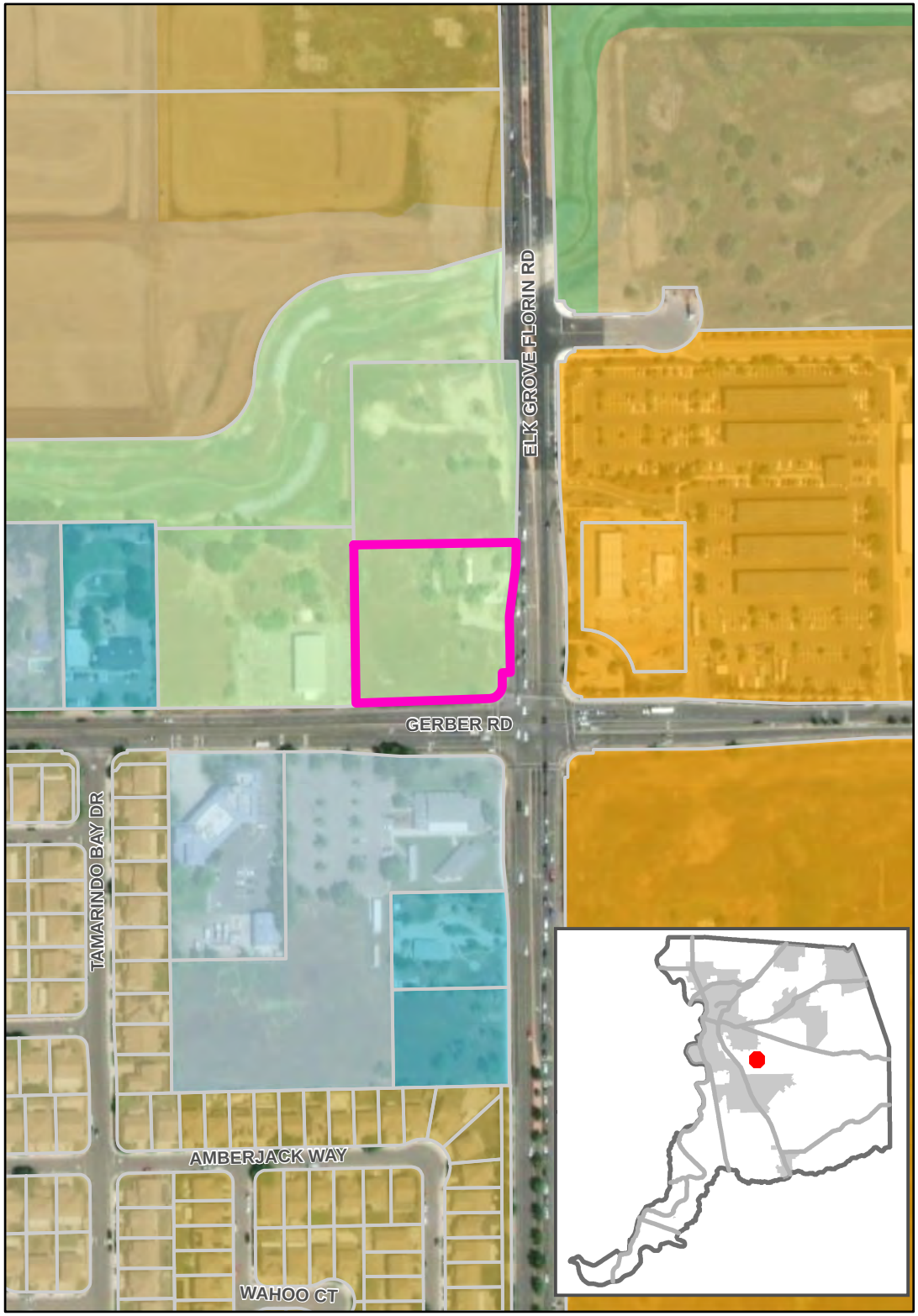
N

0 0.0375 0.075 0.15 Miles

Site 46

APN 065-0070-010-0000

7590 Elk Grove Florin Road,
South Sacramento



Legend

Proposed Rezone Site

Zoning

- A-10 Agricultural Holding Zone
- AR-1 Agricultural-Residential - 1 Acre
- AR-2 Agricultural-Residential - 2 Acres
- O Recreation
- RD-5 Residential
- RD-7 Residential
- SC Shopping Center

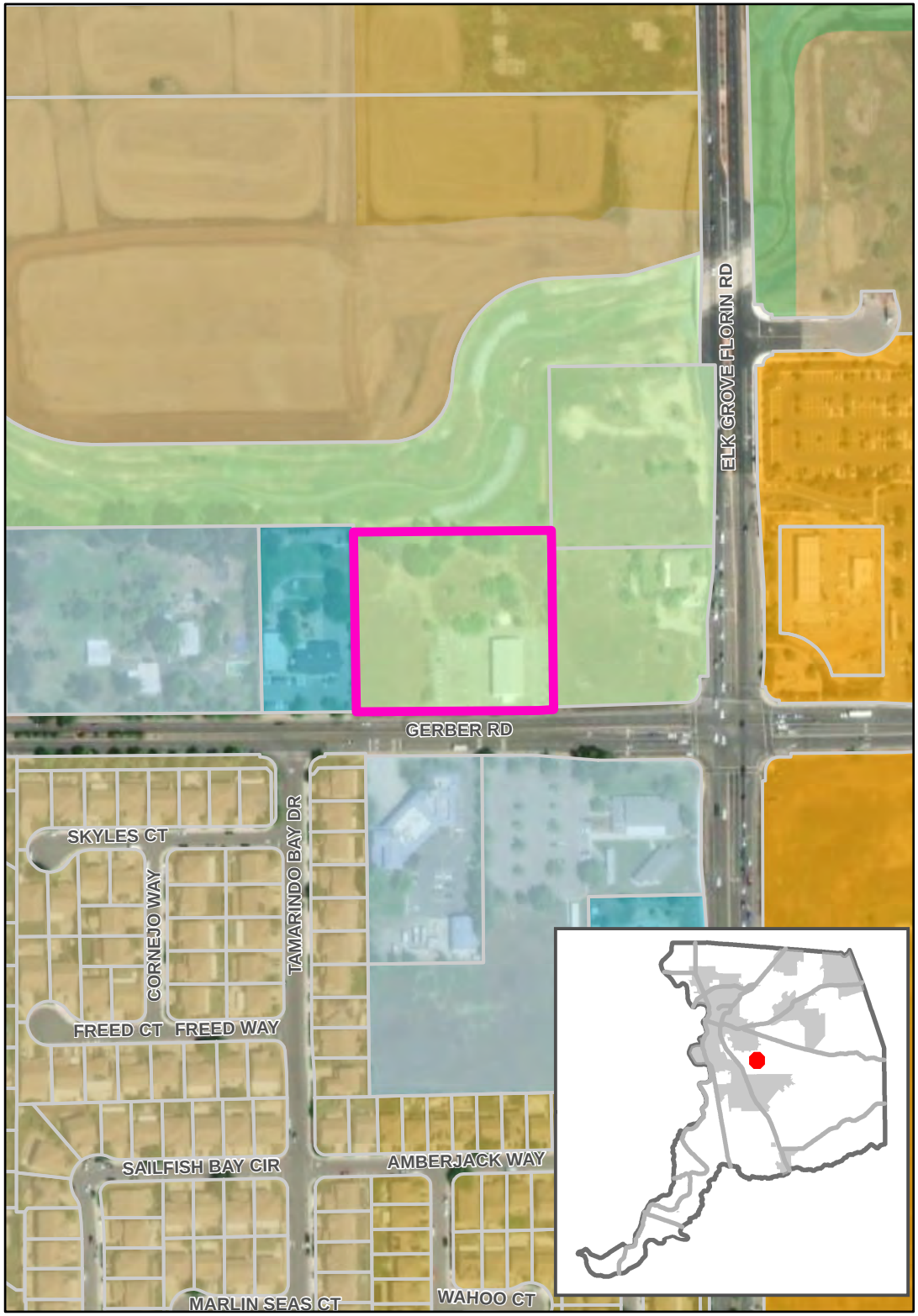
N

0 0.0375 0.075 0.15 Miles

Site 47

APN 065-0070-011-0000

8831 Gerber Road,
South Sacramento



Legend

Proposed Rezone Site

Zoning

- A-10 Agricultural Holding Zone
- AR-1 Agricultural-Residential - 1 Acre
- AR-2 Agricultural-Residential - 2 Acres
- AR-5 Agricultural-Residential - 5 Acres
- O Recreation
- RD-4 Residential
- RD-5 Residential
- RD-7 Residential
- SC Shopping Center

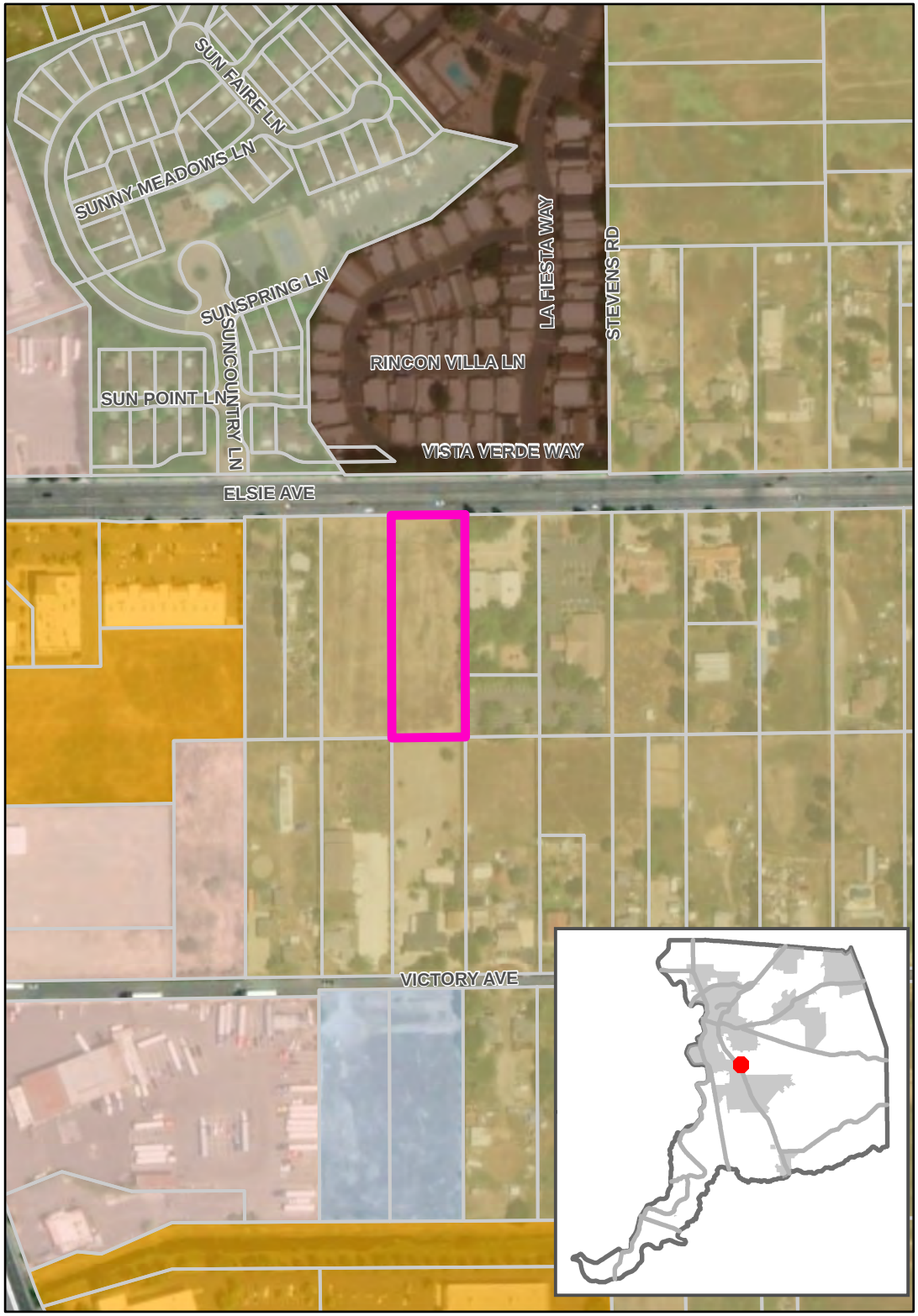
N

0 0.0375 0.075 0.15 Miles

Site 48

APN 115-0061-007-0000

7604 Elsie Avenue,
South Sacramento



Legend

Proposed Rezone Site

Zoning

- GC General Commercial
- RD-10 Residential
- RD-20 Multiple Family Residential
- RD-30 Multiple Family Residential
- RD-5 Residential
- RD-7 Residential
- RM-1 Mobile Home Subdivision
- SC Shopping Center
- TC Highway Travel Commercial

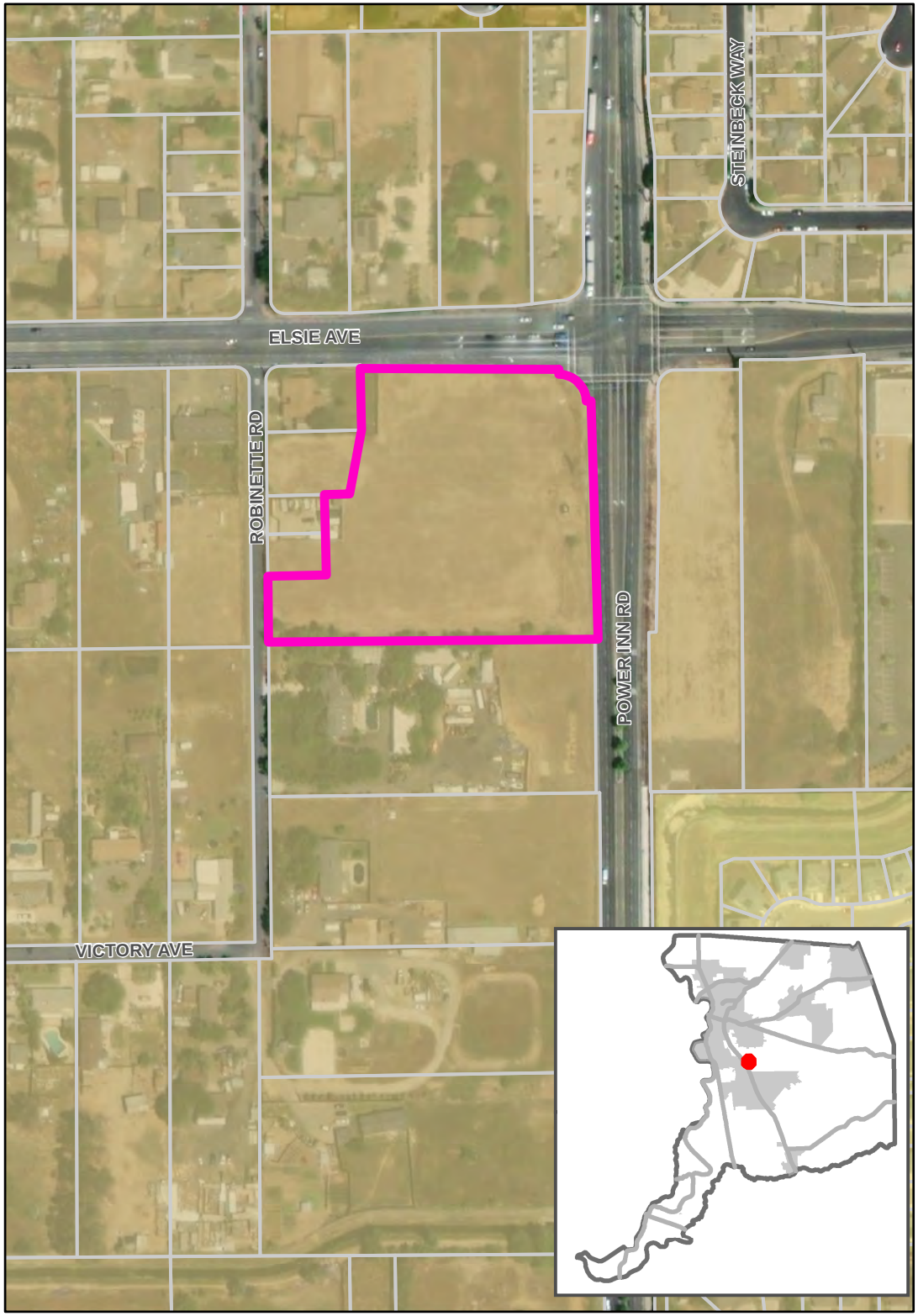
N

0 0.0375 0.075 0.15 Miles

Site 49

APN 115-0062-026-0000

7825 Robinette Road,
South Sacramento



Legend

Proposed Rezone Site

Zoning

- RD-15 Multiple Family Residential
- RD-5 Residential
- RD-7 Residential

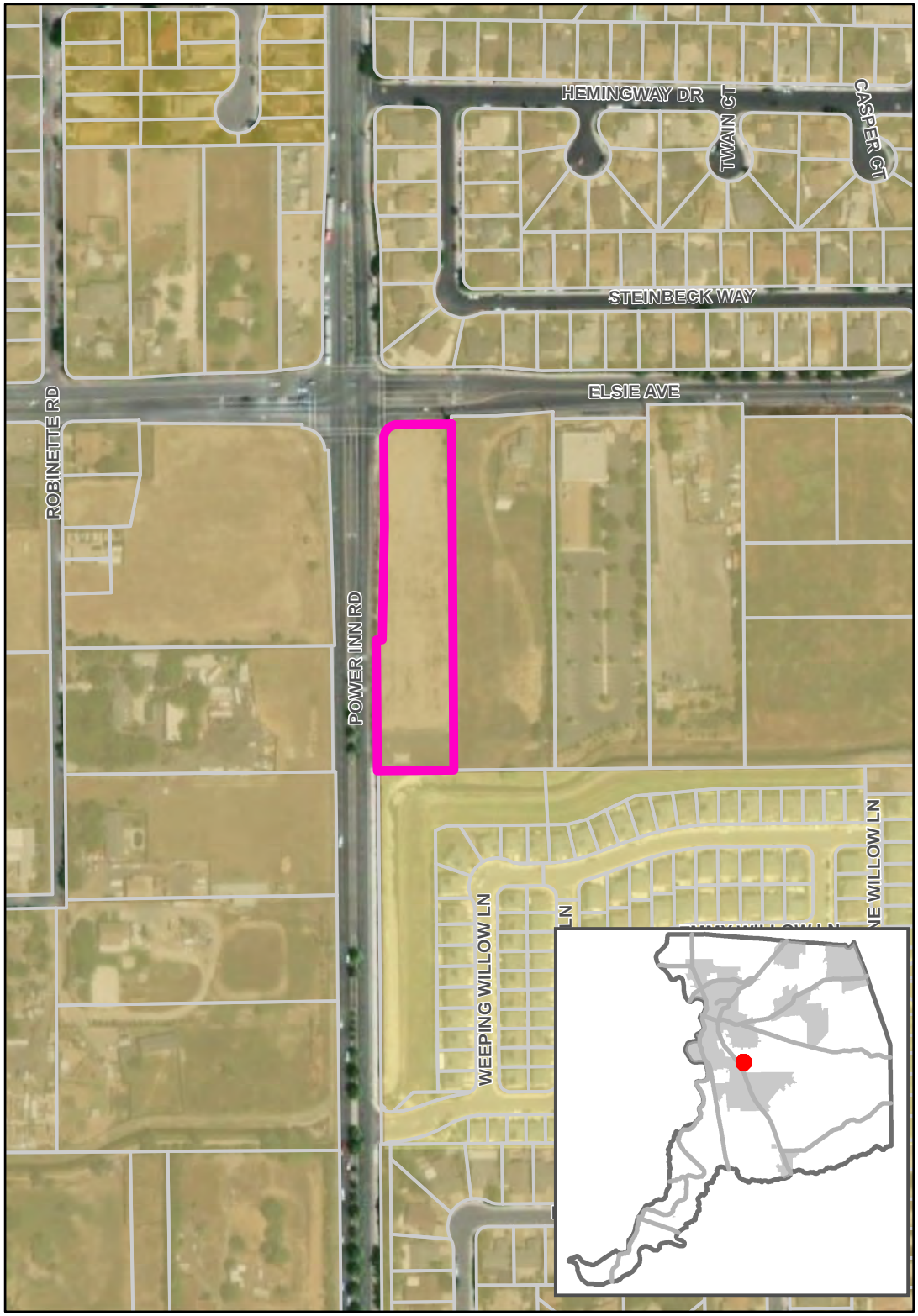
N

0 0.025 0.05 0.1
Miles

Site 50

APN 115-0073-001-0000

Southeast Elsie Avenue/Power Inn Road,
South Sacramento



Legend

Proposed Rezone Site

Zoning

- RD-15 Multiple Family Residential
- RD-5 Residential
- RD-7 Residential

N

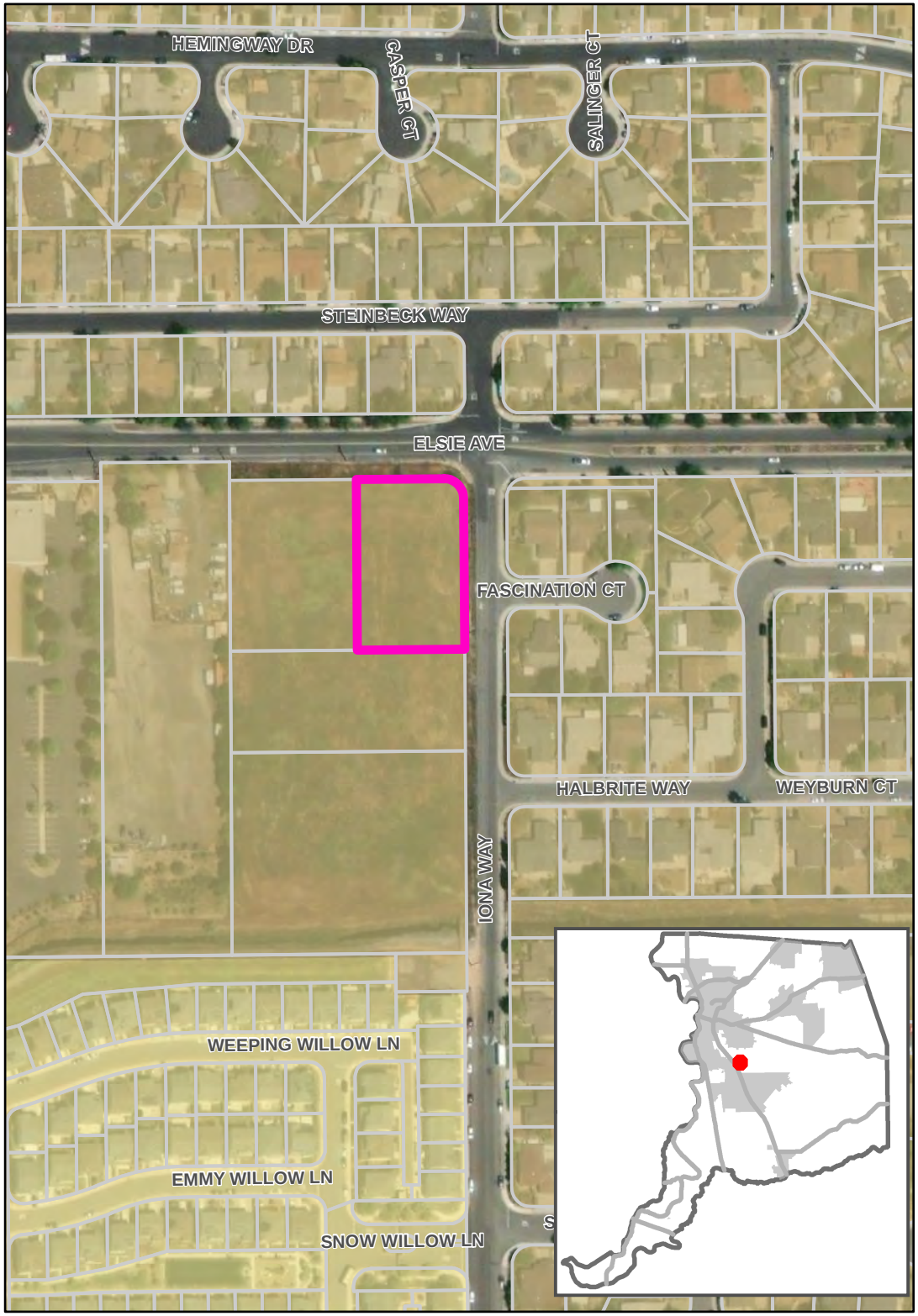
0 0.0375 0.075 0.15 Miles

Site 51

APN 115-0073-010-0000

Southwest Elsie Avenue/Iona Way

South Sacramento



Legend

Proposed Rezone Site

Zoning

RD-15 Multiple Family Residential

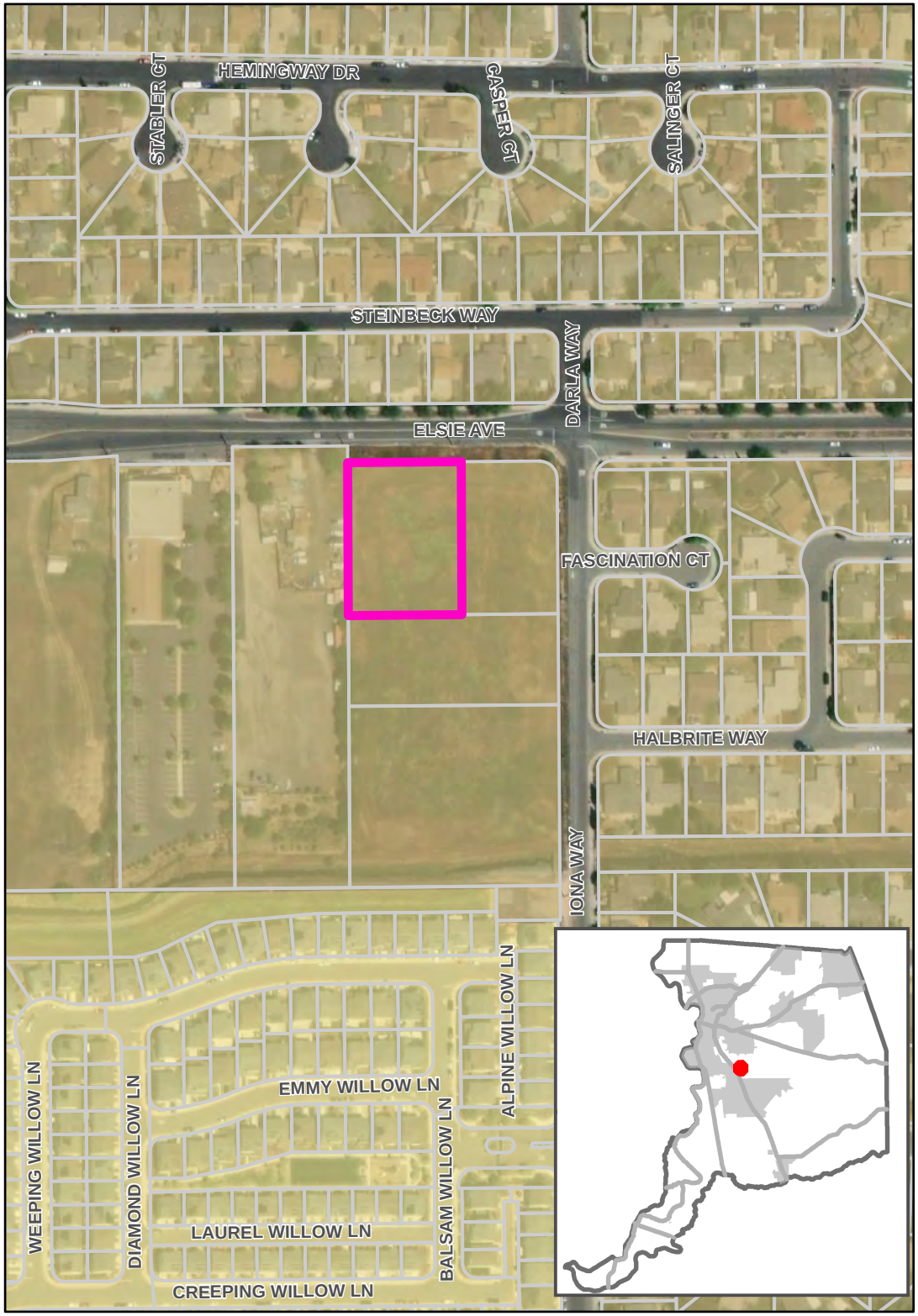
RD-5 Residential

N

0 0.025 0.05 0.1 Miles

Site 52

APN 115-0073-011-0000
140 feet West of Elsie Avenue/Iona Way,
South Sacramento



Legend

Proposed Rezone Site

Zoning

RD-15 Multiple Family Residential

RD-5 Residential

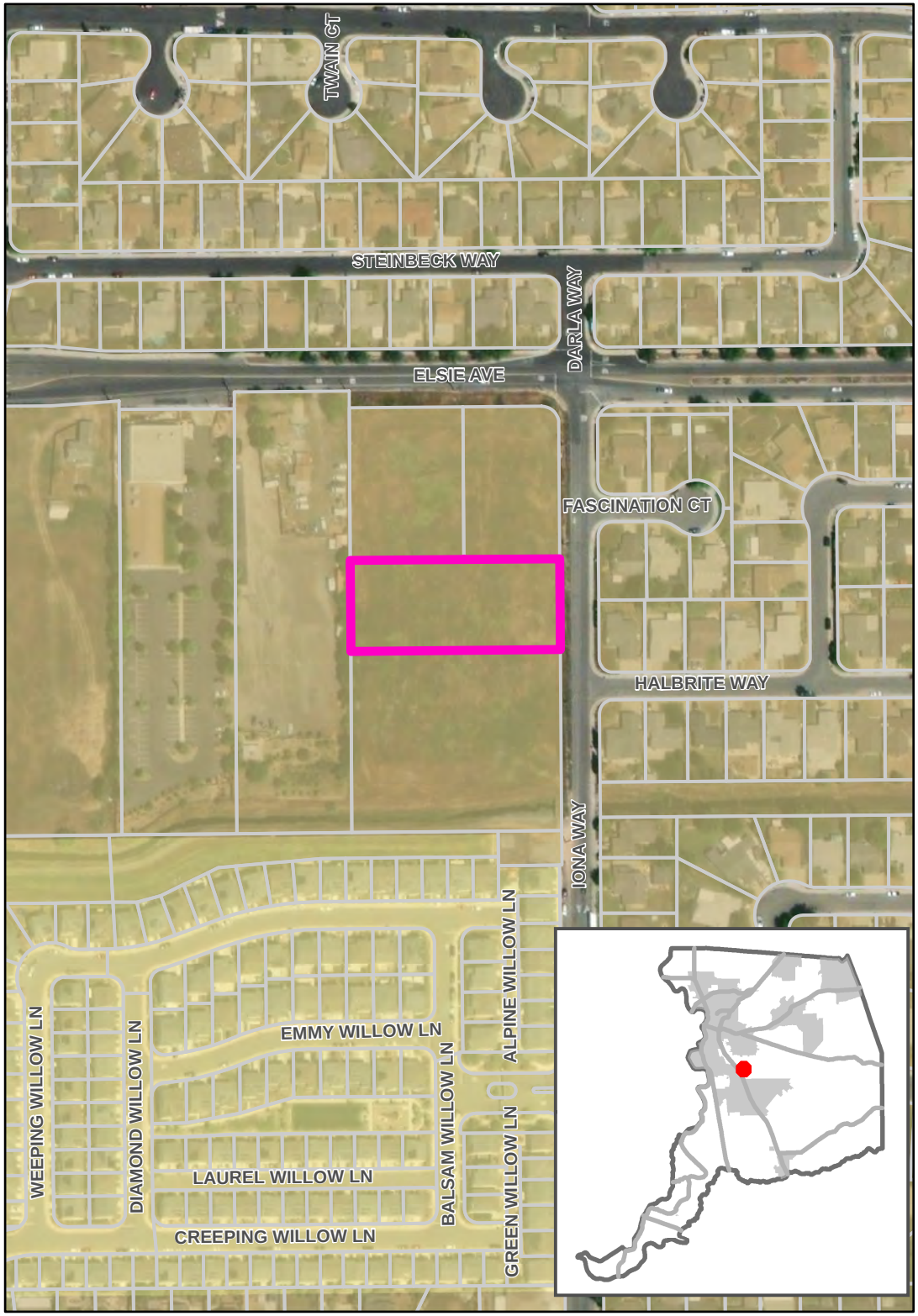
N

0 0.0375 0.075 0.15 Miles

Site 53

APN 115-0073-012-0000

220 feet South of Elsie Avenue/Iona Way, South Sacramento



Legend

Proposed Rezone Site

Zoning

RD-15 Multiple Family Residential

RD-5 Residential

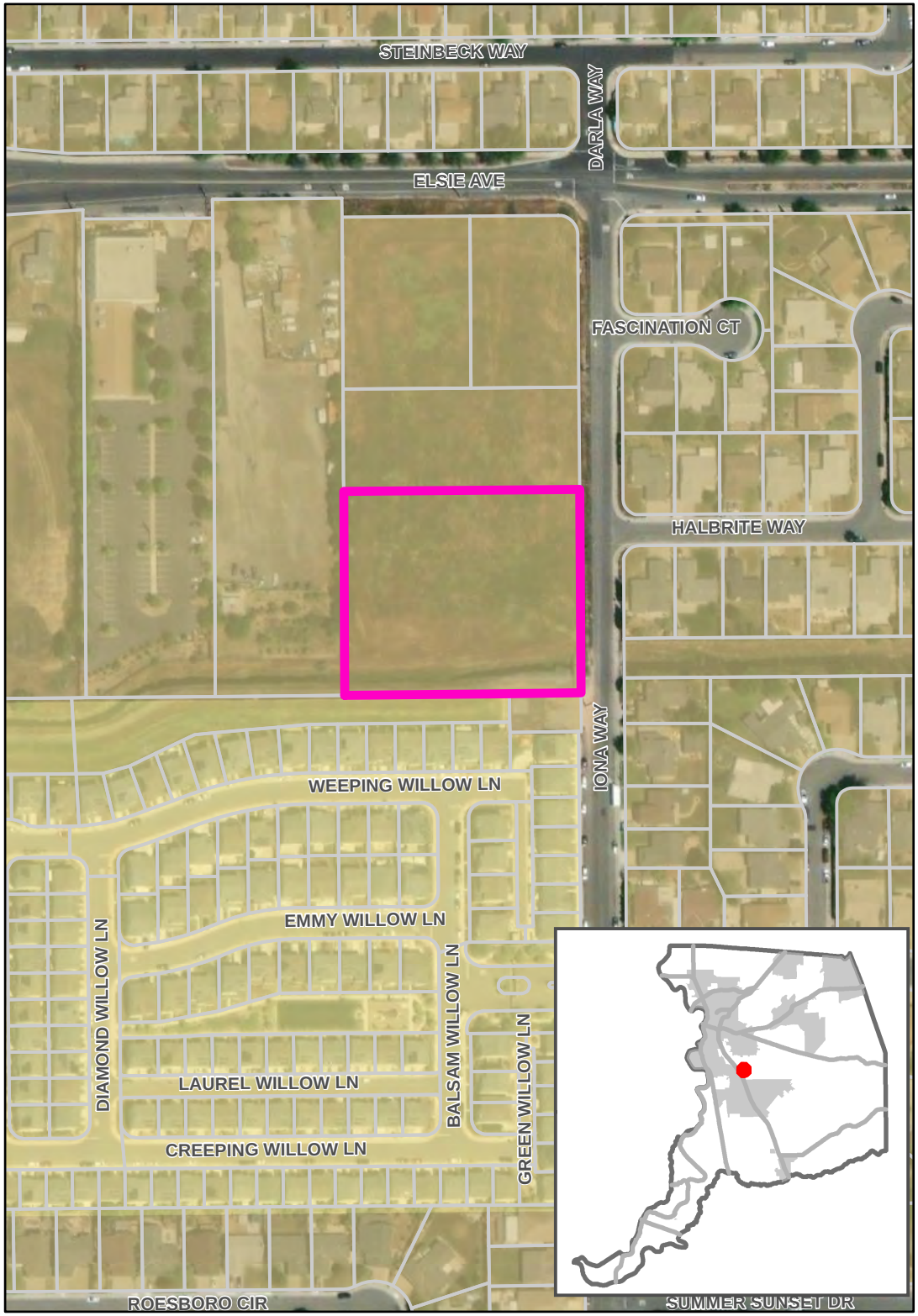
N

0 0.025 0.05 0.1 Miles

Site 54

APN 115-0073-013-0000

350 feet South of Elsie Avenue/Iona Way, South Sacramento



Legend

Proposed Rezone Site

Zoning

RD-15 Multiple Family Residential

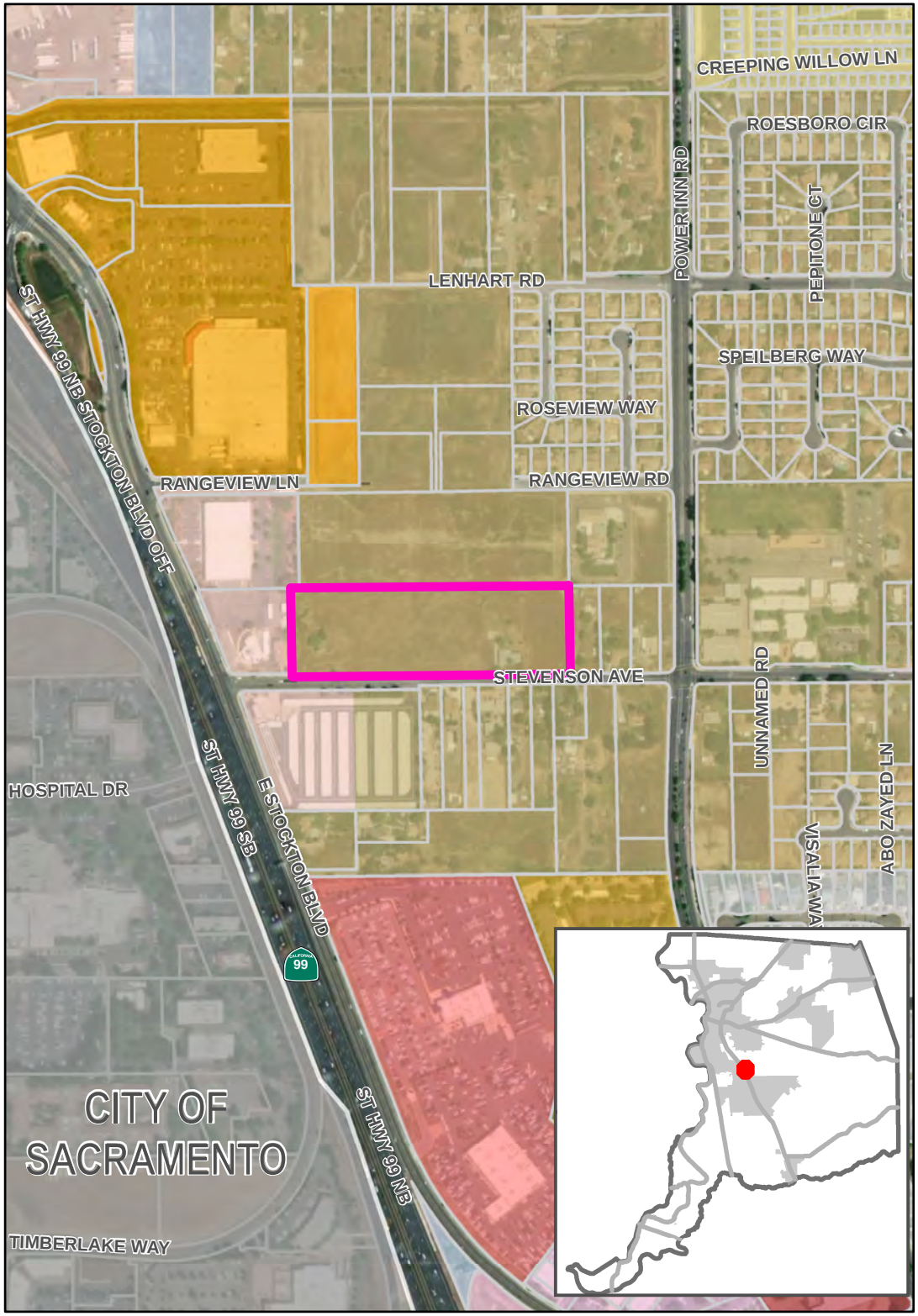
RD-5 Residential

N

0 0.025 0.05 0.1 Miles

Site 55

APN 115-0201-012-0000
7901 Stevenson Avenue,
South Sacramento



Legend

- Proposed Rezone Site

Zoning

- AC Auto Commercial
- BP Business and Professional Office
- GC General Commercial
- MP Industrial - Office Park
- RD-15 Multiple Family Residential
- RD-20 Multiple Family Residential
- RD-30 Multiple Family Residential
- RD-5 Residential
- SC Shopping Center
- SPA Special Planning Area
- TC Highway Travel Commercial

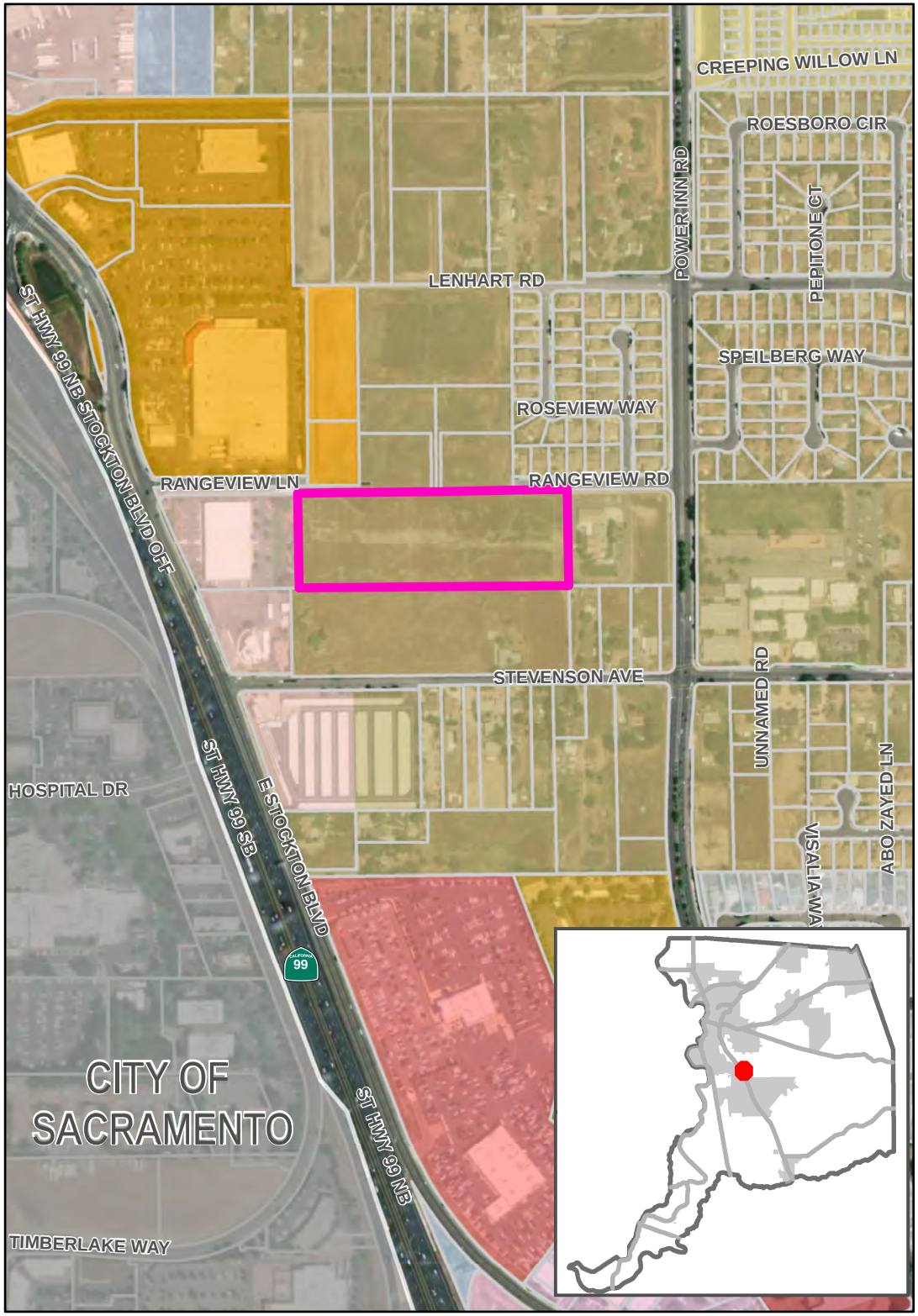
N

0 0.05 0.1 0.2 Miles

Site 56

APN 115-0201-018-0000

7516 Rangeview Lane,
South Sacramento



Legend

Proposed Rezone Site

Zoning

- AC Auto Commercial
- BP Business and Professional Office
- GC General Commercial
- MP Industrial - Office Park
- RD-15 Multiple Family Residential
- RD-20 Multiple Family Residential
- RD-30 Multiple Family Residential
- RD-5 Residential
- SC Shopping Center
- SPA Special Planning Area
- TC Highway Travel Commercial

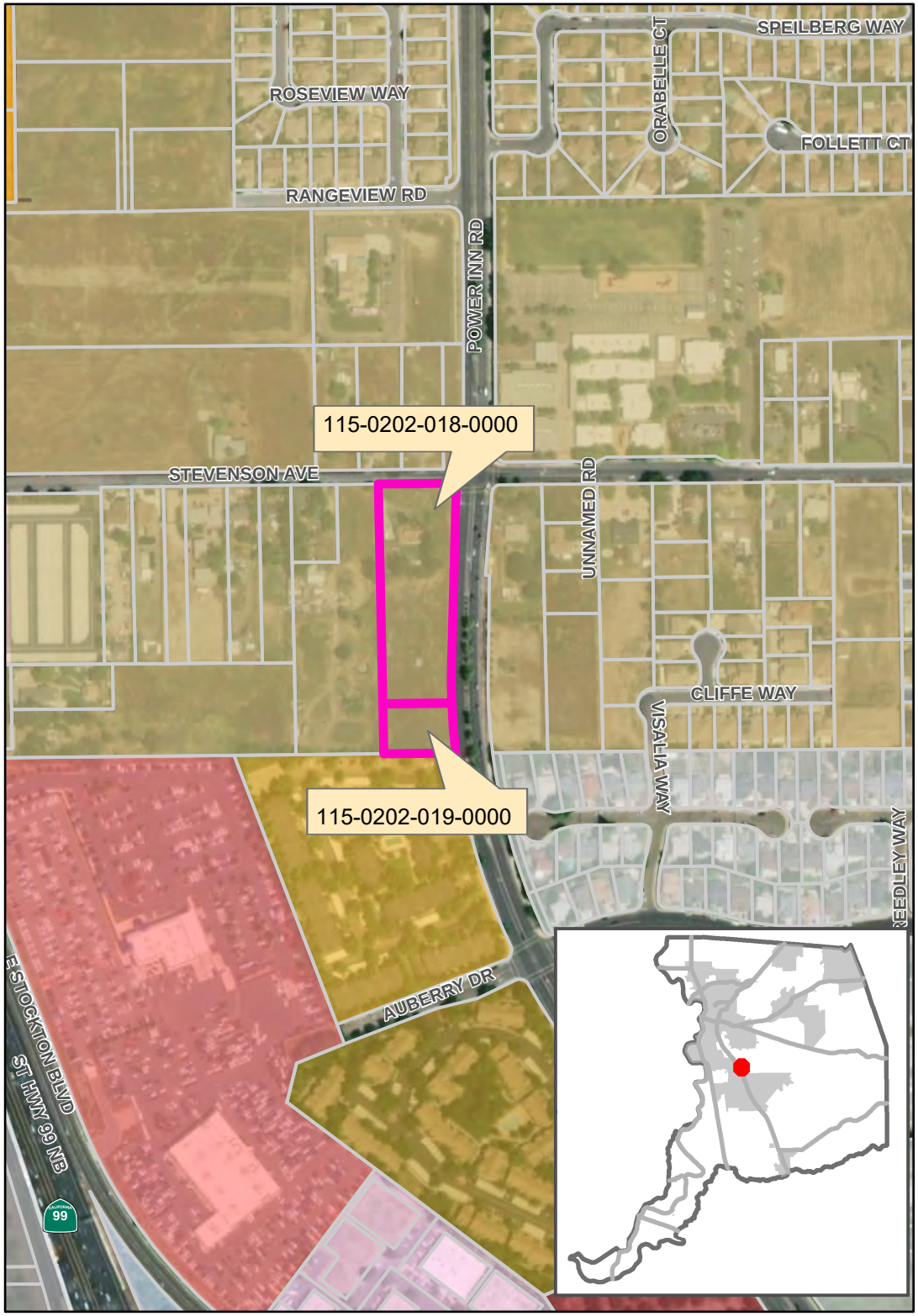
N

0 0.05 0.1 0.2 Miles

Site 57

APNs 115-0202-018-0000 &
115-0202-019-0000

8016 Stevenson Avenue & 540 feet
South of Stevenson Avenue/Power Inn Road,
South Sacramento



Legend

- Proposed Rezone Site

Zoning

- AC Auto Commercial
- BP Business and Professional Office
- GC General Commercial
- MP Industrial - Office Park
- RD-20 Multiple Family Residential
- RD-30 Multiple Family Residential
- RD-5 Residential
- SC Shopping Center
- SPA Special Planning Area
- TC Highway Travel Commercial

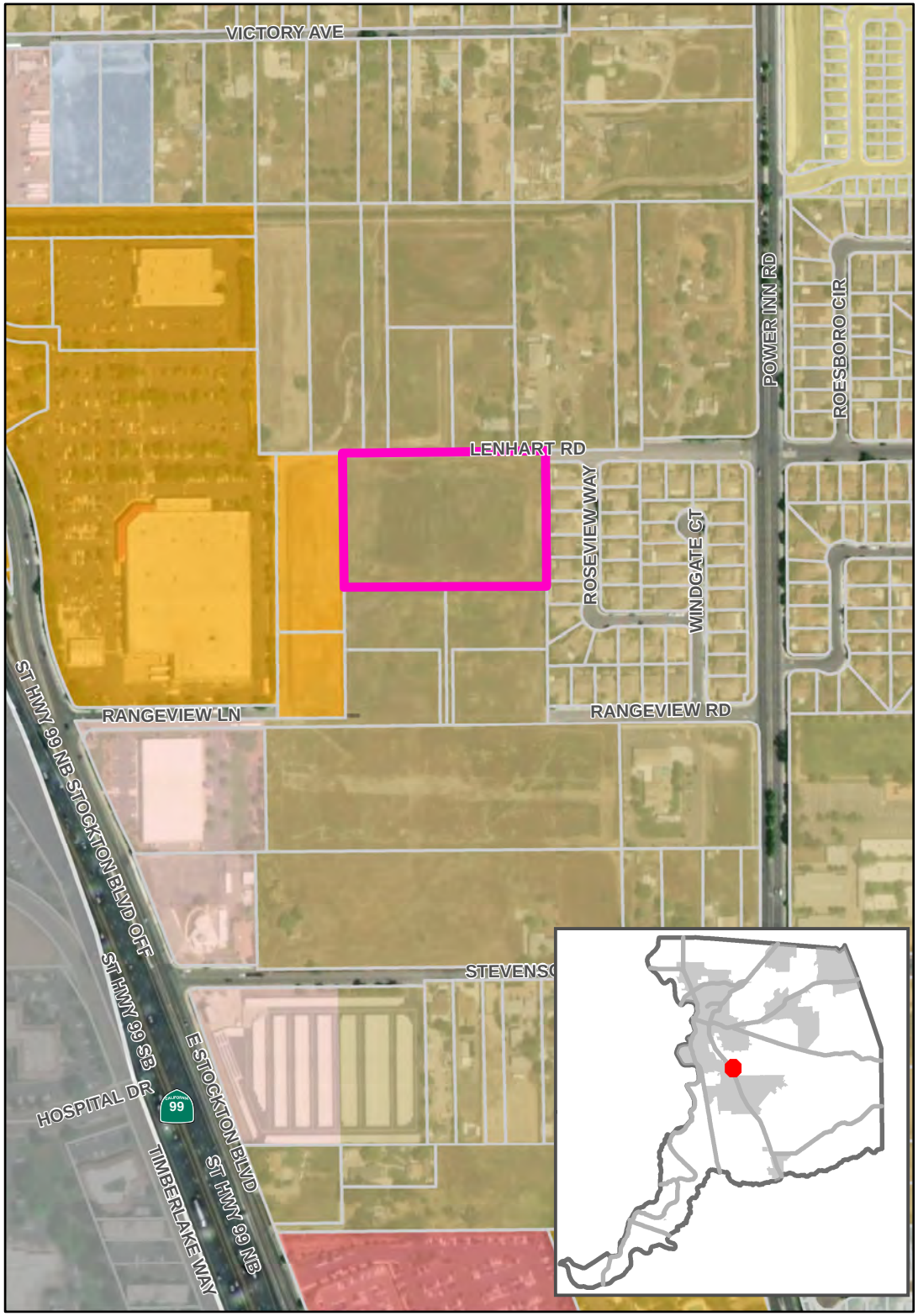
N

0 0.05 0.1 0.2 Miles

Site 58

APN 115-0210-010-0000

540 feet West of Lenhart Road/Power Inn Road, South Sacramento



Legend

- Proposed Rezone Site

Zoning

- AC Auto Commercial
- GC General Commercial
- RD-15 Multiple Family Residential
- RD-20 Multiple Family Residential
- RD-5 Residential
- SC Shopping Center
- SPA Special Planning Area
- TC Highway Travel Commercial

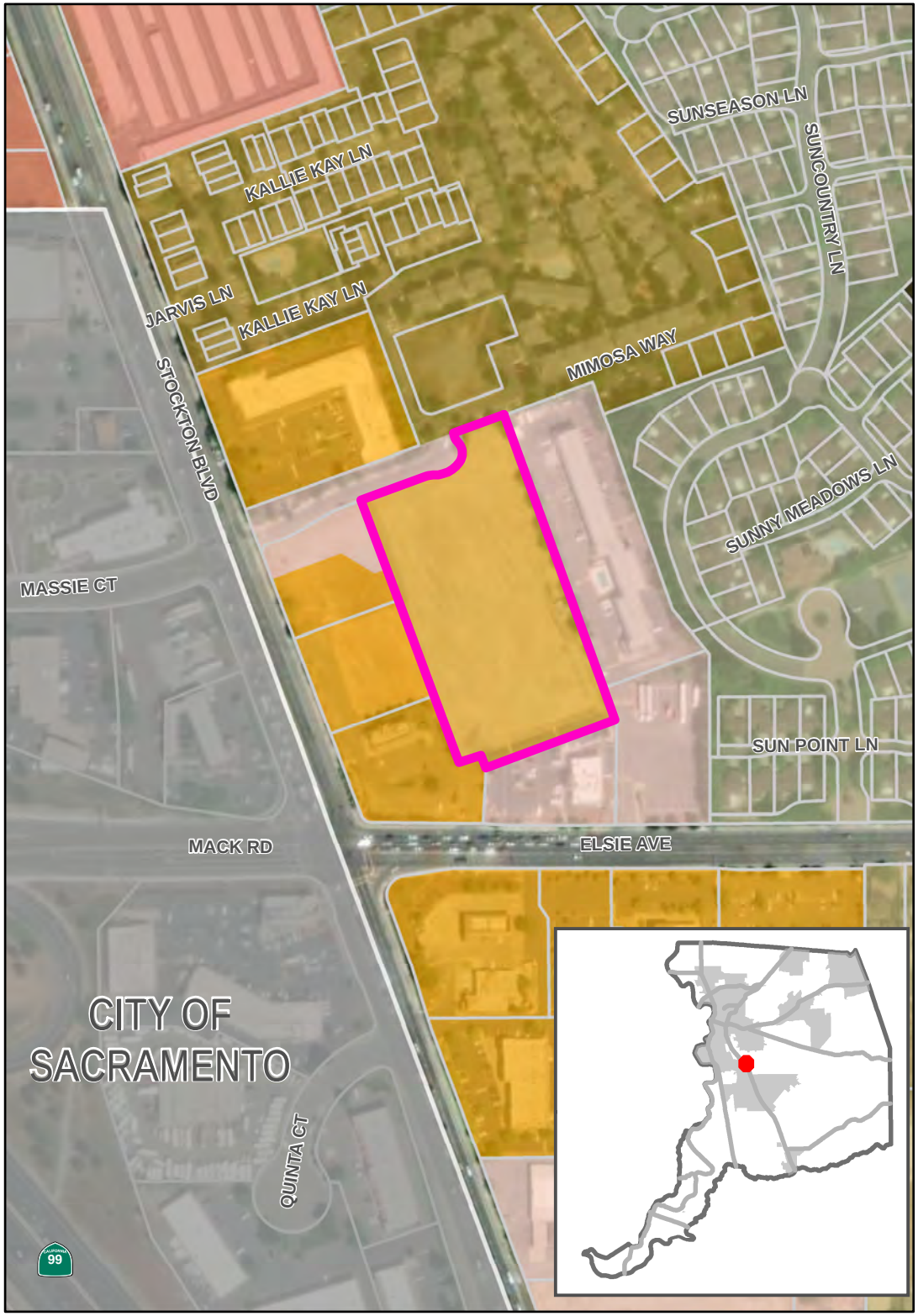
N

0 0.05 0.1 0.2 Miles

Site 59

APN 115-1980-003-0000

7333 Elsie Avenue,
Sacramento



Legend

Proposed Rezone Site

Zoning

- GC General Commercial
- LC Light Commercial
- RD-10 Residential
- RD-20 Multiple Family Residential
- RD-30 Multiple Family Residential
- RD-5 Residential
- RM-1 Mobile Home Subdivision
- SC Shopping Center

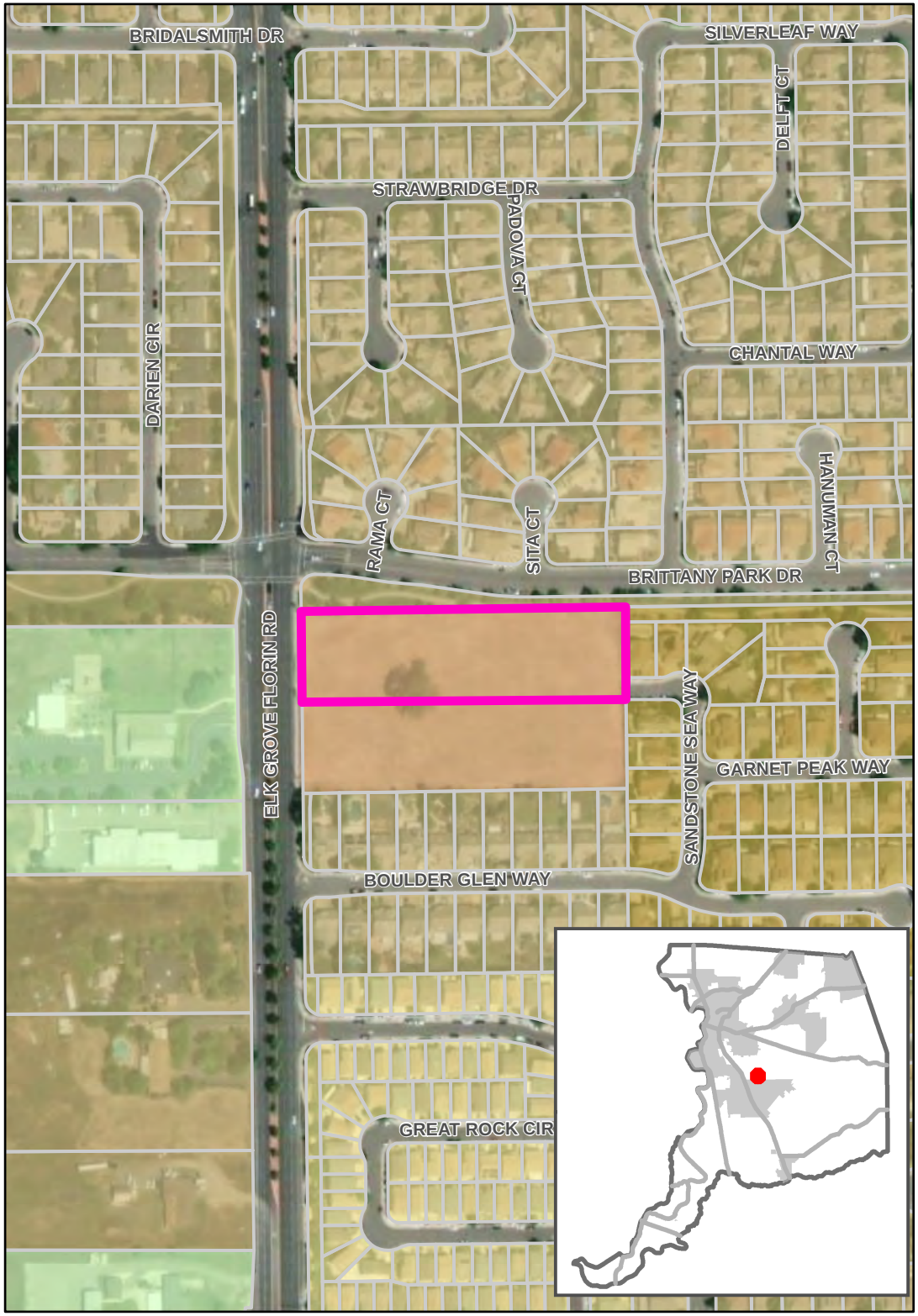
N

0 0.0375 0.075 0.15 Miles

Site 60

APN 121-0120-001-0000

8207 Elk Grove Florin Road, Vineyard



Legend

- Proposed Rezone Site

Zoning

- A-10 Agricultural Holding Zone
- RD-15 Multiple Family Residential
- RD-5 Residential
- RD-7 Residential
- UR Urban Reserve

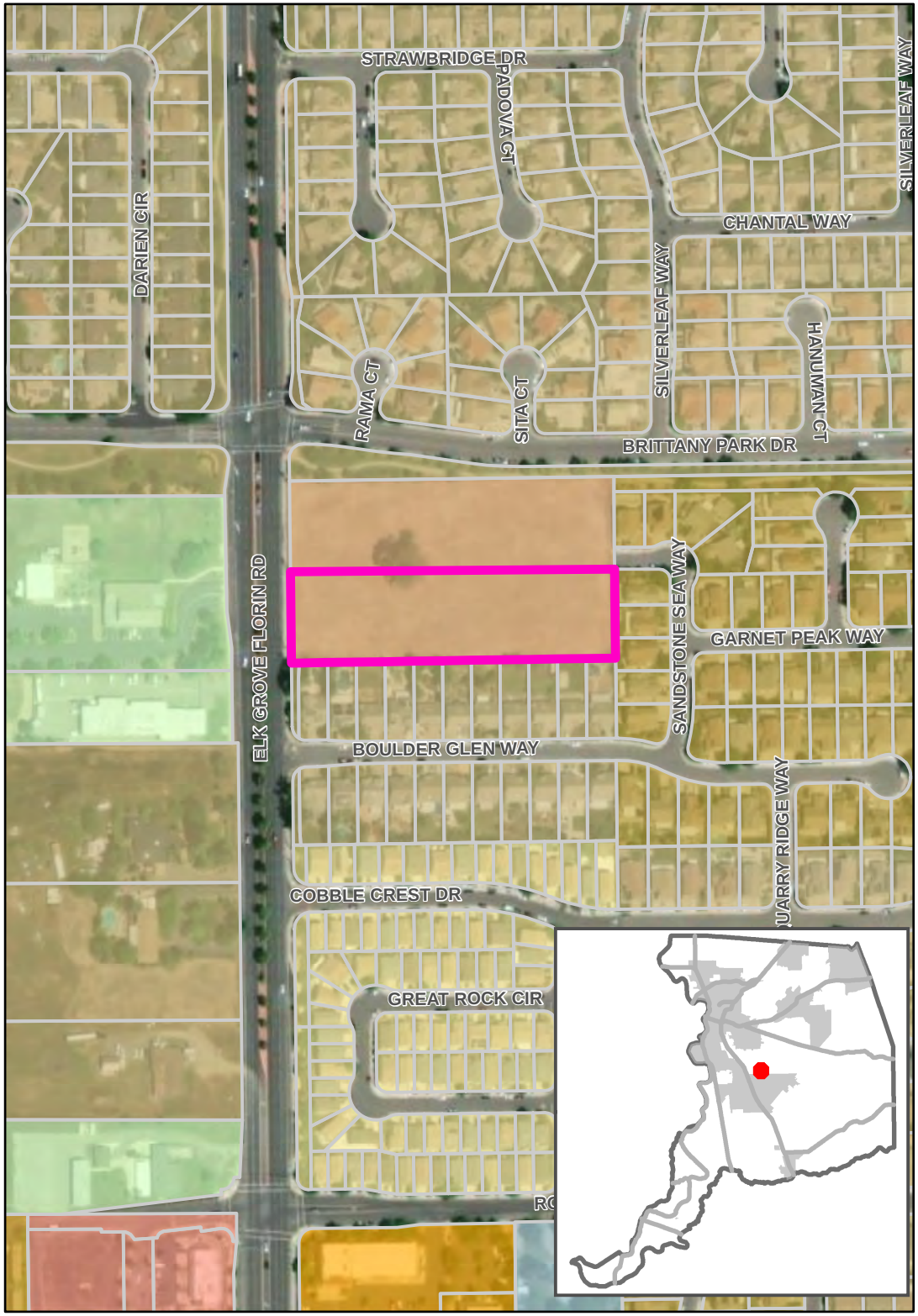
N

0 0.0375 0.075 0.15 Miles

Site 61

APN 121-0120-002-0000

8225 Elk Grove Florin Road, Vineyard



Legend

- Proposed Rezone Site

Zoning

- A-10 Agricultural Holding Zone
- AR-2 Agricultural-Residential - 2 Acres
- LC Light Commercial
- RD-15 Multiple Family Residential
- RD-20 Multiple Family Residential
- RD-5 Residential
- RD-7 Residential
- SC Shopping Center
- UR Urban Reserve

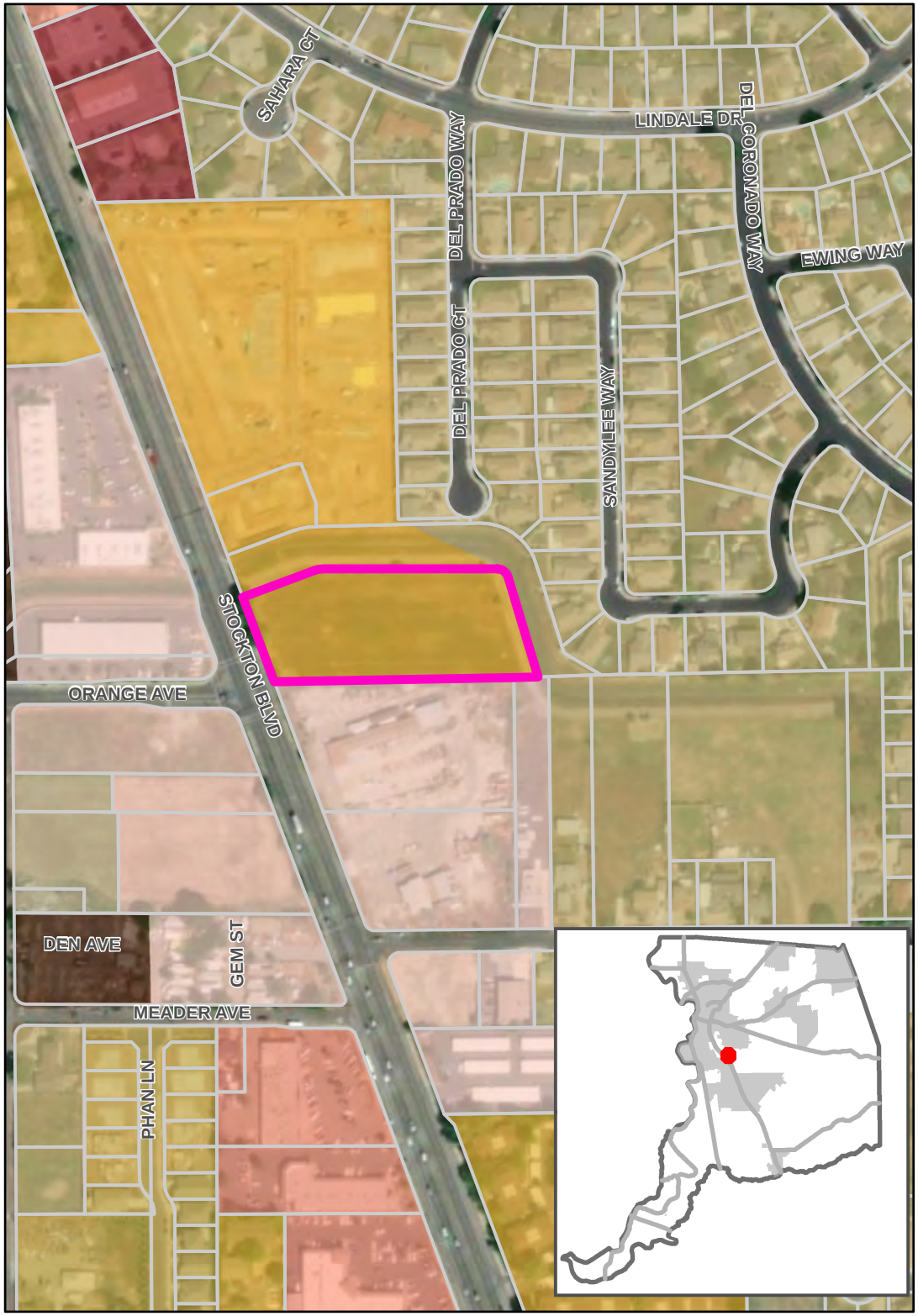
N

0 0.0375 0.075 0.15 Miles

Site 62

APN 051-0640-049-0000

Northeast Stockton Boulevard/Orange Avenue,
South Sacramento



Legend

Proposed Rezone Site

Zoning

- BP Business and Professional Office
- GC General Commercial
- LC Light Commercial
- RD-10 Residential
- RD-20 Multiple Family Residential
- RD-5 Residential
- RD-7 Residential
- RM-1 Mobile Home Subdivision

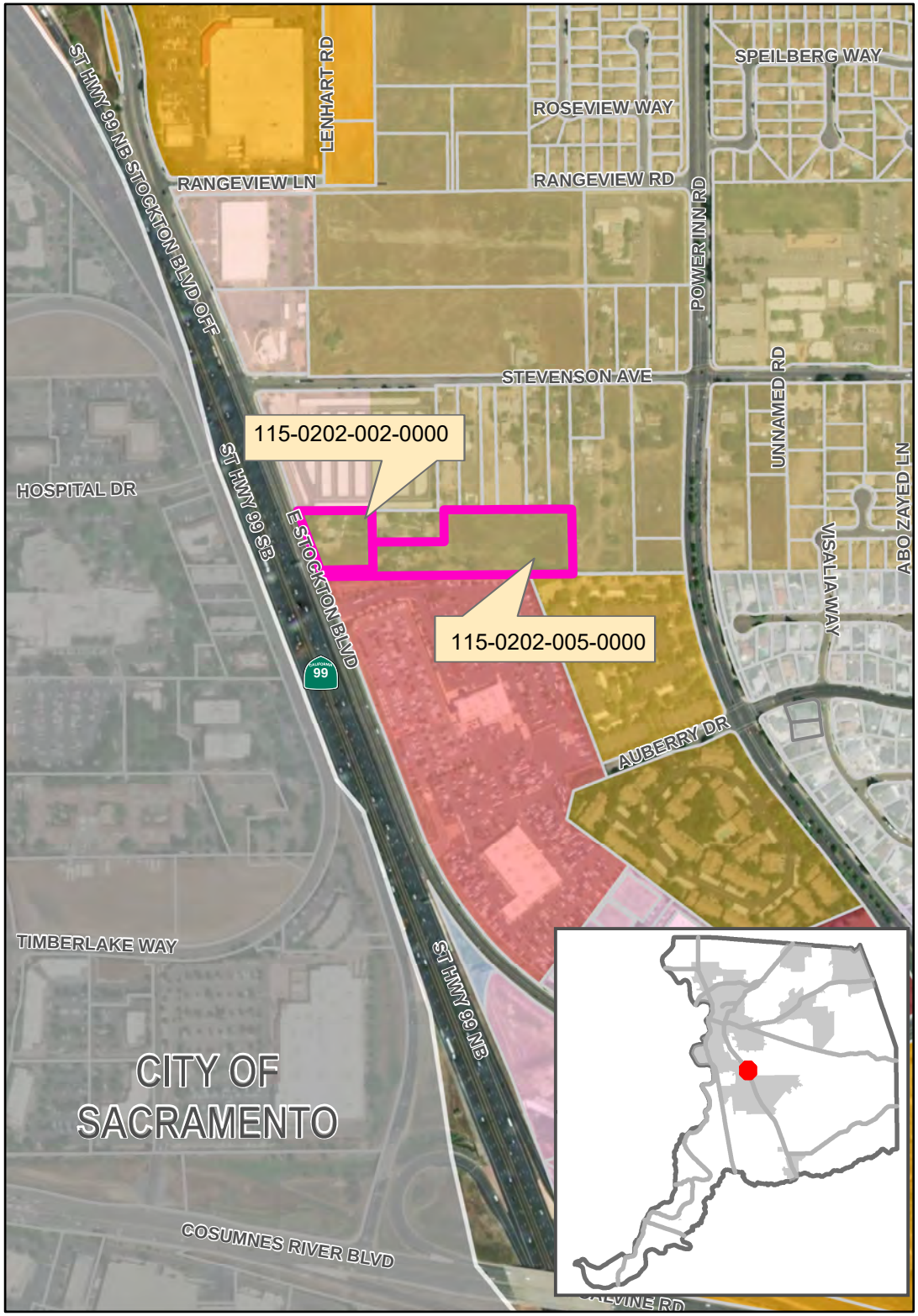
N

0 0.0375 0.075 0.15 Miles

Site 63

APNs 115-0202-002-0000 &
115-0202-005-0000

8095 & 8099 E Stockton Boulevard, South Sacramento



Legend

Proposed Rezone Site

Zoning

- AC Auto Commercial
- BP Business and Professional Office
- GC General Commercial
- MP Industrial - Office Park
- RD-20 Multiple Family Residential
- RD-30 Multiple Family Residential
- RD-5 Residential
- SC Shopping Center
- SPA Special Planning Area
- TC Highway Travel Commercial

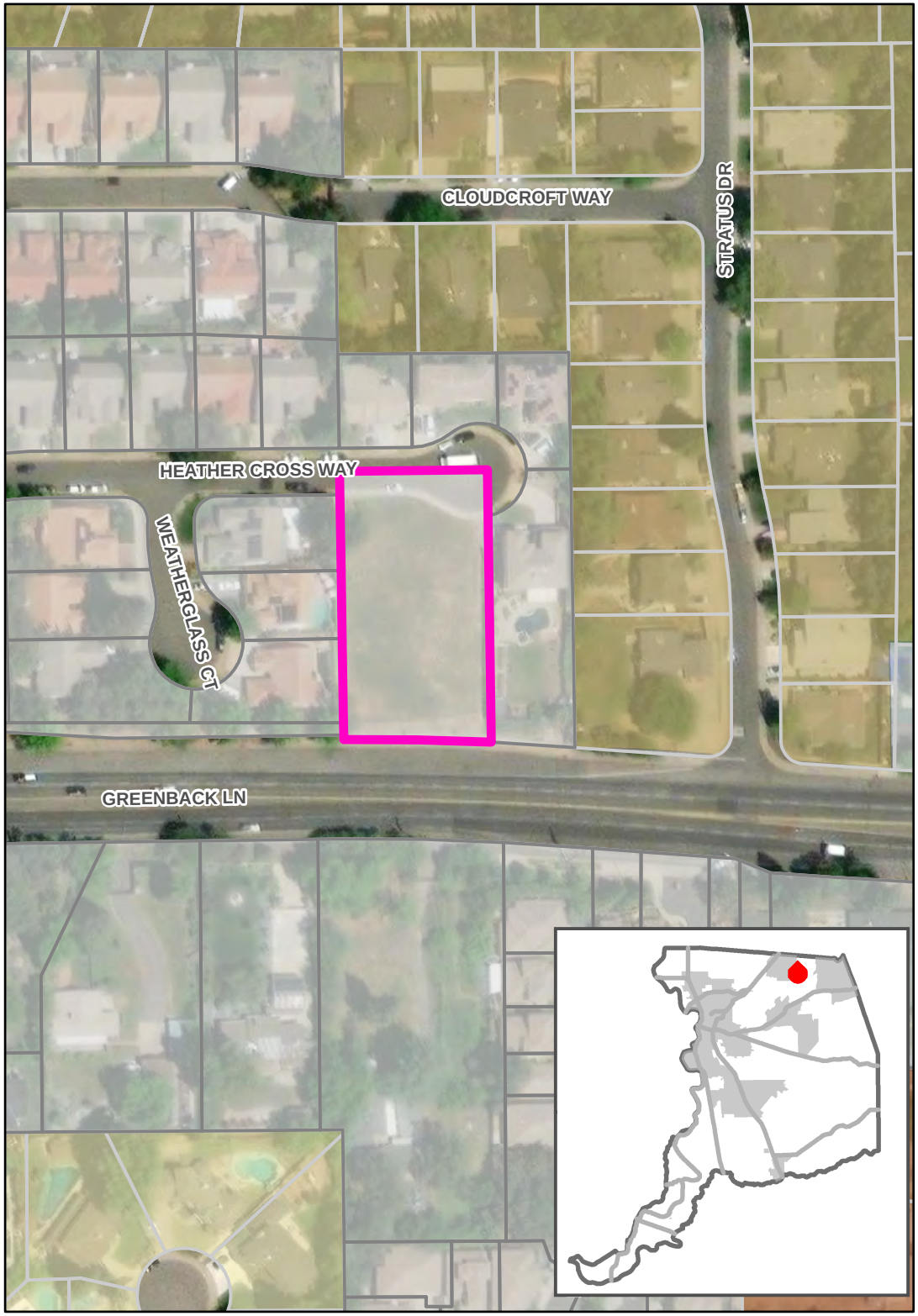
N

0 0.05 0.1 0.2 Miles

Site 64

APN 261-0160-018-0000

8553 Greenback Lane, Orangevale



Legend

Proposed Rezone Site

Zoning

- RD-2 Residential
- RD-3 Residential
- RD-4 Residential
- RD-5 Residential
- SPA Special Planning Area

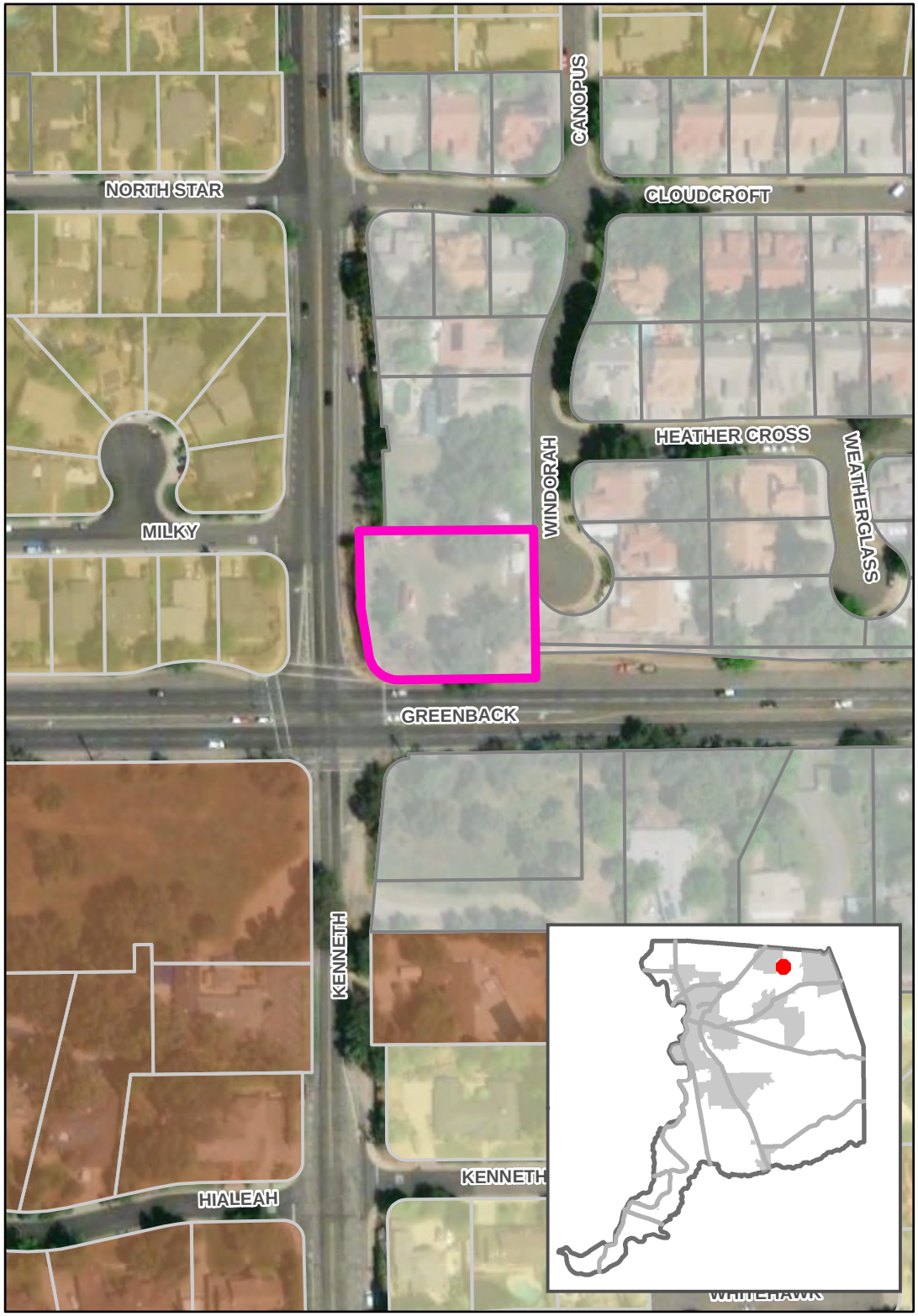
N

0 0.025 0.05 0.1 Miles

Site 65

APN 261-0160-020-0000

NE Greenback Lane/Kenneth Avenue, Orangevale



Legend

- Proposed Rezone Site

Zoning

- RD-2 Residential
- RD-3 Residential
- RD-5 Residential
- SPA Special Planning Area

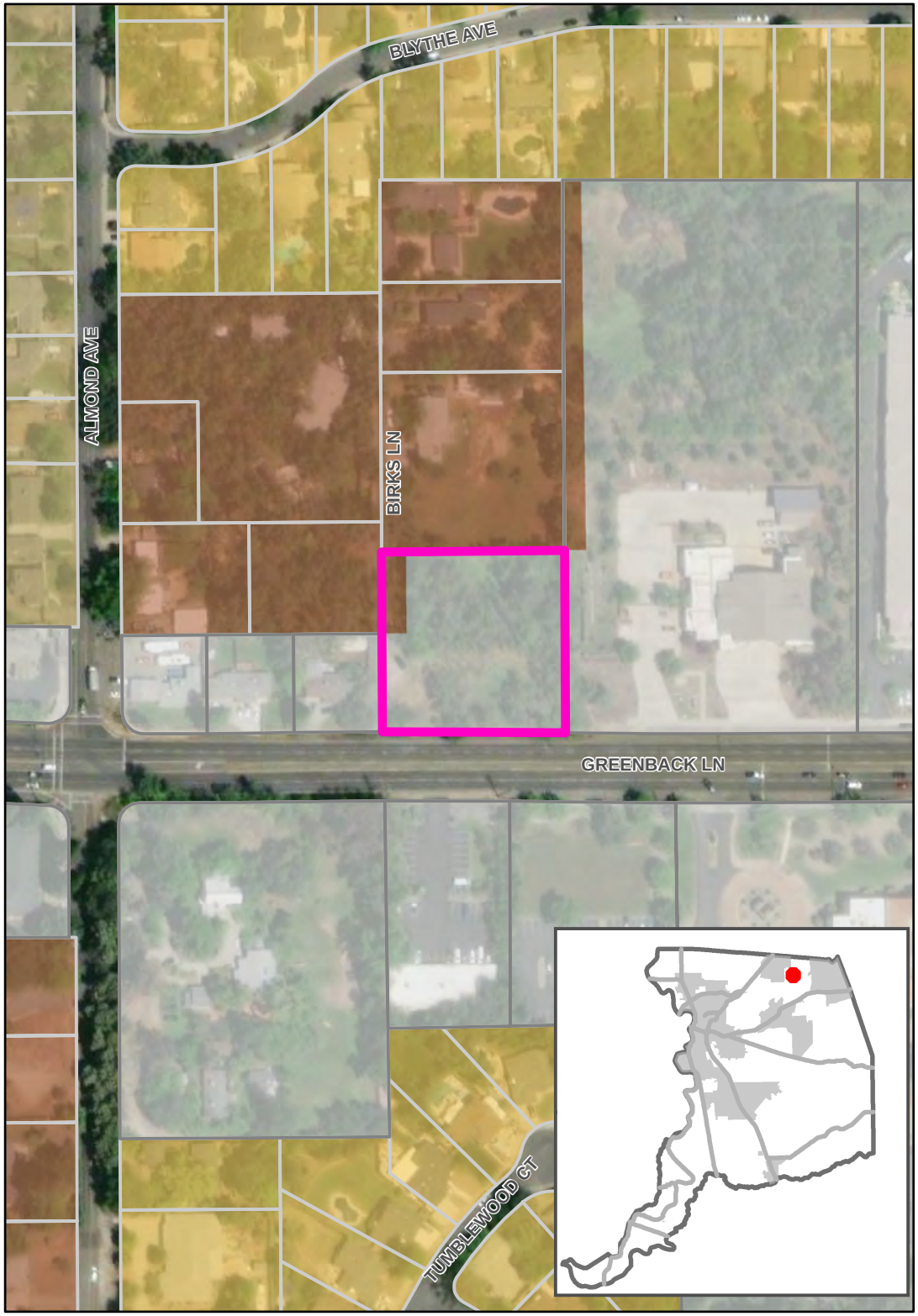
N

0 0.025 0.05 0.1 Miles

Site 66

APN 261-0160-034-0000

300 feet E of Greenback Lane/Almond Avenue, Orangevale



Legend

Proposed Rezone Site

Zoning

- RD-2 Residential
- RD-3 Residential
- RD-4 Residential
- RD-5 Residential
- SPA Special Planning Area

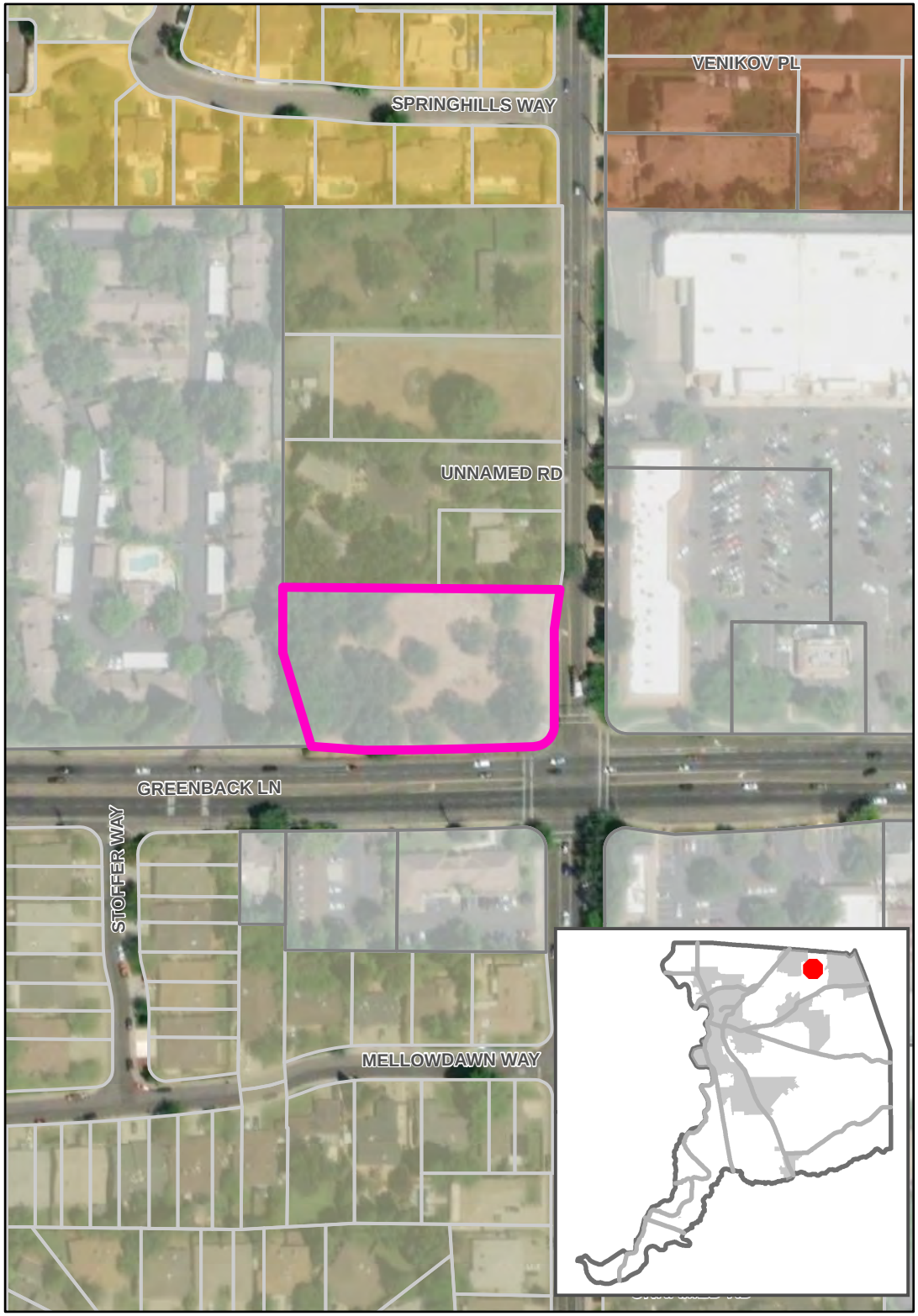
N

0 0.025 0.05 0.1 Miles

Site 67

APN 261-0210-019-0000

Northwest Beech Avenue/Greenback Lane, Orangevale



Legend

Proposed Rezone Site

Zoning

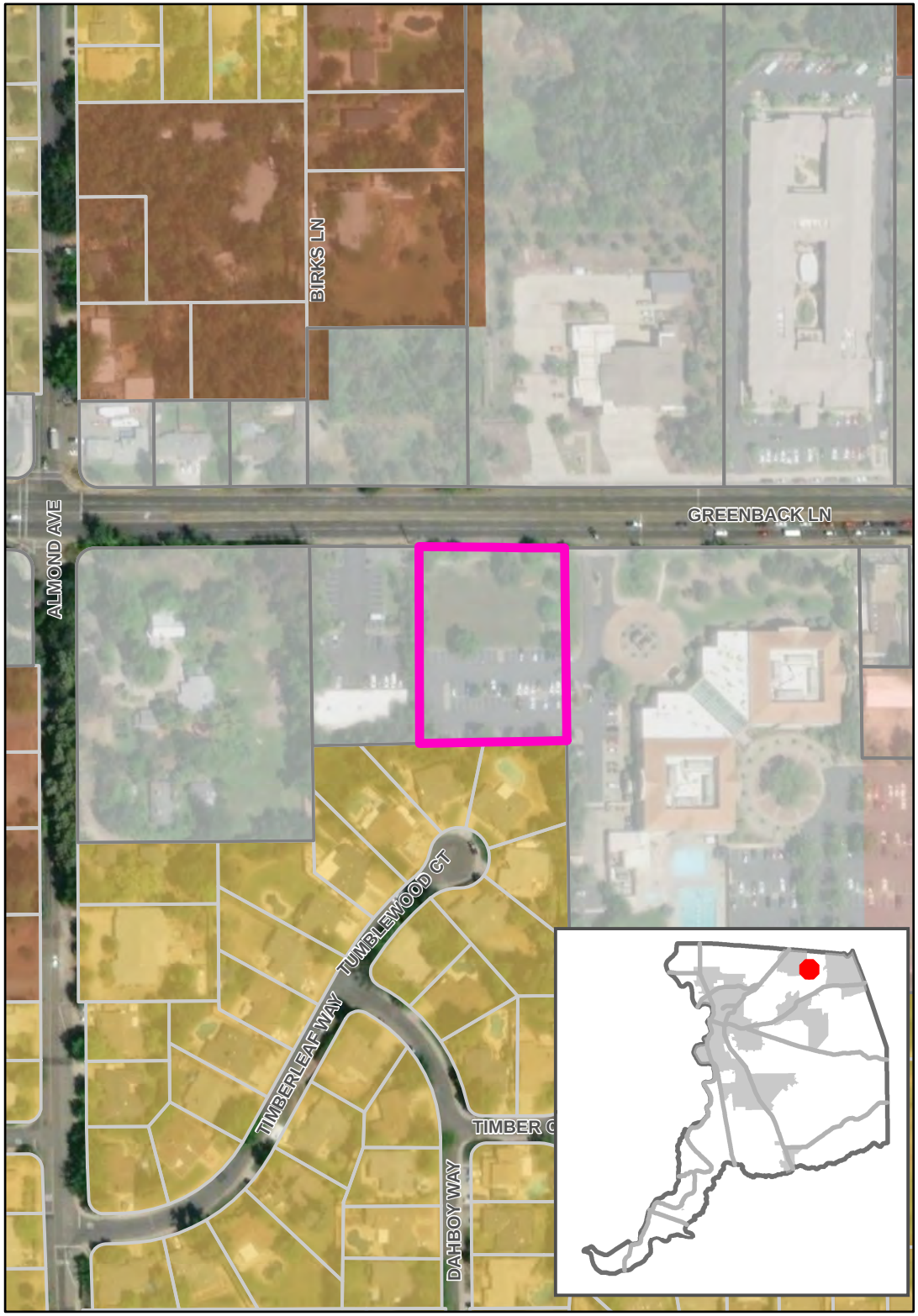
- RD-2 Residential
- RD-3 Residential
- RD-4 Residential
- RD-5 Residential
- SPA Special Planning Area

N

0 0.025 0.05 0.1 Miles

Site 68

APN 261-0220-038-0000
8646 Greenback Lane,
Orangevale



Legend

- Proposed Rezone Site

Parcel Zone

- GC General Commercial
- RD-2 Residential
- RD-4 Residential
- RD-5 Residential
- SPA Special Planning Area

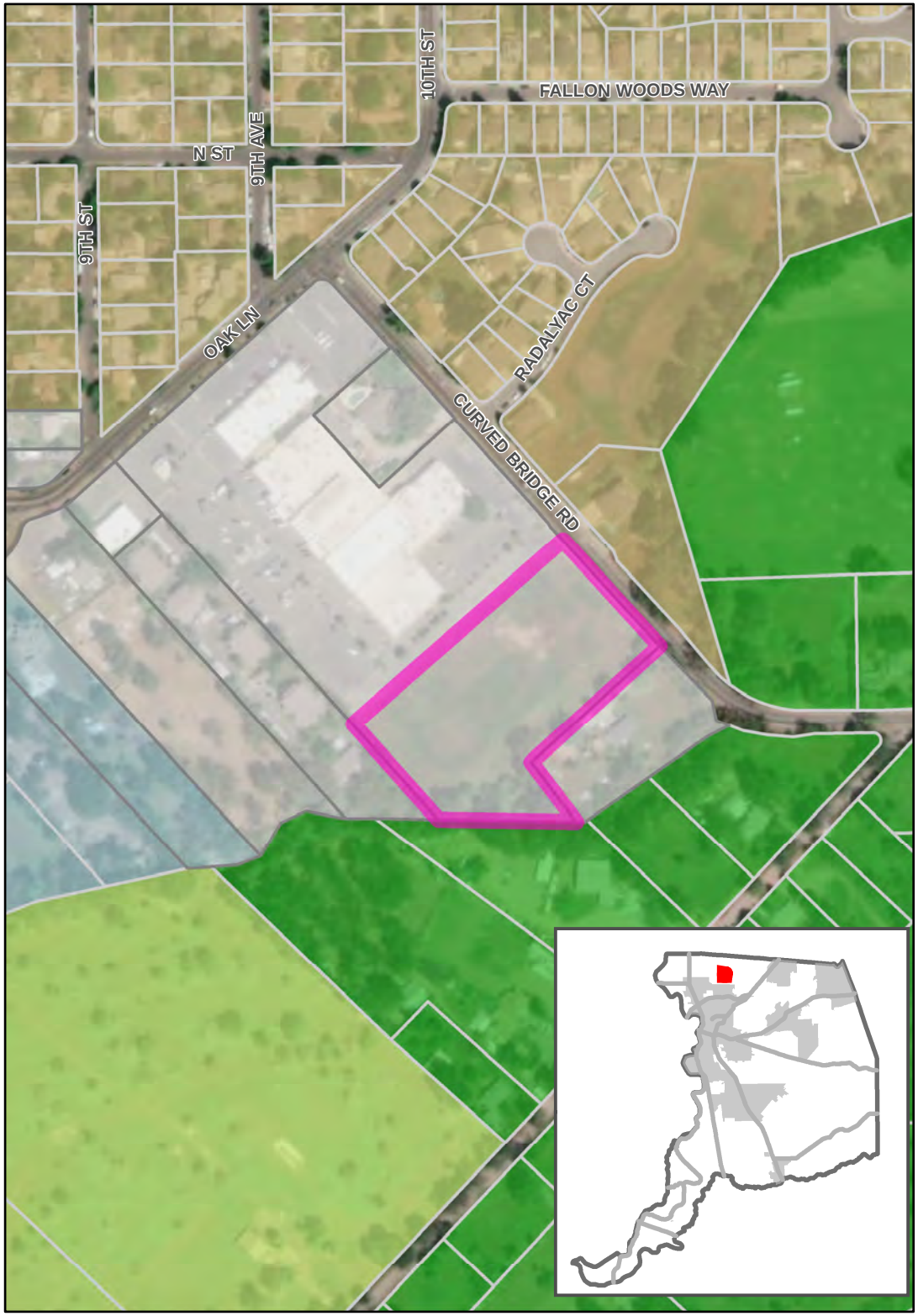
N

0 0.025 0.05 0.1 Miles

Site 69

APN 207-0141-015-0000

970 Oak Lane,
Rio Linda/Elverta



Legend

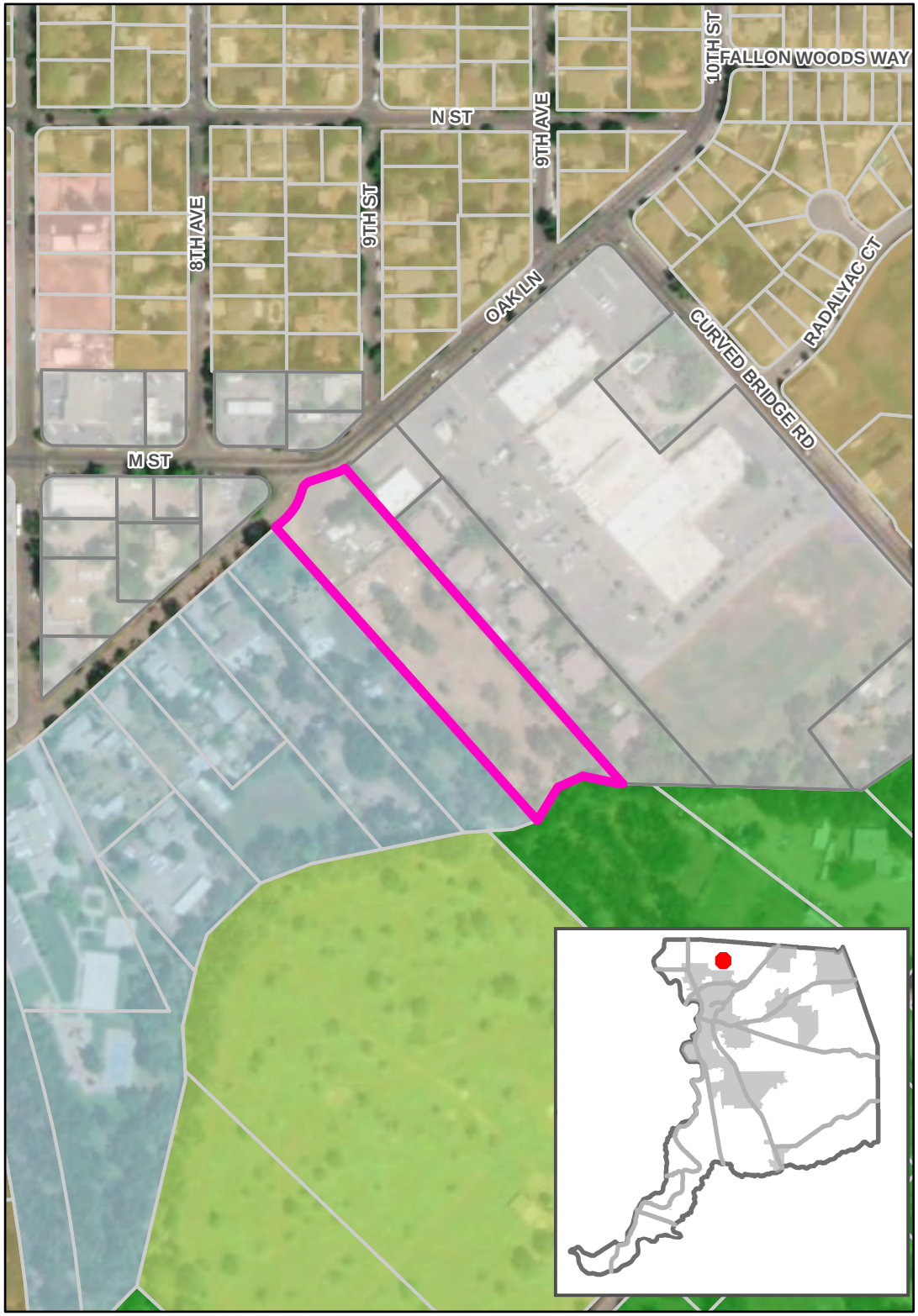
Proposed Rezone Site

Zoning

- AG-80 Agricultural - 80 Acres
- AR-2 Agricultural-Residential - 2 Acres
- RD-5 Residential
- RR Recreation Reserve
- SPA Special Planning Area

N

0 0.05 0.1 0.2 Miles



Site 70

APN 207-0300-009-0000 864

Oak Lane,

Rio Linda/Elverta

Legend

Parcel Rezone Site

Zoning

- AG-80 Agricultural - 80 Acres
- AR-2 Agricultural-Residential - 2 Acres
- GC General Commercial
- RD-5 Residential
- RR Recreation Reserve
- SPA Special Planning Area

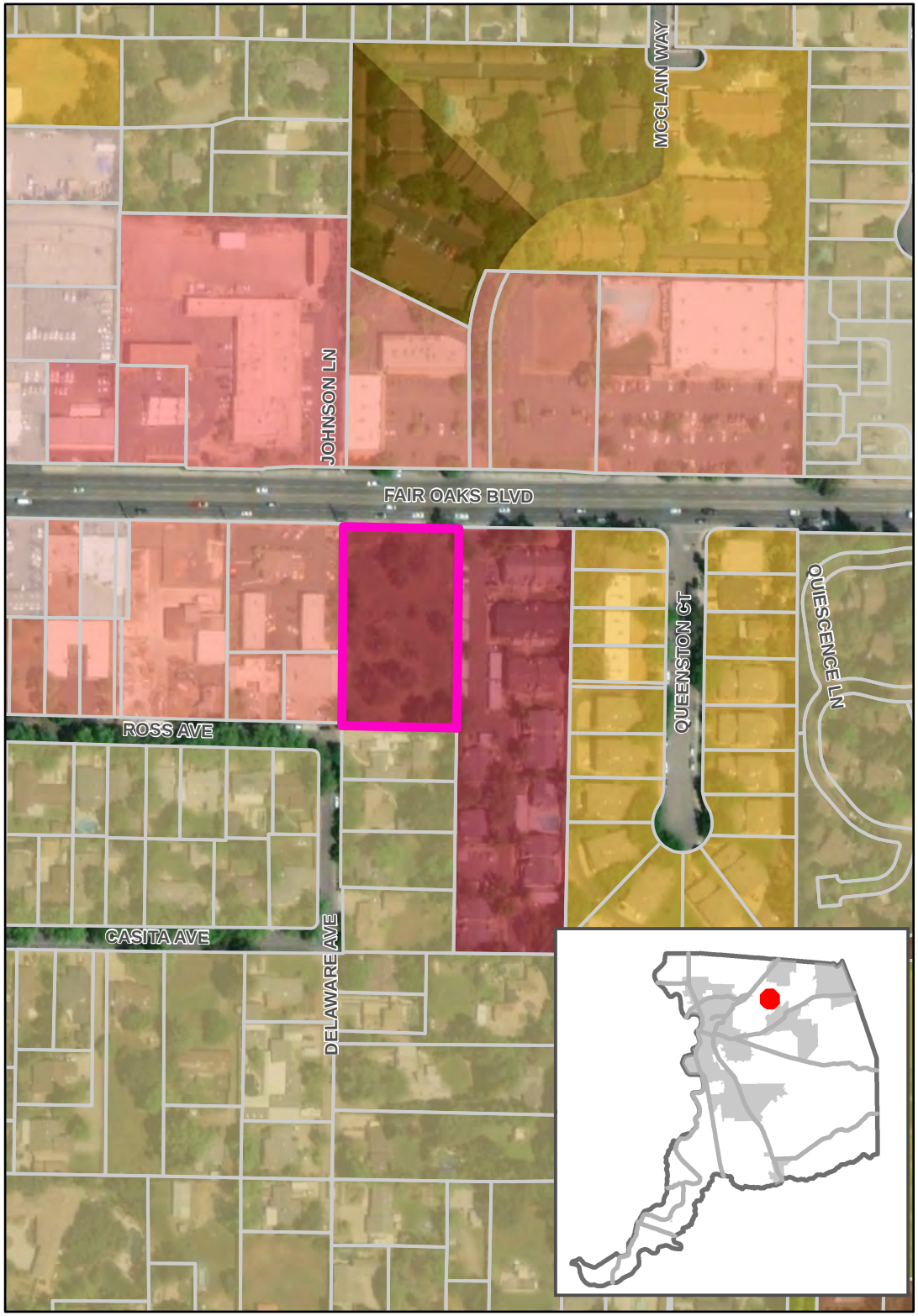
N

0 0.05 0.1 0.2 Miles

Site 71

APN 260-0310-025-0000

7904 Fair Oaks Boulevard,
Carmichael/Old Foothill Farms



Legend

Proposed Rezone Site

Zoning

- AC Auto Commercial
- BP Business and Professional Office
- GC General Commercial
- LC Light Commercial
- RD-1 Residential
- RD-10 Residential
- RD-2 Residential
- RD-20 Multiple Family Residential
- RD-30 Multiple Family Residential
- RD-40 Multiple Family Residential
- RD-5 Residential

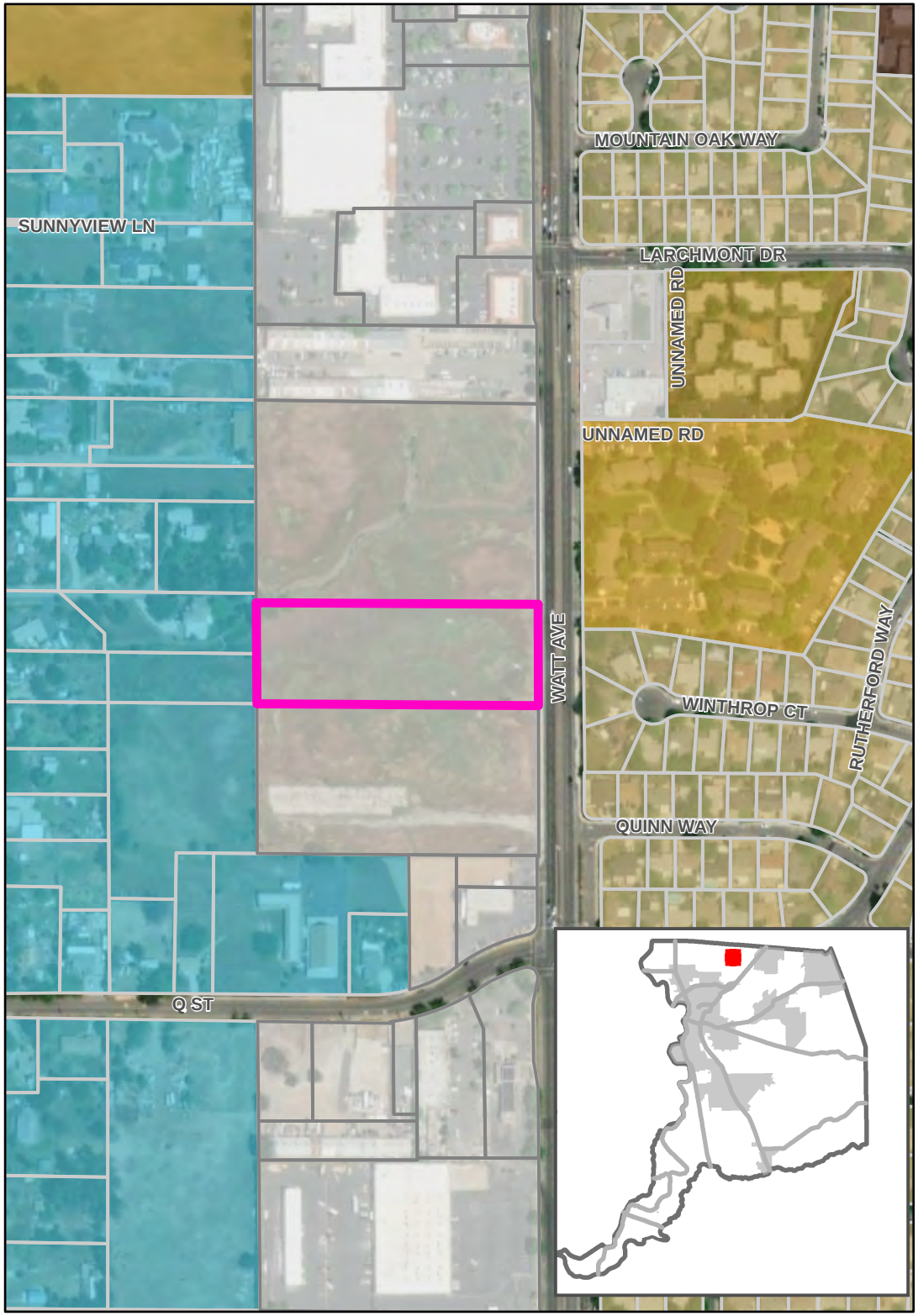
N

0 0.0375 0.075 0.15
Miles

Site 72

APN 208-0122-066-0000

500 feet North of Watt Avenue/Q Street, North Highlands



Legend

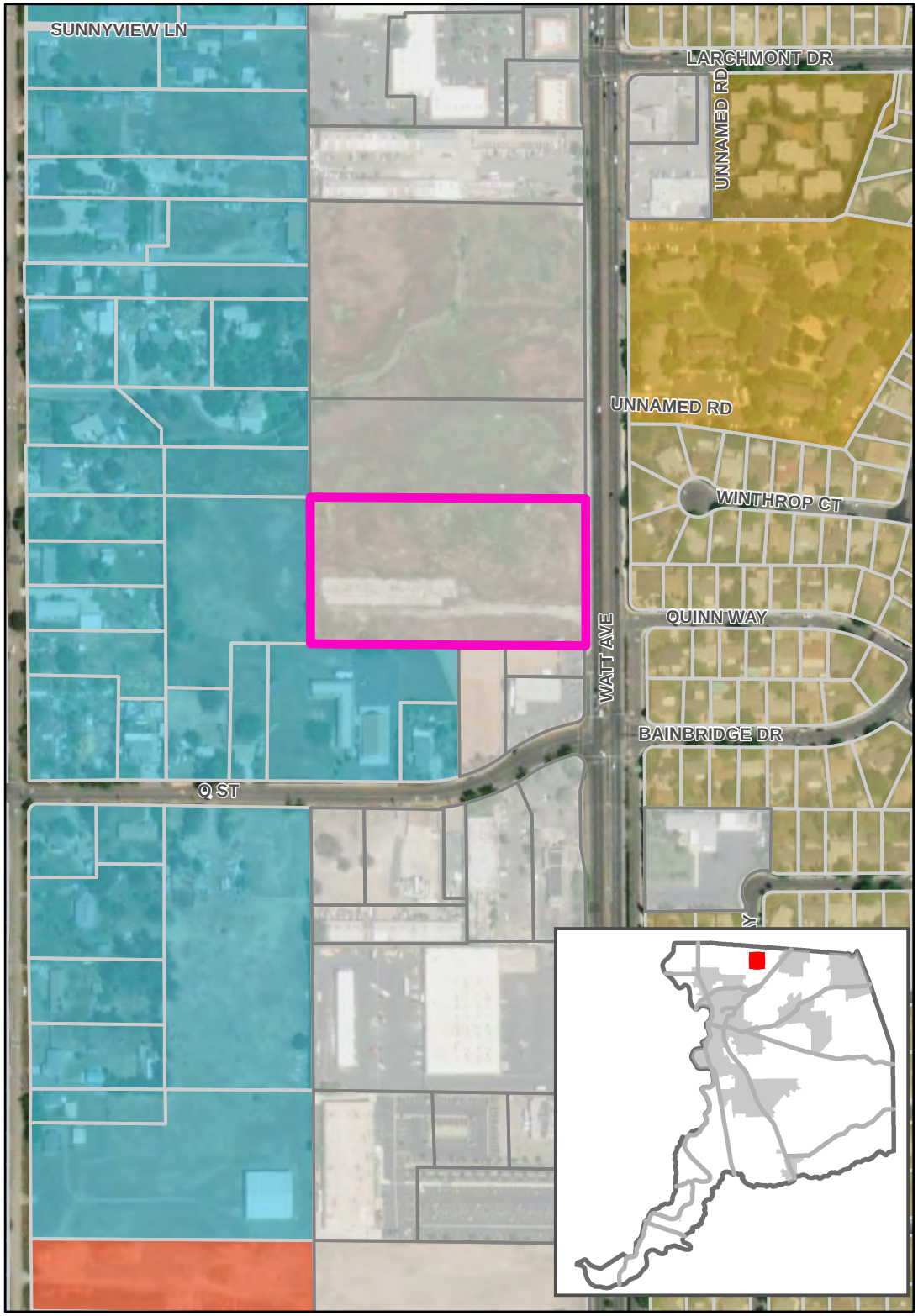
- Proposed Rezone Site

Zoning

- AR-1 Agricultural-Residential - 1 Acre
- RD-20 Multiple Family Residential
- RD-30 Multiple Family Residential
- RD-5 Residential
- RD-7 Residential
- RM-1 Mobile Home Subdivision
- SPA Special Planning Area

N

0 0.05 0.1 0.2 Miles



Site 73

APN 208-0132-008-0000

7235 Watt Avenue,
North Highlands

Legend

- Proposed Rezone Site

Zoning

- AR-1 Agricultural-Residential - 1 Acre
- M-1 Light Industrial
- RD-20 Multiple Family Residential
- RD-30 Multiple Family Residential
- RD-5 Residential
- SPA Special Planning Area

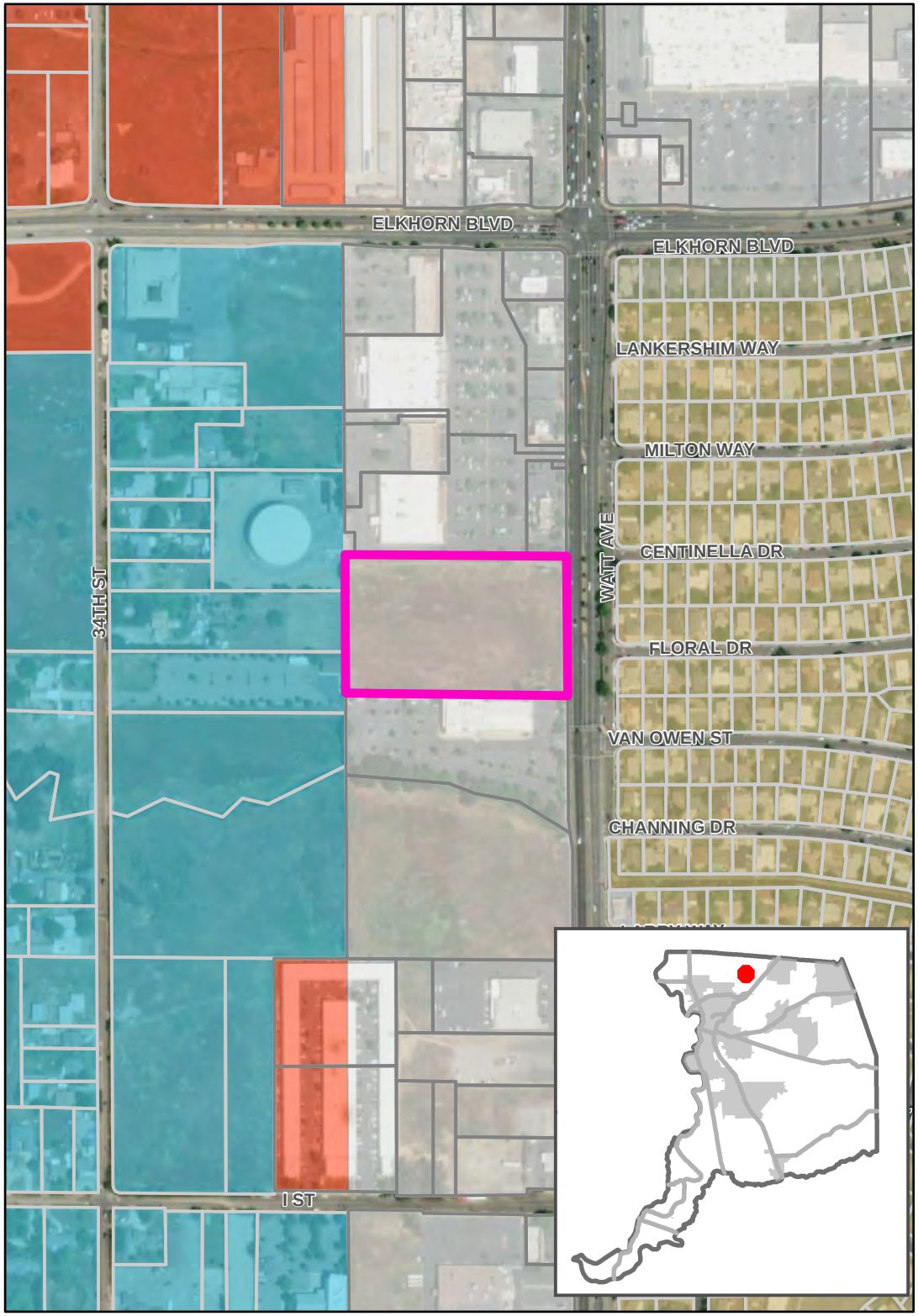
N

0 0.05 0.1 0.2 Miles

Site 74

APN 208-0162-018-0000

0.2 Miles South of Watt Avenue/
Elkhorn Boulevard,
North Highlands



Legend

- Proposed Rezone Site

Zoning

- AR-1 Agricultural-Residential - 1 Acre
- M-1 Light Industrial
- RD-10 Residential
- RD-5 Residential
- SPA Special Planning Area

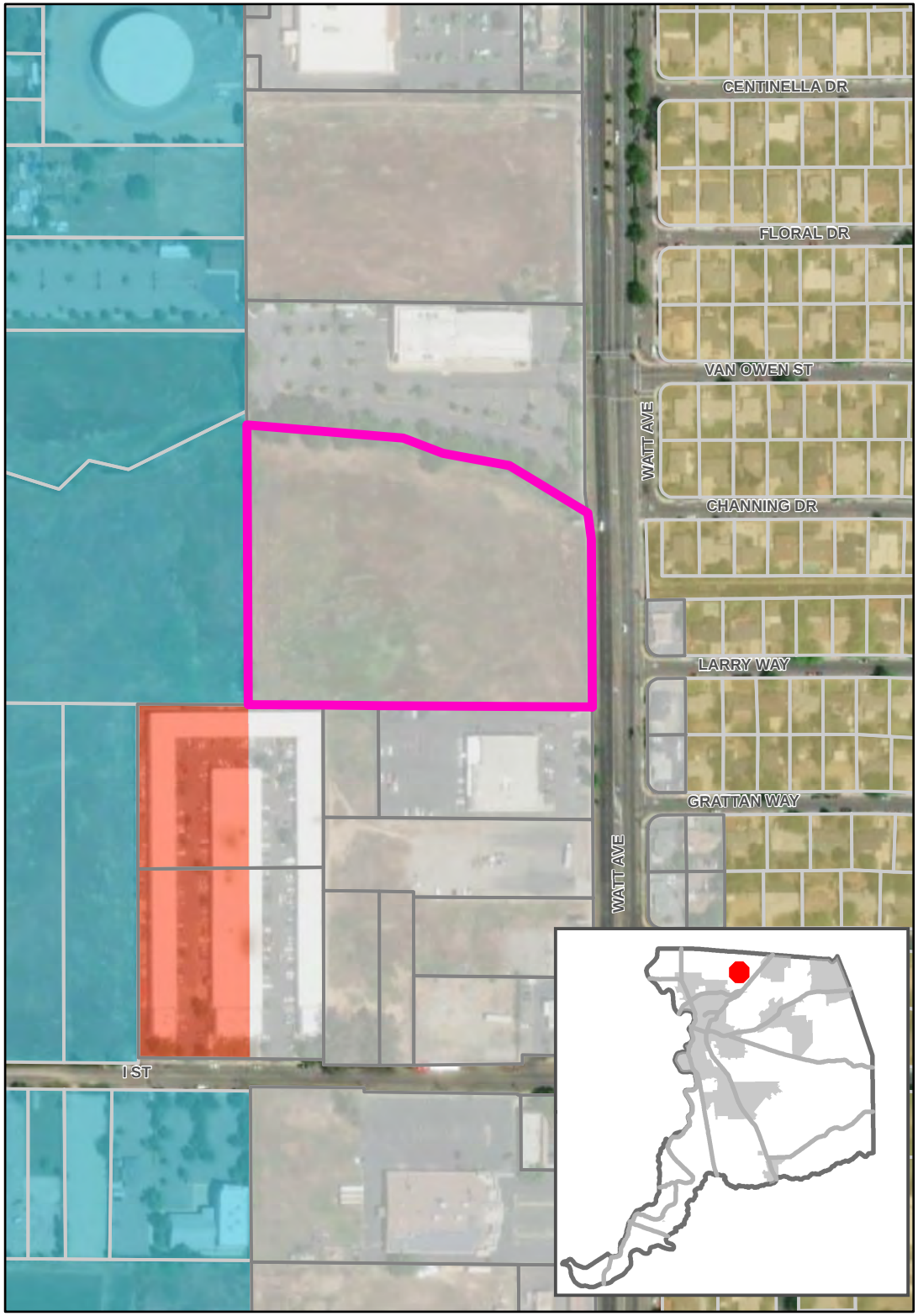
N

0 0.05 0.1 0.2 Miles

Site 75

APN 208-0162-027-0000

0.1 miles North of Watt Avenue/I Street, North Highlands



Legend

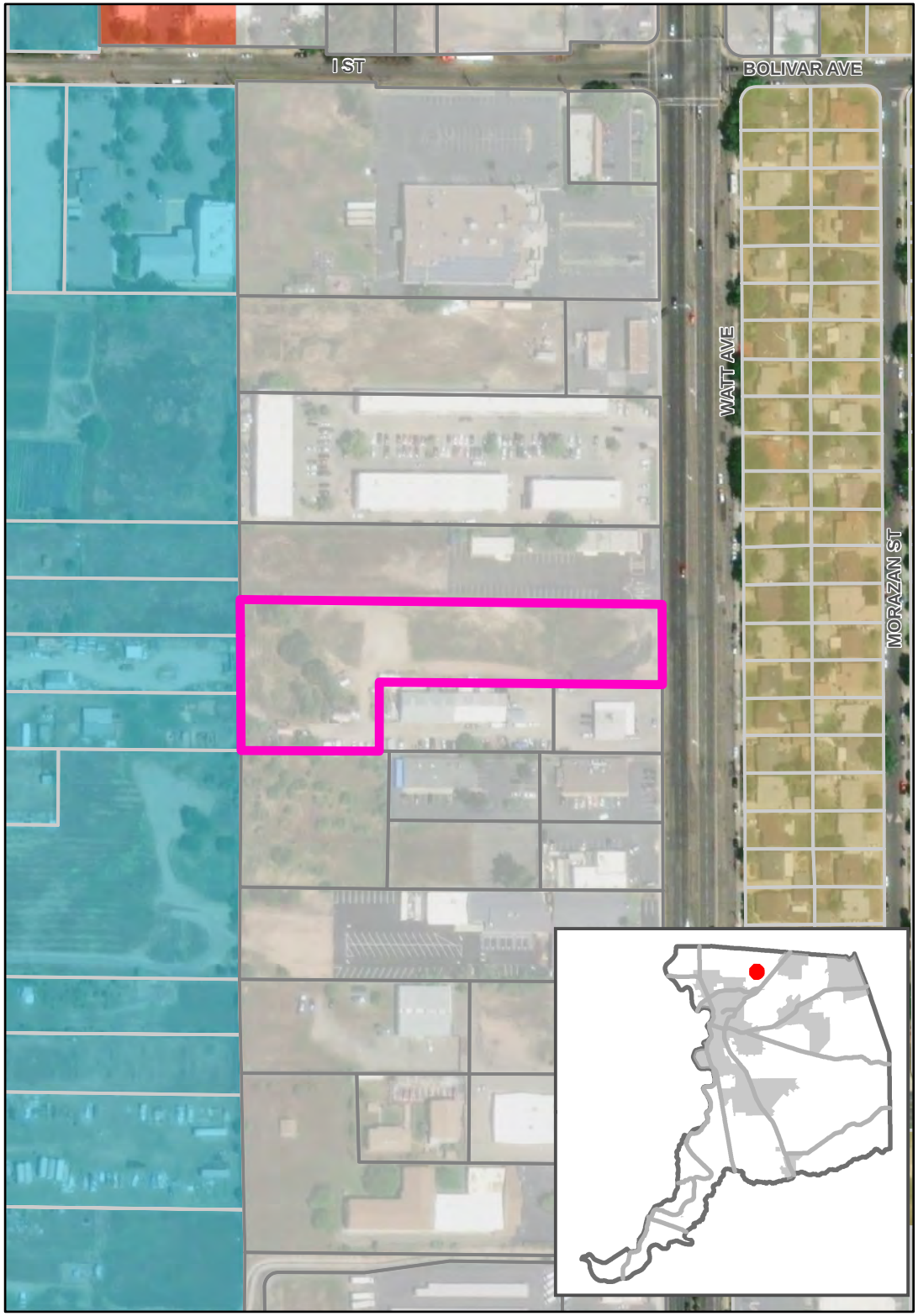
Proposed Rezone Site

Zoning

- AR-1 Agricultural-Residential - 1 Acre
- M-1 Light Industrial
- RD-5 Residential
- SPA Special Planning Area

N

0 0.0375 0.075 0.15 Miles



Site 76

APN 215-0062-057-0000

6233 Watt Avenue,
North Highlands

Legend

Proposed Rezone Site

Zoning

- AR-1 Agricultural-Residential - 1 Acre
- M-1 Light Industrial
- RD-5 Residential
- SPA Special Planning Area

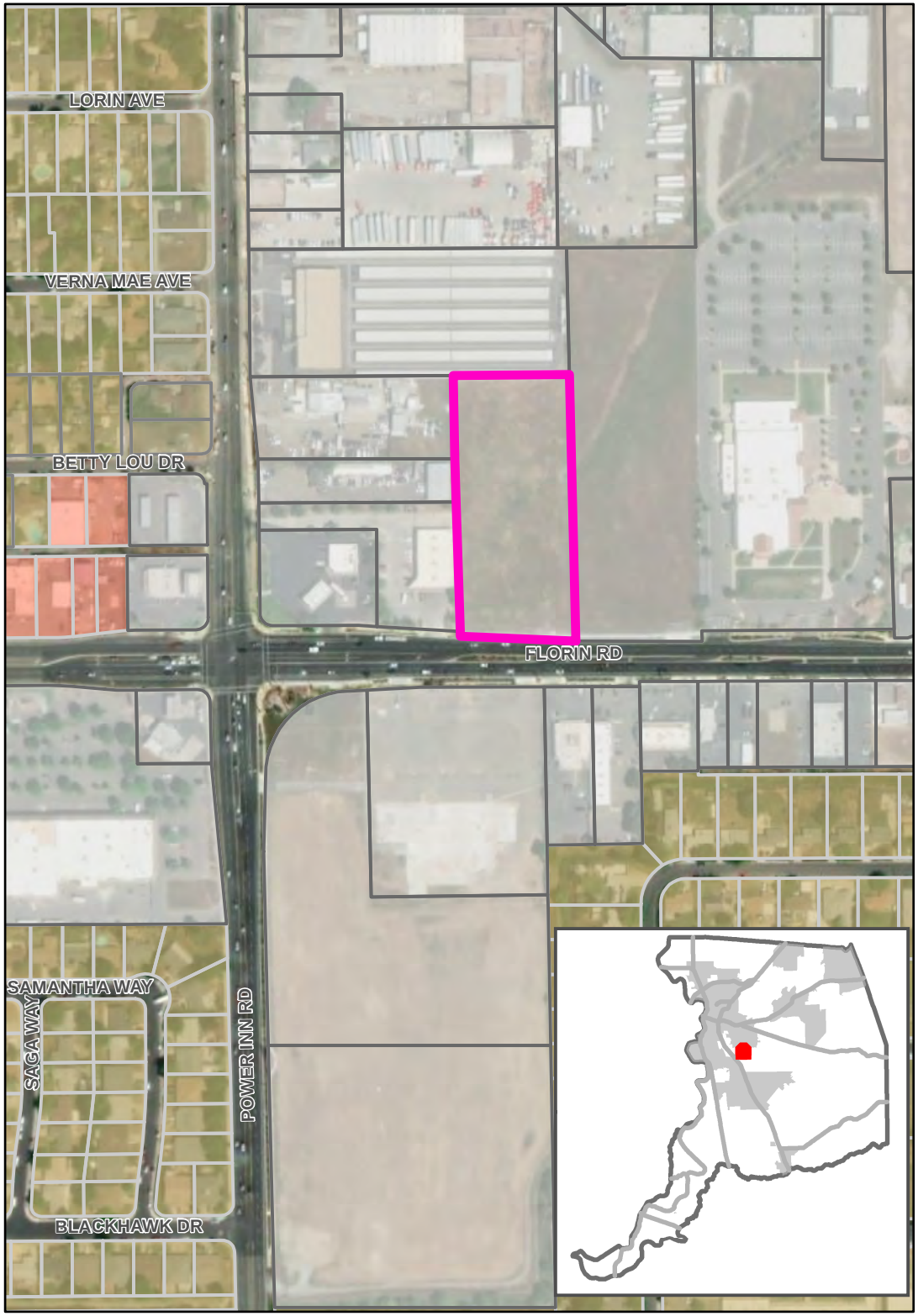
N

0 0.025 0.05 0.1 Miles

Site 77

APN 043-0070-005-0000

8149 Florin Road,
South Sacramento



Legend

Proposed Rezone Site

Zoning

- LC Light Commercial
- RD-10 Residential
- RD-5 Residential
- SPA Special Planning Area

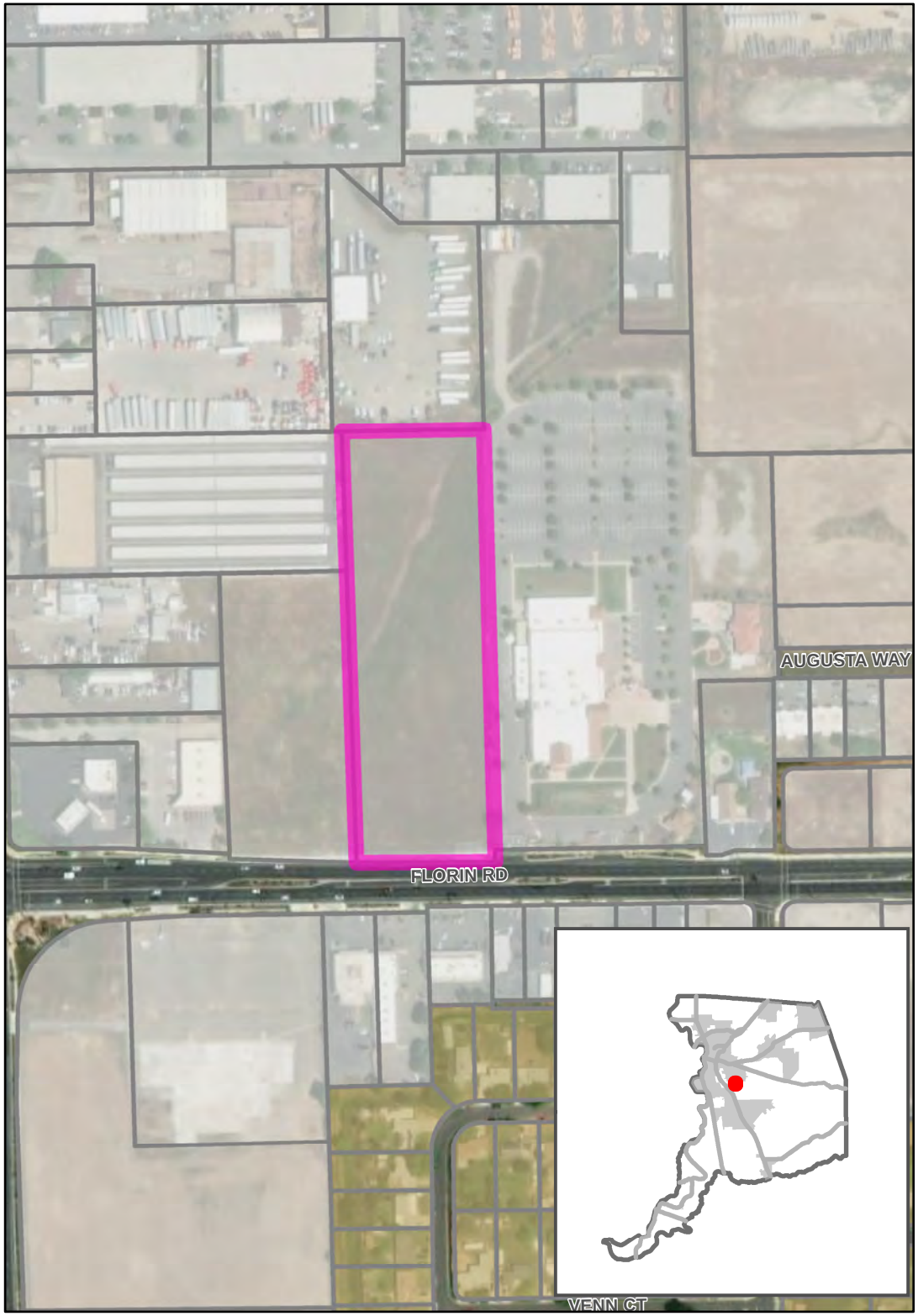
N

0 0.0375 0.075 0.15
Miles

Site 78

APN 043-0070-034-0000

8165 Florin Road,
South Sacramento



Legend

Proposed Rezone Site

Zoning

RD-10 Residential

RD-5 Residential

SPA Special Planning Area

N

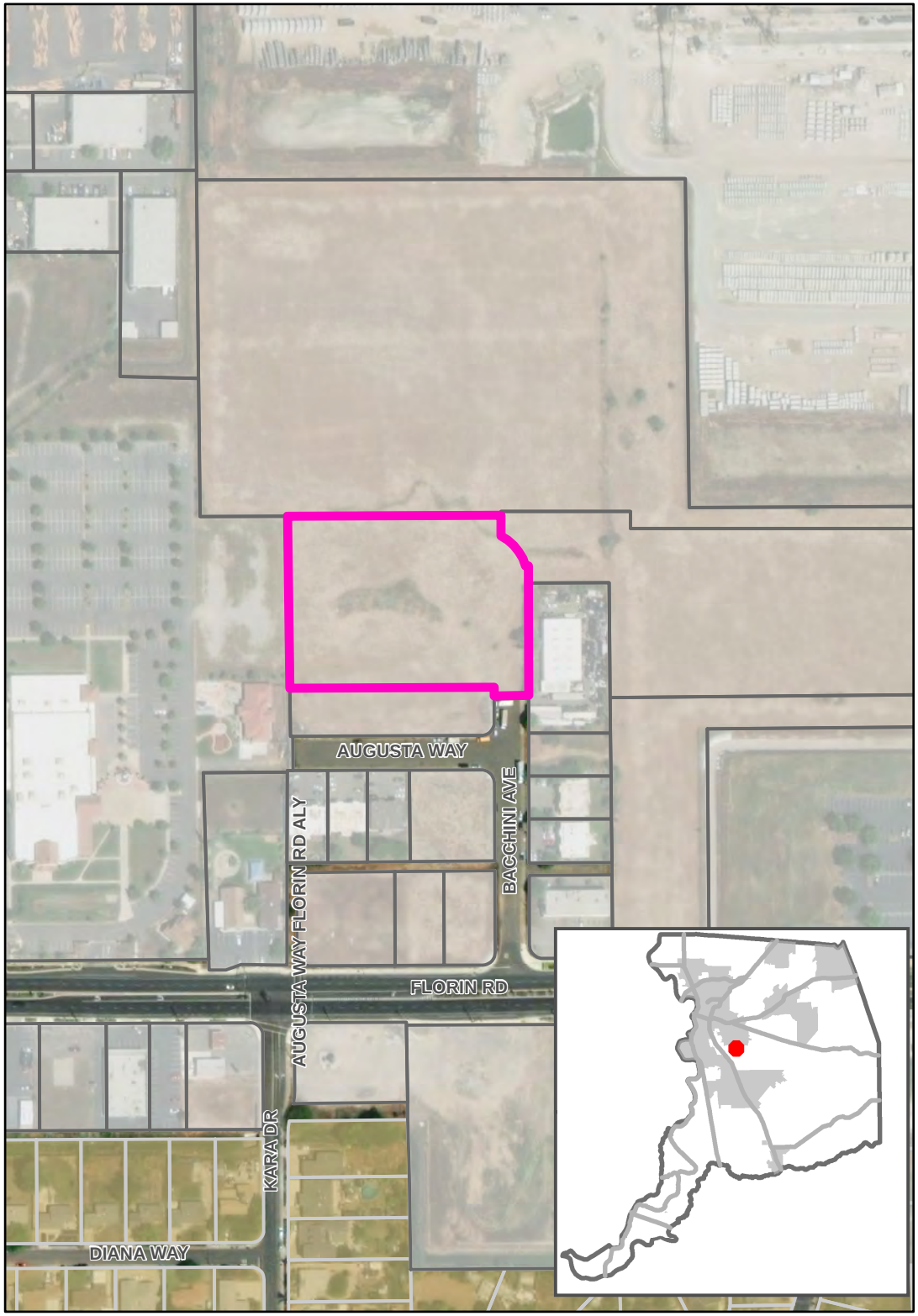
0 0.0375 0.075 0.15

Miles

Site 79

APN 043-0230-021-0000

90 feet North of Augusta Way/Bacchini Avenue,
South Sacramento



Legend

Proposed Rezone Site

Zoning

RD-5 Residential

SPA Special Planning Area

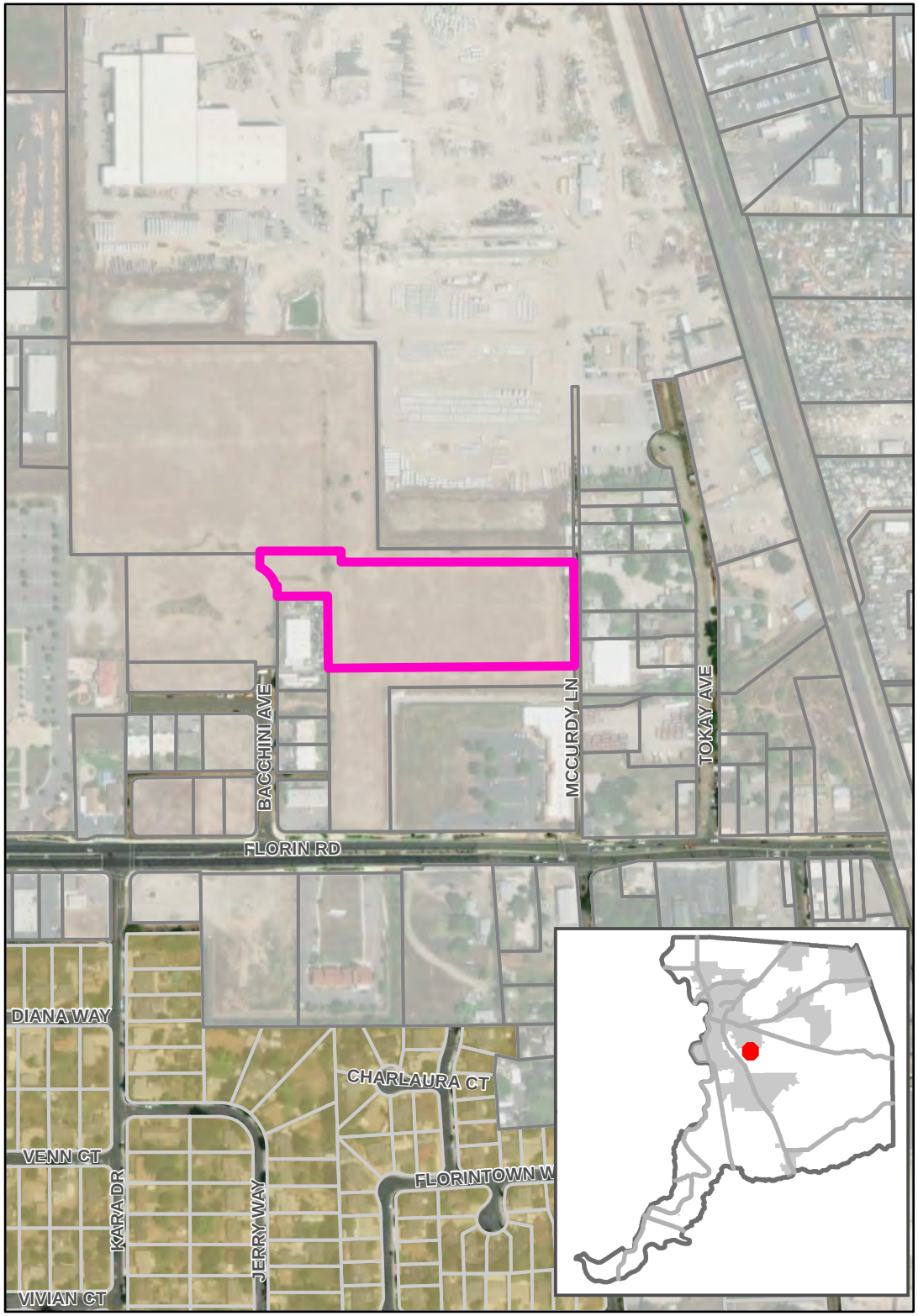
N

0 0.0375 0.075 0.15 Miles

Site 80

APN 043-0230-022-0000

430 feet North of McCurdy Lane/Florin Road, South Sacrameto



Legend

Proposed Rezone Site

Zoning

RD-5 Residential

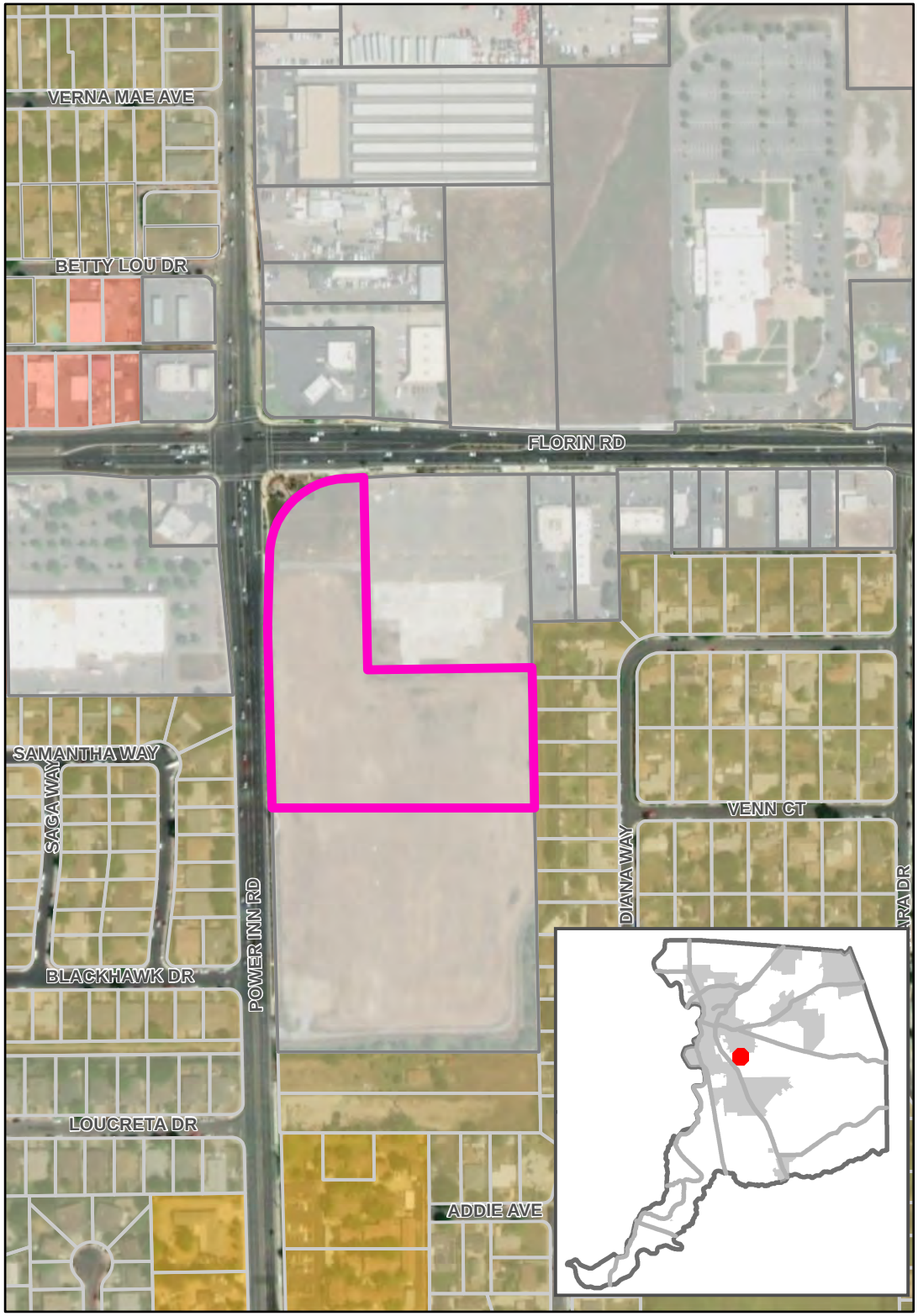
SPA Special Planning Area

N

0 0.05 0.1 0.2 Miles

Site 81

APN 051-0030-012-0000
Southeast Power Inn Road/Florin Road,
South Sacramento



Legend

- Proposed Rezone Site

Zoning

- LC Light Commercial
- RD-10 Residential
- RD-20 Multiple Family Residential
- RD-5 Residential
- SPA Special Planning Area

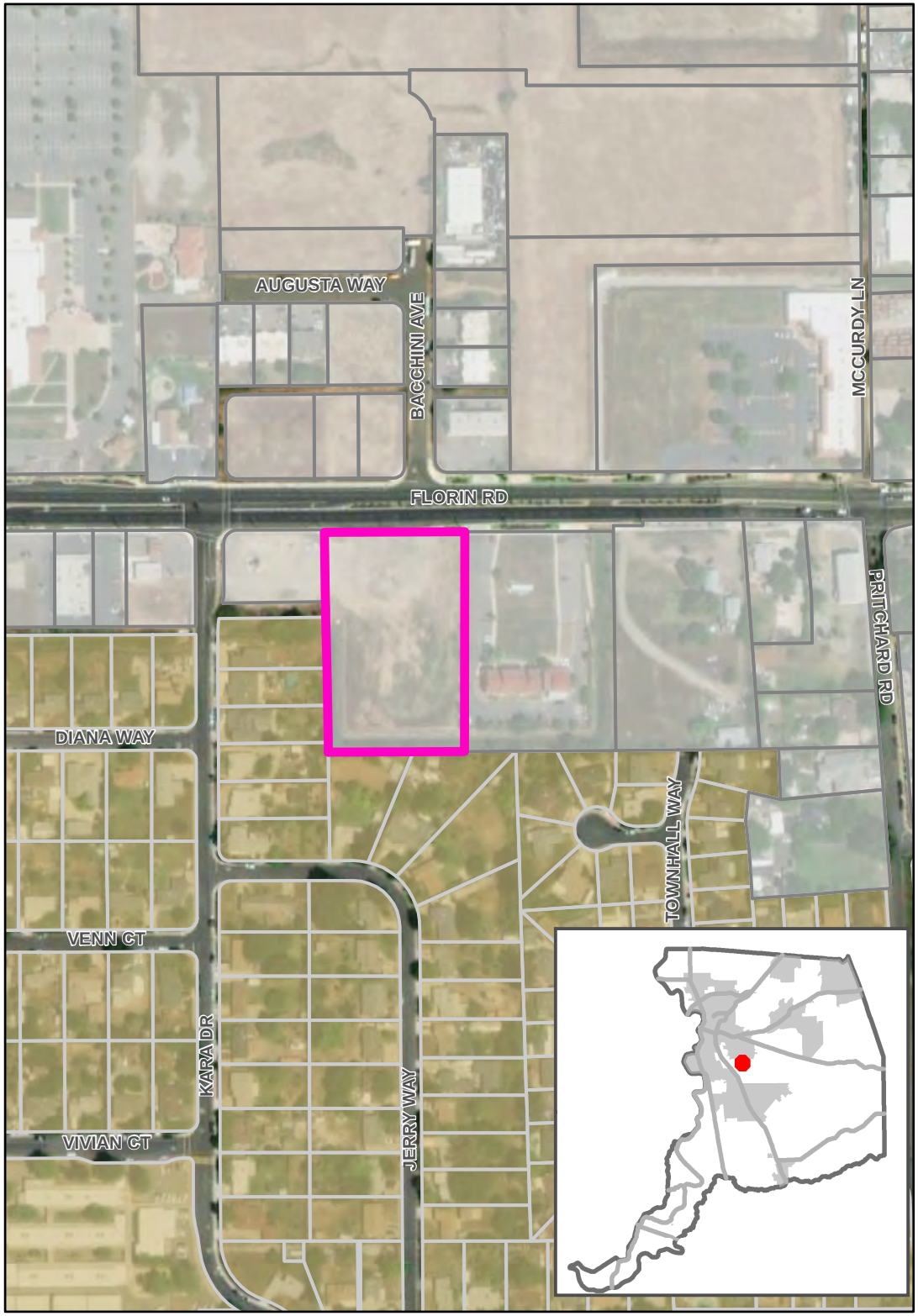
N

0 0.0375 0.075 0.15
Miles

Site 82

APN 051-0061-018-0000

180 feet East of Florin Road/Kara Drive,
South Sacramento



Legend

Proposed Rezone Site

Zoning

RD-5 Residential

SPA Special Planning Area

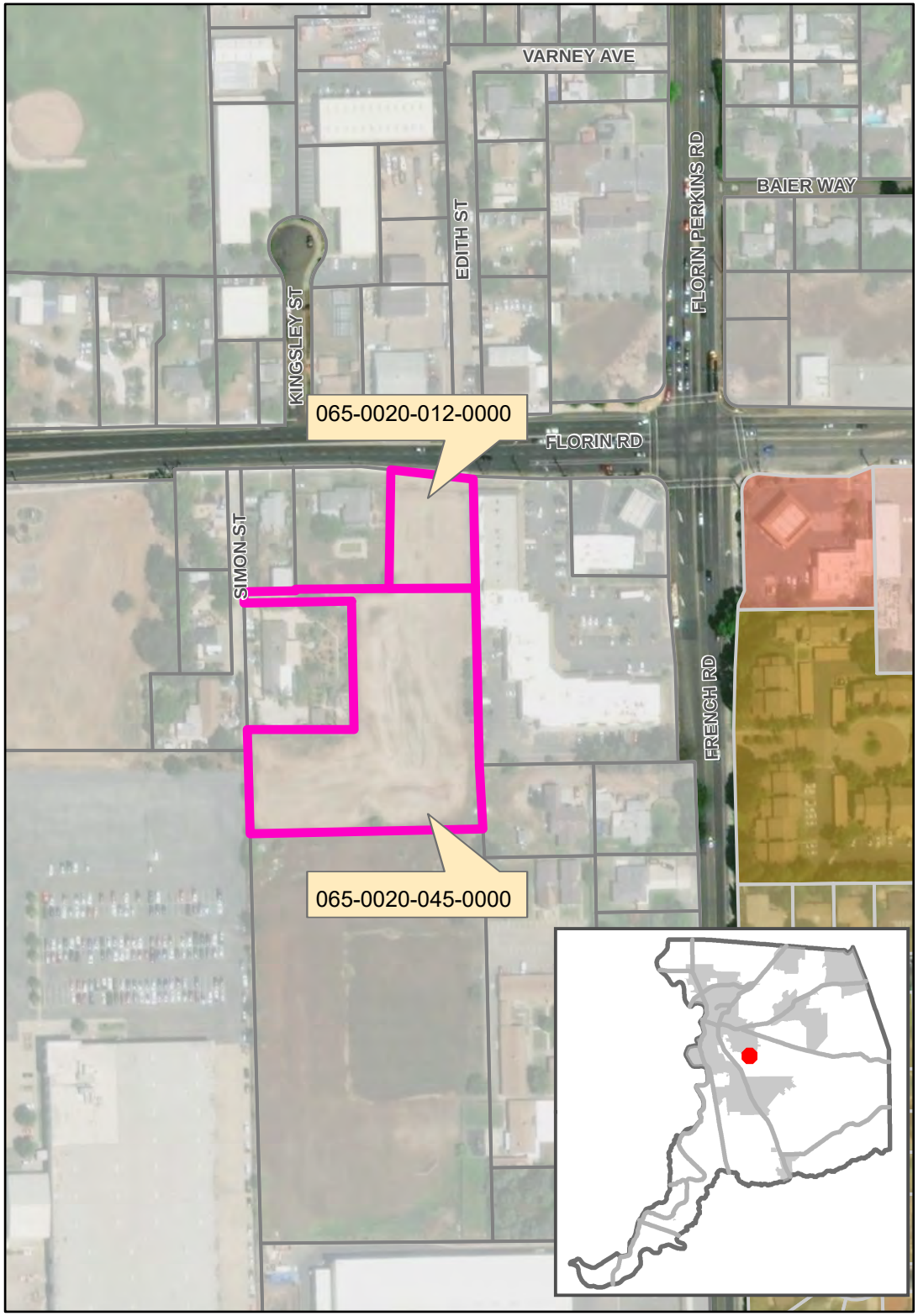
N

0 0.0375 0.075 0.15 Miles

Site 83

APNs 065-0020-012-0000
& 065-0020-045-0000

8475 Florin Road & 180 feet South
of Florin Road/Simon Street,
South Sacramento



Legend

Proposed Rezone Site

Zoning

- GC General Commercial
- LC Light Commercial
- RD-30 Multiple Family Residential
- RD-5 Residential
- SPA Special Planning Area

N

0 0.0375 0.075 0.15 Miles

SACRAMENTO AREA
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www.sacsewer.com

March 13, 2024

Ms. Jessie Shen
County of Sacramento – Community Development Department
827 Seventh Street, Room 225
Sacramento, CA 95814

Subject: **REVISED NOTICE OF PREPARATION OF A DRAFT SUBSEQUENT ENVIRONMENTAL IMPACT REPORT FOR THE SACRAMENTO COUNTY REGIONAL HOUSING NEEDS ALLOCATION (RHNA) REZONE PROJECT (SCH# 2023060304; COUNTY CONTROL NO. PLNP2020-00042)**
APN: **N/A**
File No: **PLNP2020-00042 (SCH# 2023060304)**

Dear Ms. Shen,

The Sacramento Area Sewer District (SacSewer) has reviewed the subject document and has the following comments.

The Sacramento County Housing Element of 2021-2029 identifies a shortfall of 2,884 units for the lower-income category in the County. There are insufficient appropriately zoned sites to accommodate the County's Regional Housing Needs Allocation (RHNA) obligation for the lower-income category. As such, Planning and Environmental Review (PER) is undertaking a rezone of ±248.33 acres comprising 83 candidate rezone sites within the unincorporated County to provide additional lower-income and moderate-income category housing opportunities. The Project does not propose to construct new residential or other development on the ±248.33 acres proposed to be rezoned; instead, it provides capacity for future development of housing units to meet the County's remaining unmet RHNA of 2,884 lower income category units, consistent with State law. The planning horizon year for the Project is 2029.

Note: Effective January 1, 2024, the Sacramento Regional County Sanitation District and the Sacramento Area Sewer District merged into one district called the Sacramento Area Sewer District, or SacSewer for short.

SacSewer provides local sewer service to the proposed project site via its collection system and conveys sewage from the collection system to the EchoWater Resource Recovery Facility for treatment, resource recovery, and disposal.

SacSewer is not a land-use authority and plans and designs its sewer systems using information from land-use authorities. SacSewer bases the projects identified within its planning documents on growth projections provided by these land-use authorities.

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To receive sewer service, the project proponent must complete Sewer Master Plans that include connection points and phasing information to assess the existing capacity of the collection systems to determine if the current facilities can convey the additional flows generated by the Project.

In March 2021, the SacSewer Board of Directors approved the most current SacSewer planning document, the 2020 System Capacity Plan Update (SCP). In February 2013, the SacSewer Board of Directors adopted the Interceptor Sequencing Study (ISS). The SCP and ISS are on the SacSewer website at System Capacity Plans - Sacramento Area Sewer District (sacsewer.com).

The increased densities proposed by the Project were not included in the most current SCP and ISS planning documents. Portions of the Project area may exceed the design capacity of the existing collection system and may require projects to upsize the existing collection system to handle the increased flows proposed by the Project.

Customers receiving service from SacSewer are responsible for rates and fees outlined within the latest SacSewer ordinance. Fees for connecting to the sewer system recover the capital investment of sewer and treatment facilities that serve new customers. SacSewer does not guarantee sewer service or system capacity to the property until the property obtains proper permits to connect to the system and pays all facility impact (capacity) fees. The SacSewer ordinances are on the SacSewer website at Ordinances - Sacramento Area Sewer District (sacsewer.com).

If you have any questions regarding these comments, please call me at (916) 876-6104.

Sincerely,

Robb Armstrong

Robb Armstrong
SacSewer Development Services