150 SHORELINE AFFORDABLE HOUSING PROJECT

Addendum to the 2023 Housing & Safety Element Update to the Marin Countywide Plan Final Environmental Impact Report (SCH #2021120123) and Supplemental Environmental Review

Prepared for:

Marin County Community Development Agency

By: **Sicular Environmental Consulting and Natural Lands Management**

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150 SHORELINE HIGHWAY AFFORDABLE HOUSING PROJECT EIR ADDENDUM AND SUPPLEMENTAL ENVIRONMENTAL REVIEW

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INTRODUCTION

Marin County is the Lead Agency, pursuant to the State *Guidelines*[1] for the California Environmental Quality Act (CEQA),[2] for the preparation of this Addendum to the 2023 Housing Element and Safety Element Final Environmental Impact Report (2023 HESE FEIR; SCH #2021120123). The 2023 Housing Element Update, which is part of the Marin Countywide Plan, was adopted by the Marin County Board of Supervisors, following certification of the 2023 HESE FEIR, on January 24, 2023.

This Addendum examines the potential for the proposed 150 Shoreline Affordable Housing Project to result in significant environmental effects not identified in the 2023 HESE FEIR for new housing developments that would be facilitated by the 2023 Housing Element Update, 6th Cycle, 2023-2031. Pursuant to Section 15164 of the State CEQA *Guidelines*, the Lead Agency shall prepare an Addendum to a previously certified EIR if some changes or additions are necessary, but none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred. This Addendum has been prepared by the County of Marin in accordance with CEQA, the State CEQA *Guidelines*, and the Marin County Environmental Impact Review Guidelines (Marin County, 1994).

Project Summary

Pacific West Communities, Inc. ("The Pacific Companies," or "TPC") has submitted an application to the County of Marin for Design Review approval to construct a new, affordable, multi-family apartment building on a vacant lot located at 150 Shoreline Highway, in the Manzanita area of unincorporated Mill Valley.[3] The Project would entail the construction of a five-story multi-family residential building, with 31 units restricted to lower-income households, as defined in Health and Safety Code Section 50079.5(b),[4] a manager's unit that would not be income-restricted, a manager's office, residential amenities, and eight on-site parking spaces. The building would be approximately 54 feet, five inches from grade to the roof plate, and approximately 70 feet from grade to the top of the elevator and staircase overrun.

The Project site (APN 052-371-03) is a 0.587-acre, vacant parcel within the Howard Johnson's Master Plan area, the rest of which is developed with commercial uses, including a Holiday Inn Express hotel. Five of the parcels within the Master Plan Area, including the Project site, are included in the Sites Inventory of the 2023 Housing Element Update. The Project site listing is for potential development of ten units of above-moderate income housing (Marin County, 2023b).

1 California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 15000 *et seq*.
2 Public Resources Code Sections 21000 *et seq*.
3 Project plans, technical studies, and information on the planning process are available at the County's Project web page: https://www.marincounty.gov/departments/cda/planning/projects/tamalpais-valley/pacific-west-communities-inc-tpc-design-review-p4722
4 "Lower income households" include very low income households, as defined in California Health and Safety Code Section 50105, and extremely low income households, as defined in Section 50106.

Prior to the adoption of the 2023 Housing Element Update, on December 14, 2021, the Board of Supervisors adopted a Mitigated Negative Declaration (Marin County Community Development Agency, 2021) and approved a two-story apartment building on the Project site, consisting of 10 residential units, 11 extended-stay hotel rooms, 20 on-site parking spaces, common areas, and other improvements. This formerly proposed development, known as the O'Donnell Financial Group Master Plan Amendment and Design Review project, was never constructed, and the Project site was subsequently acquired by the current Project applicant. The listing of the Project site in the 2023 Housing Element Update Sites Inventory is consistent with the amount of housing that the O'Donnell project would have provided. The current Project proposes a larger housing development.

Addendum to the 2023 Housing Element and Safety Element Final Environmental Impact Report

The 2023 HESE FEIR is a program EIR[5] that broadly examines potential impacts associated with implementation of the Housing Element and Safety Element Updates, as well as consideration of alternatives to the proposed version of the Updates. The 2023 HESE FEIR broadly considers the potential impacts of developing all the housing sites identified in the Sites Inventory. As stated in the 2023 HESE FEIR:

> Future site-specific development facilitated by the [Housing Element Update], but which has not yet been described at a project-specific level of detail, will be evaluated for consistency with this EIR if and when the development is proposed. As with all projects proposed in the unincorporated areas of the County, projects will be reviewed to determine whether they are subject to CEQA compliance at such time as the County receives a permit application for the project and the details of the individual project are defined. At that time, and if the project is subject to CEQA, the environmental analysis would address impacts (if any) specific to the project….[6]

The 150 Shoreline Affordable Housing Project is a site-specific development, as described above, and is considered a "later activity," as described in the discussion of uses of a program EIR in State CEQA *Guidelines* Section 15168(c):

> 15168(c) Use with Later Activities. Later activities in the program must be examined in the light of the program EIR to determine whether an additional environmental document must be prepared.
>
> (1) If a later activity would have effects that were not examined in the program EIR, a new Initial Study would need to be prepared leading to either an EIR or a Negative Declaration. That later analysis may tier from the program EIR as provided in Section 15152.

5 State CEQA *Guidelines* Section 15168.
6 Housing & Safety Element Update to the Marin Countywide Plan, Draft EIR (October 2022), page 1-9.

(2) If the agency finds that pursuant to Section 15162, no subsequent EIR would be required, the agency can approve the activity as being within the scope of the project covered by the program EIR, and no new environmental document would be required.

State CEQA *Guidelines* Section 15162 describes the criteria for determining whether a subsequent EIR would be required:

(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.

Pursuant to State CEQA *Guidelines* Section 15162, if the SER were to find that the Project would involve new significant environmental effects or a substantial increase in the severity of previously identified significant effects, and the impact could not be reduced to a less-than-significant level with implementation of mitigation measures already contained in the 2023 HESE FEIR, then a subsequent EIR, or, pursuant to Section 15163, a supplement to the previous EIR may be required prior to consideration of Project approval. Pursuant to Section 15164 of the State CEQA *Guidelines*, however, the Lead Agency shall prepare an Addendum to a previously certified EIR if some changes or additions are necessary but none of the conditions described in Section 15162 calling for preparation of a subsequent or supplemental EIR have occurred.

The Supplemental Environmental Review (SER) presented in Chapter 2 is a checklist with supporting discussion and analysis, used to document the evaluation of the current Project to determine whether its environmental effects are within the scope of the program EIR.[7] The SER is therefore "tiered" from the 2023 HESE FEIR.[8] As discussed and concluded for each environmental topic in Chapter 2, and as summarized and concluded in Chapter 3, Summary and Conclusion, the 150 Shoreline Affordable Housing Project would not involve new significant environmental effects or a substantial increase in the severity of previously identified significant environmental effects. The County's obligations under CEQA may therefore be satisfied with adoption of this Addendum to the 2023 HESE FEIR. Following adoption of this Addendum, the County may act to approve the 150 Shoreline Affordable Housing Project.

Review and Comment

CEQA does not require a formal public review and comment period on an EIR Addendum. However, the 2023 HESE FEIR and this EIR Addendum are available for review during the hours of 8:00 am to 4:00 pm, Monday through Thursday and 8:00 am to noon on Friday at the Marin County Community Development Agency at 3501 Civic Center Drive, Room 308, San Rafael, CA 94903, and on the Community Development Agency's website at: https://www.marincounty.gov/departments/cda/planning/projects/tamalpais-valley/pacific-west-communities-inc-tpc-design-review-p4722

Those wishing to submit comments on this Addendum may do so in writing. Please address your comments to:

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References

Marin County, 1994. Marin County Environmental Impact Review Guidelines (EIR Guidelines): Policy and Procedures for Implementation of the California Environmental Quality Act (CEQA). Adopted by the Board of Supervisors May 17, 1994. https://www.marincounty.org/-/media/files/departments/cd/planning/environmental-impact/erguide1994.pdf

Marin County, 2007. Marin Countywide Plan. Adopted by the Board of Supervisors November 6, 2007, and amended through January 24, 2023.

7 State CEQA *Guidelines* Section 15168(c)(4).
8 State CEQA *Guidelines* Section 15152.

Marin County Community Development Agency, 2021. O'Donnell Financial Group Master Plan Amendment and Design Review: Initial Study and Mitigated Negative Declaration. Prepared by Douglas Herring and Associates, January 2021.Marin County, 2023. Housing & Safety Element Update to the Marin Countywide Plan, Final Environmental Impact Report. State Clearinghouse Number 2021120123. Certified by the Board of Supervisors January 24, 2023.

CHAPTER 1
Project Description

Introduction and Background

Pacific West Communities, Inc. ("The Pacific Companies," or "TPC") has submitted an application to the County of Marin for Design Review approval to construct a new, affordable, multi-family apartment building on a vacant lot located at 150 Shoreline Highway, in the Manzanita area of unincorporated Mill Valley.[9] The Project would entail the construction of a five-story multi-family residential building, with 31 units restricted to lower-income households, as defined in Health and Safety Code Section 50079.5(b),[10] a manager's unit that would not be income-restricted, a manager's office, residential amenities, and eight on-site parking spaces. The building would be approximately 54 feet five inches from grade to the roof plate, and approximately 70 feet tall from grade to the top of the elevator and staircase overrun.

The Project site (APN 052-371-03) is a 0.587-acre, vacant parcel within the Howard Johnson's Master Plan area, the rest of which is developed with commercial uses, including a Holiday Inn Express hotel. The Project site is included in the Sites Inventory of the Marin Countywide Plan 2023 Housing Element Update (6th Cycle) for potential development of ten units of above-moderate income housing (Marin County, 2023b). In addition, the Holiday Inn parcel and three other parcels, all currently developed with commercial buildings, are included in the Sites Inventory for potential redevelopment.

The applicant for this Project is also developing another affordable housing project currently being constructed in the nearby unincorporated community in Marin City. That project originally proposed the construction of a 74-unit, 100% affordable building at 825 Drake Avenue. In response to public comments, TPC entered into an agreement with Marin County to reduce the size of the 825 Drake Avenue project to 42 units, and to seek approval for construction of 32 units at 150 Shoreline Highway.[11]

Project Location and Environmental Setting

The Project site is located near the intersection of State Route 1 (Shoreline Highway) and U.S. 101, on the western side of the freeway and the northern side of Shoreline Highway (Figure 1-1 Project Location, Figure 1-2, Aerial Photo of Project Site, Figure 1-3, Oblique Aerial of Project Site, Figure 1-4: Existing Site Conditions, Figure 1-5: Site Photos). The Project site, and the

9 Project plans, technical studies, and information on the planning process are available at the County's Project web page: https://www.marincounty.gov/departments/cda/planning/projects/tamalpais-valley/pacific-west-communities-inc-tpc-design-review-p4722

10 "Lower income households" include very low income households, as defined in California Health and Safety Code Section 50105, and extremely low income households, as defined in Section 50106.

11 The agreement was formalized on February 11, 2025 by the Board of Supervisors after a public hearing.

surrounding parcels within the Howard Johnson's Master Plan area, are atop artificial fill placed over former marshlands. They are adjacent to Bothin Marsh, a saltwater and brackish marsh at the mouth of Coyote Creek; Coyote Creek flows into Richardson Bay about 650 feet north of the Project site. Consequently, the Project site is low lying: the elevation of the Project site, which is nearly flat, is about 10 feet above mean sea level (msl).[12] The Project site and surrounding parcels are mapped within the AE Flood Zone (the 100-year floodplain[13]) by the Federal Emergency Management Agency (FEMA), with a base flood elevation[14] of 10 feet.

The Project site is a roughly rectangular lot, arrayed on a northeast-southwest axis. Immediately to the northeast and southeast are commercial buildings and associated landscaping and parking lots. To the south and southwest there is a parking lot and then Shoreline Highway. To the northwest is a parking lot and then the Floodwater restaurant and Holiday Inn Express hotel. Across Shoreline Highway are the Fireside, a former inn that has been redeveloped as affordable and supportive housing, and the Muir Woods Lodge, a motel.

Vehicular egress and ingress to the Project site and the adjoining parcels are via a driveway from Shoreline Highway. A two-way left-turn lane is provided in the center of Shoreline Highway for vehicles turning into and out of the site from and to the eastbound (i.e., southbound) direction. A multi-use path (bicycle and pedestrian) has an access point next the driveway to the Howard Johnson's Master Plan area. This path leads to the Tamalpais Junction (Tam Junction) commercial area a short distance away and connects to the regional Mill Valley-Sausalito path, which is Route 5 in the Marin Countywide Bicycle Route System.

The Howard Johnson's Master Plan was adopted by Marin County in 1960. The Master Plan area is subdivided into five small lots, with each lot designated for a specific use. The Master Plan designated the Project site as a gasoline service station, and it was developed with this use until 1994. In 1996, the San Francisco Bay Regional Water Quality Control Board issued a letter confirming the completion of site clean-up and remedial actions for the former gas station's underground fuel storage tanks, but the site has been vacant since demolition of the gas station. The Howard Johnson's Master Plan has been amended over the years, most recently on December 14, 2021, when the Board of Supervisors amended it to allow a mixed-use development and approved a two-story apartment building on the Project site, consisting of 10 residential units, 11 extended hotel rooms, 20 on-site parking spaces, common areas, and other improvements. This formerly proposed development, which was never constructed, was the subject of a previous environmental review known as the O'Donnell Financial Group Master Plan Amendment and Design Review Mitigated Negative Declaration (Marin County Community Development Agency, 2021).

[12] All elevations stated in this document are referenced to the North American Vertical Datum of 1988 (NAVD-88).
[13] The 100-year floodplain is the area with a 1% annual chance of flooding.
[14] Base flood elevation, or BFE, is the estimated water surface elevation during a 100-year flood.

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Figure 1-1

Source: Google Earth Pro, 2025

Project Location

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Figure 1-2

Source: Google Earth Pro, 2025

Aerial Photo of Project Site

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Figure 1-3

Source: AO, 2025

Oblique Aerial of Project Site

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Figure 1-4

Source: Atlas Civil Design, 2025

Existing Site Conditions

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Source: Sicular Environmental Consulting, 2025

Figure 1-5

Site Photos

Regulatory Setting

The Marin Countywide Plan (CWP; Marin County, 2007) is the governing general plan for the unincorporated areas of the County and establishes goals, policies, and programs that govern existing and future land uses and developments. The Project site is within the Richardson Bay planning area of the CWP, and within the "Baylands Corridor," which is described as follows:

> The Baylands Corridor, encompassing lands along the shoreline of San Francisco, San Pablo, and Richardson bays, provides heightened recognition of the unique environmental characteristics of this area and the need to protect its important resources. The area generally contains marshes, tidelands, and diked lands that were once wetlands or part of the bays, and adjacent, largely undeveloped uplands.

The Community Development (Chapter 3.4) and Planning Areas (Chapter 3.12) sections of the CWP together form the Land Use Element of the CWP. The Project site's land use designation is identified in the CWP as General Commercial/Mixed-Use (GC).

The CWP also includes adopted community area plans that pertain to specific unincorporated communities. The Project site is within the Tamalpais Area Community Plan (TACP; Marin County, 1992). The TACP designates land use for the Project site as Multiple Residential-Visitor Commercial (MRVC), which allows both commercial and multi-family housing development. The TACP states that "multiple family housing is an appropriate and acceptable use within [the MRVC] land use designation."[15]

Housing Element

The Regional Housing Needs Allocation (RHNA) is a key part of Housing Element law,[16] and is a central factor in satisfying periodically required updates of the Housing Element. The RHNA is a projection of housing need based on regional growth and policies for accommodating that growth. Every city and county in the State of California has a legal obligation to respond to its fair share of the existing and projected future housing needs in the region in which it is located. Housing Element law requires local governments to update land use plans, policies, and zoning to accommodate projected housing growth. On December 16, 2021, the Association of Bay Area Governments (ABAG) adopted the current RHNA plan for the Bay Area (ABAG, 2021). The ABAG plan allocates 3,569 new housing units to Marin County for the unincorporated area for the 6th Cycle Housing Element Update, which covers the period from 2023-2031 (Marin County, 2023b). This allocation includes 1,100 very low income units, 634 low income units, 512 moderate income units, and 1,323 above-moderate income units.[17]

The Housing Element determines the local jurisdiction's realistic capacity for new housing growth by means of a parcel-level analysis of land resources with the potential to accommodate residential uses. In Marin County's 2023 Housing Element Update, the required analysis

15 ibid, p. 86.
16 Government Code Section 65580.
17 Income categories are established based on a range of percentage of the Adjusted Median Household Income, or AMI: very low = 0-50% AMI; low = 51-80% AMI, moderate=81-120% AMI, and above moderate=120%+ AMI.

considers physical and regulatory constraints such as lot area and configuration, environmental factors (e.g., slope, sensitive habitat, flood risk), allowable density, and other development standards. Suitable parcels are included in the Housing Element's "Sites Inventory." As previously noted, five of the parcels within the Howard Johnson's Master Plan, including the Project site, are listed in the Sites Inventory of the 2023 Housing Element Update.[18]

Proposed Development

The proposed five-story building[19] (Figure 1-6, Renderings of Proposed Development; Figure 1-7, Elevations; Figure 1-8, Color and Material Board) would have a floor area of 32,378-square-foot and a floor area ratio (FAR) of 1.27 on the 25,570-square-foot lot.[20] The building footprint would cover 7,030 square feet, or 27.49% of the lot. Setbacks on the northwest side and southwest front of the building would provide space for a fire lane (Figure 1-9, Fire Access). The exterior walls would have the following setbacks: 28 feet from the southwest front property line; 30 feet, two inches from the southeast side property line; 56 feet, nine inches from the northwest side; and 23 feet, seven inches from the northeast (rear) property line. The height of the first finished floor would be 11.1 feet above mean sea level. Height from surrounding grade to the roofline would be 54' 5", and to the top of the roof access stair, 70' 0".

The residential units would include 24 one-bedroom units and eight two-bedroom units. Residential units would be located on all five floors. In addition, the building would house a manager's office/leasing office, maintenance room, equipment rooms, clubhouse, laundry room, and long-term bicycle storage room with spaces for 16 bicycles.

The proposed site improvements include asphalt pavement, sidewalks, a patio, and 7,159 square feet of landscaped areas, including two bioretention facilities for stormwater capture and treatment in the northeastern and southeastern portions of the lot (Figure 1-10, Landscaping Plan). The bioretention facilities would overflow to existing catch basins and storm sewers. Other site improvements would include a new concrete curb, sidewalk, eight onsite parking spaces, two of which would be EV charging spaces, and 15 short-term bicycle parking spaces.

[18] Marin County, 2023, Appendix C, Sites Inventory, Table C-4: Residential Sites Inventory by Community. See listings for Tam Valley sites.

[19] Project plans are available at the County's Project web page: https://www.marincounty.gov/departments/cda/planning/projects/tamalpais-valley/pacific-west-communities-inc-tpc-design-review-p4722

[20] Floor Area Ratio, or FAR, is the ratio of floor area to lot size.

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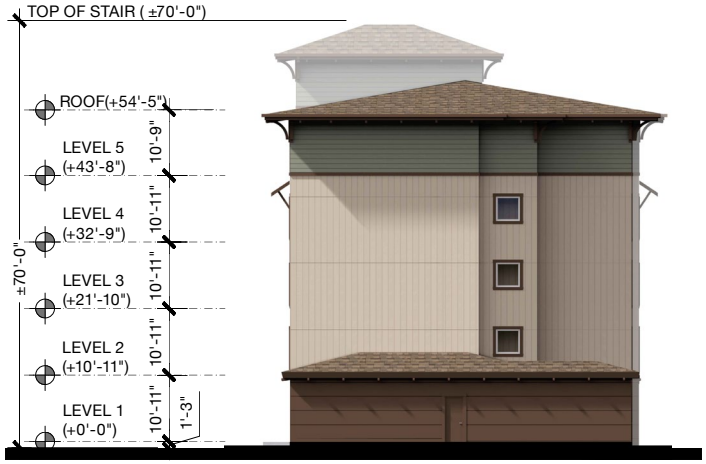
Figure 1-6

Source: AO, 2025

Renderings of Proposed Development

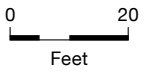
1. South Elevation - Shoreline Hwy

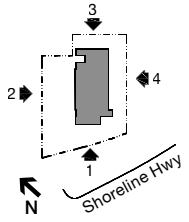
2. West Elevation



3. North Elevation

4. East Elevation





150 SHORELINE HIGHWAY AFFORDABLE HOUSING PROJECT

Source: AO, 2025

Figure 1-7

Elevations

West Elevation - 30th Street

Colors

A. SW 2822 DOWNING SAND

B. SW 7027 HICKORY SMOKE

C. SW 6186 DRIED THYME

D. SW 2837 AURORA BROWN

Materials

1. HARDIE BOARD LAP SIDING

2. HARDIE BOARD BOARD AND BATTEN

3. HARDIE BOARD SQUARE CHANNEL

4. ASPHALT SHINGLES

5. VINYL WINDOWS - WHITE

6. SHUTTERS FAUX WOOD

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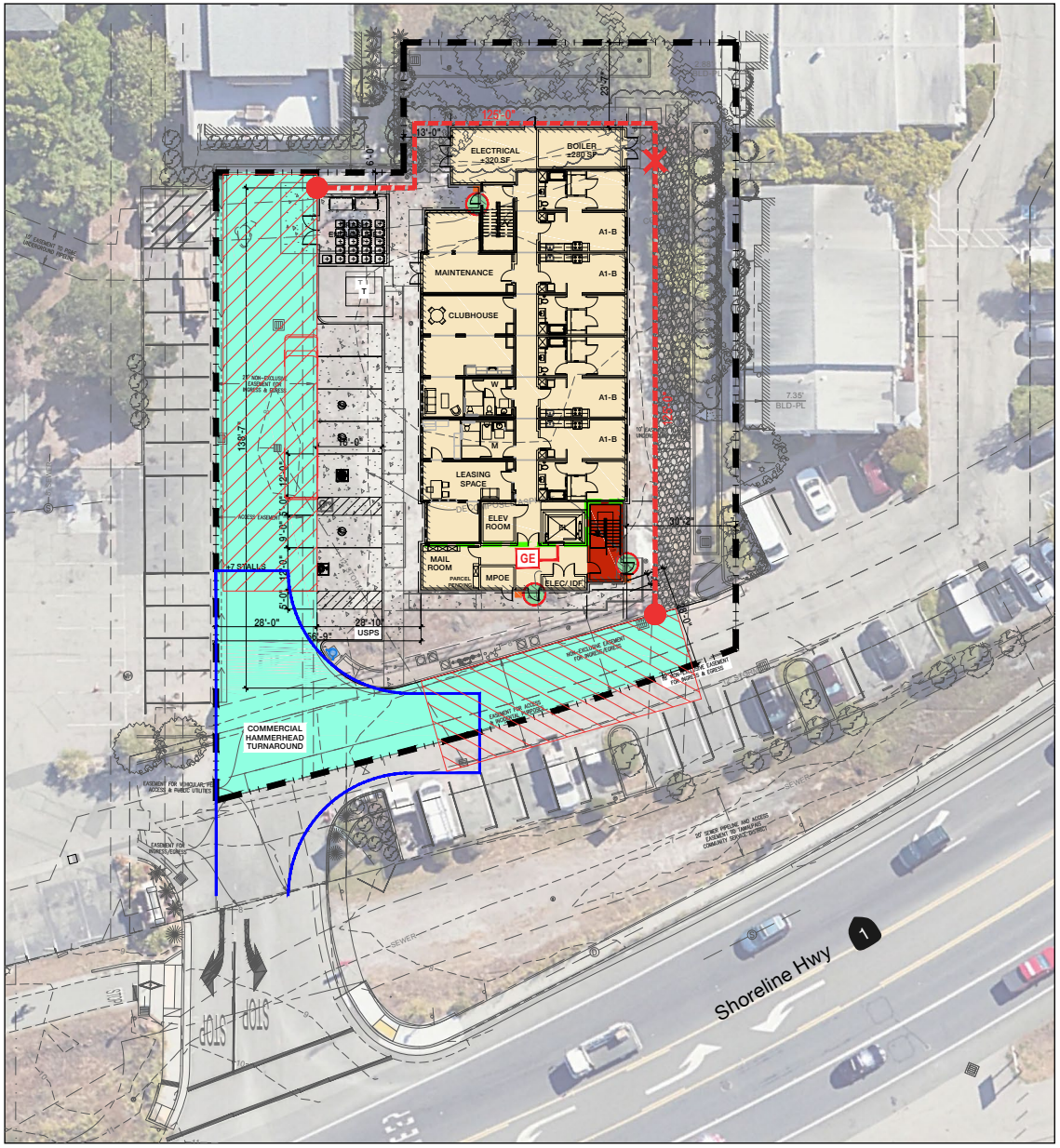
Source: AO, 2025

Figure 1-8

Color and Material Board



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Source: AO, 2025

Figure 1-9

Fire Access

PLANT SCHEDULE

SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	QTY	WATER USE	MATURE HEIGHT	MATURE WIDTH
TREES							
	HESPEROCYPARIS MACROCARPA	MONTEREY CYPRESS	24"	2	LOW - MEDIUM	40 - 65FT. HT.	40 - 65FT. W.
	PLATANUS RACEMOSA	CALIFORNIA SYCAMORE	15 GAL.	2	MEDIUM	40 - 65FT. HT.	25 - 40FT. W.
	SEQUOIA SEMPERVIRENS `APTOS BLUE`	COAST REDWOOD	15 GAL.	4	HIGH	40 - 65FT. HT.	
SHRUB AREAS							
	SHRUB & GROUND COVER	PLANTING AREA		3,461 SF			
	STORM WATER TREATMENT			1,767 SF			
MATERIALS							
	3/4 CRUSHED ROCK EARTH TONE, LOCALLY SOURCED	2`` DEPTH OVER LANDSCAPE FABRIC		252 SF			

0 40

Feet

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Source: Thomas H. Phelps Landscape Architecture, 2025

Figure 1-10

Landscaping Plan

Site Development

The ground surface of the Project site consists of gravel and broken concrete, overlaying 7-9 feet of artificial fill. Beneath the fill are natural marsh and bay sedimentary deposits (Allerion Consulting Group, 2024). The site is sparsely vegetated, with shrubs and herbaceous plants around the southeastern and northeastern perimeter of the site. Along the northeastern property line there are four coast redwood trees ranging from 23-inches to 60-inches in diameter. One is rooted on the neighboring property, but overhangs onto the Project site. Site development would include clearing existing vegetation, including the three coast redwoods rooted on the project site. To prepare the site for construction, the building footprint and area immediately around it would be excavated to native soil, then compacted and re-filled with engineered fill. Earthworks would entail an estimated 530 cubic yards of cut and 110 cubic yards of fill, with a net surplus of 420 cubic yards that would be exported from the site.

In addition to the existing driveway from Shoreline Highway, the Project would add a second, emergency access driveway into the Howard Johnson's Master Plan area for Fire Department use only. This driveway, which would be gated and locked, would be located a short distance east of the existing driveway.

Construction Management Plan

The Project applicant has submitted a Construction Management Plan (Pacific West Builders, 2025). The Construction Management Plan includes a site plan showing areas where grading and construction would take place, and where soil would be temporarily stockpiled. The site plan delineates a storage area for material delivery and a parking area for construction workers, and shows the planned location of temporary facilities such as portable toilets. The Construction Management Plan also includes a dust reduction plan, and a schedule for construction phasing and timing. The schedule shows construction taking place over an 11-month period, with excavation, grading, and foundation construction together taking place over about two months.

Construction hours would be limited to 7 am – 6 pm, Monday through Friday, with construction activities involving potential noise impacts limited to 8 am – 5 pm, Monday-Friday.

Required Approvals

The Project will require the following County approvals:

- Design Review is required pursuant to Marin County Code Section 22.42.020(A), because the Project is located in a planned zoning district;
- A Tree Removal Permit is required pursuant to Marin County Code Section 22.62.050, for removal of one heritage coast redwood and two protected coast redwoods. The permit may contain conditions, as determined by the Community Development Director;
- Because the Project proposes to construct affordable housing, it is eligible for incentives, concessions, and waivers of development standards under the State Density Bonus

Law.[21] The Project applicant has requested the following concessions under Government Code Section 65915(d):

- Relief from TACP Policy 33.1.b.h, to increase the height limit from 25 feet to 70 feet above the surrounding grade;
- Relief from the CWP's floor area standards for the designated land use, to increase the maximum FAR from 0.35 to 1.3; and,
- Relief from Marin County Code Section 24.04.340(a) to reduce the required residential parking from 51 spaces to 8 spaces.

The Project applicant has also requested the following waivers of development standards under Government Code Section 65915(e):

- Relief from the requirement of the Multi-Family Design Guidelines Policy DG-20, for reduction of windows and fenestration from 25 percent to 12 percent on the south elevation;
- Relief from the requirement of the Multi-Family Design Guidelines Policy DG-20, for reduction of windows and fenestration from 25 percent to less than ten percent on the north elevation;
- Relief from the requirement of the Multi-Family Design Guidelines Policy DG-80, for a reduction in tree canopies from 25 percent to 5 percent; and,
- Relief from the Multi-Family Design Guidelines Policy DG-29 to reduce the required open space from 3,200 square feet to zero square feet.

- The Project will require a Caltrans encroachment permit to enable development of the proposed second driveway for emergency vehicle access.
- The Project will require completion of environmental review pursuant to California Environmental Quality Act (CEQA). As discussed in the Introduction chapter and in Chapter 3, Summary and Conclusion, CEQA requirements may be satisfied with adoption of this Addendum to the 2023 Housing Element and Safety Element Final Environmental Impact Report (2023 HESE FEIR).

Following adoption of this Addendum to the 2023 HESE FEIR, the County may consider approval of the Project.

References

Allerion Consulting Group, 2024. Geotechnical Engineering Study, Proposed Apartment Building, Mill Valley California. Prepared for Pacific West Communities, Inc., June 14, 2024. Revised October 16, 2024.

Association of Bay Area Governments (ABAG), 2021. Final Regional Housing Needs Allocation (RHNA) Plan: San Francisco Bay Area, 2023-2031. December 2021.

[21] Government Code Section 65915–65918.

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Marin County, 2023a. Housing & Safety Element Update to the Marin Countywide Plan, Final Environmental Impact Report. State Clearinghouse Number 2021120123. Certified by the Board of Supervisors January 24, 2023.

Marin County, 2023b. Marin Countywide Plan, Housing Element Update (Sixth Cycle). Adopted by the Board of Supervisors January 24, 2023. Certified by the California Department of Housing and Community Development June 19, 2023.

Pacific West Builders, 2025. Mill Valley- Marin Shoreline Apartments – Construction Management Plan. Prepared by Deanna Alexander, Project Manager. January 2, 2025.

CHAPTER 2
Supplemental Environmental Review Checklist

The purpose of this checklist is to evaluate the proposed 150 Shoreline Affordable Housing Project (the Project) in order to determine, for each environmental issue, whether any changes (i.e., Project changes, changed circumstances, or new information of substantial importance) may result in a new or substantially more severe significant environmental impact, or otherwise trigger the requirement for a subsequent or supplemental Environmental Impact Report (EIR, pursuant to State CEQA *Guidelines* Sections 15162 or 15163 (see Introduction chapter, above). For each environmental issue, the checklist asks whether there is any changed condition that pertains to that issue, and, if so, whether the changed condition would result in a new significant impact or a substantial increase in the severity of a significant impact that was previously identified in the 2023 Housing & Safety Element Update to the Marin Countywide Plan, Final Environmental Impact Report (2023 HESE FEIR).

Explanation of Checklist Questions

Where was this Impact Analyzed in the Previous Environmental Document?

The first question in the checklist asks for a cross-reference to the particular HESE FEIR document and impact number, section, or pages in which information and analysis that pertain to the environmental issue may be found. The 2023 HESE FEIR consists of the following documents (abbreviated document titles, shown in parenthesis, are used in the text):

- Housing & Safety Element Update to the Marin Countywide Plan, Final Environmental Impact Report. Certified by the Board of Supervisors January 24, 2023. (2023 HESE FEIR). This document incorporates all the following documents.
    - Housing & Safety Element Update to the Marin Countywide Plan, Revised Final Environmental Impact Report Amendment. January 2023 (HESE FEIR Amendment).
    - Housing & Safety Element Update to the Marin Countywide Plan, Draft Environmental Impact Report. October 2022 (HESE DEIR).
    - California Environmental Quality Act Findings and Statement of Overriding Considerations for the 2023-2031 Housing Element Update and Safety Element Update. Adopted January 24, 2023. (HESE FEIR Statement of Overriding Considerations).

Do Proposed Project Changes Affect this Issue?

This checklist question asks whether the proposed changes to the Project could affect or have any bearing on the environmental issue. This question, along with the next two, determines whether it is necessary to continue with the analysis of each issue. If it is determined that proposed Project changes could not affect this environmental issue, the question is answered "no." A "yes" answer indicates the necessity to continue to evaluate impacts related to this environmental issue.

Are There Any Changed Circumstances that Affect this Issue?

This checklist question asks whether there have been changes in the circumstances under which the Project is undertaken that have occurred since certification of the 2023 HESE FEIR that could affect the environmental issue. "Changed circumstances" include changes to the environmental setting and the regulatory setting for the Project. A "yes" answer indicates the necessity to continue to evaluate impacts related to this environmental issue.

Is There Any New Information of Substantial Importance Pertaining to this Issue?

This checklist question asks whether 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 2023 HESE FEIR was certified has come to light that pertains to the environmental issue. New information may include, for example, new studies of the Project or the Project site, the results of mitigation monitoring of the Project, or new scientific studies or methods.

If Any of the Previous Three Questions Was Answered "Yes," Would the Changes or New Information Result in a New or Substantially More Severe Significant Impact?

This checklist question pertains only to those issues for which at least one of the previous three questions was answered "yes." A "yes" response to this question indicates that the supplemental environmental analysis has found that a new significant impact or substantial increase in the severity of a previously identified significant impact would occur. A "no" answer indicates that the analysis has concluded that no such impact would occur. If the previous three questions were all answered "no," this column is marked "not applicable" ("N/A"). In determining whether a new or substantially more significant impact would occur, the supplemental environmental analysis assumes the continuation of existing adopted mitigation measures and conditions of approval, unless stated otherwise.

Are there any New or Reconsidered Mitigation Measures or Alternatives that would Substantially Reduce Significant Impacts?

Pursuant to Section 15162(a)(3)(c) and (d) of the State CEQA *Guidelines*, this column asks whether new information of substantial importance has come to light, consisting of evidence that mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant impacts, or that new mitigation measures

or alternatives which are considerably different from those previously analyzed would substantially reduce one or more significant impacts. A "yes" response indicates that the supplemental environmental analysis has developed new mitigation measures or alternatives, or reconsidered previous mitigation measures or alternatives, and found them to be feasible and capable of reducing a previously identified significant impact, or a newly identified significant impact, to less than significant. A "no" response indicates no such mitigation measures or alternatives are available. "N/A" indicates that there was not previously, nor is there currently, a significant impact associated with this issue.

Discussion

A discussion of each checklist topic is provided under each environmental issue to clarify and substantiate the answers. The discussion provides information about each topic, how the proposed Project changes relate to the topic, any changed circumstances or new information resulting in new significant impacts or a substantial increase in the severity of previously identified significant impacts, and mitigation measures that apply to this topic.

Mitigation Measures

Applicable mitigation measures from the prior environmental review that are required to reduce or avoid impacts of the current Project are listed for each environmental issue. New mitigation measures and revisions to previously adopted mitigation measures are considered, if needed. Revisions may be proposed for clarity, for consistency with current regulations, or to make them applicable to the current Project. All proposed revisions to mitigation measures are also compiled in Chapter 4. Revisions are indicated by ~~strikethrough~~ and <u>underline</u> text.

Conclusions

At the end of each section, a discussion is provided that summarizes the conclusions resulting from the supplemental environmental analysis.

2.1 Aesthetics

Environmental Issue Area	Where Was this Issue Analyzed in the Previous Environmental Document?	Do Proposed Project Changes Affect this Issue?	Are There Any Changed Circumstances that Affect this Issue?	Is There Any New Information of Substantial Importance Pertaining to this Issue?	If Any of the Previous Three Questions Was Answered "Yes," Would Changes or New Information Result in a New or Substantially More Severe Significant Impact?	Are there any New or Reconsidered Mitigation Measures or Alternatives that Would Substantially Reduce Significant Impacts?
1. Aesthetics. Would the Project:						
a) Have a substantial adverse effect on a scenic vista?	HESE DEIR Chapter 4, Aesthetics, Impact 4-1.	Yes	No	No	No	No
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	HESE DEIR Chapter 4, Aesthetics, Section 4.1.3 Existing Scenic Highways	No	No	No	N/A	N/A
c) Substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	HESE DEIR Chapter 4, Aesthetics, Impact 4-2.	Yes	No	No	No	No
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	HESE DEIR Chapter 4, Aesthetics, Impact 4-3.	Yes	No	No	No	N/A

Discussion

The 2023 HESE FEIR, DEIR Chapter 4, Aesthetics, identifies three impacts of the then-proposed Housing Element Update on aesthetic or visual resources. For each topic in the checklist table above, the following discussion reviews the applicable impact where the topic was discussed in the 2023 HESE FEIR, states the significance conclusion previously reached, then provides an analysis of the topic as it pertains to the 150 Shoreline Affordable Housing Project.

a) Would the Project have a substantial adverse effect on a scenic vista?

The 2023 HESE FEIR, DEIR Chapter 4, Aesthetics, Impact 4-1: Effects on Scenic Vistas, states that Potential housing facilitated by the then-proposed Housing Element Update would include development on vacant sites and also redevelopment or expansion of existing developed sites. New development could adversely affect a scenic vista due to changes in densities and building heights that could potentially obscure or degrade scenic vistas. The 2023 HESE FEIR identifies Impact 4-1 as a significant impact, and states that no feasible mitigation measures are available to reduce or avoid the impact. Consequently, the 2023 HESE FEIR finds Impact 4-1 to be significant and unavoidable. The 2023 HESE FEIR does not identify any individual scenic vistas that may be significantly and unavoidably impacted, or any particular sites where development of new housing could adversely impact scenic vistas, but rather discusses the topic broadly as it may apply to many of the potential housing sites being considered for inclusion in the 2023 Housing Element Update's Sites Inventory.

Scenic vistas from publicly accessible vantage points in the vicinity of the 150 Shoreline Affordable Housing Project site include views of Mount Tamalpais, the most prominent and distinctive visual resource in the area. There are also scenic views of Bothin Marsh from publicly accessible vantage points. Both Mount Tamalpais and Bothin Marsh are visible from some public areas within the Howard Johnson Master Plan area, as well as from portions of Shoreline Highway, US 101, and the pedestrian and bicycle trails that traverse Bothin Marsh. Typically, these vistas also include views of developed and undeveloped hillsides, such as the Almonte neighborhood and the undeveloped slope above the Fireside. Figure 2.1-1 shows the vista from northbound Shoreline Highway, near the intersection with the US 101 southbound off-ramp/on-ramp, looking past the Project site to the west. Mount Tamalpais is a distant but prominent feature in this view.

The Project proposes to construct a five-story building with maximum height of 70 feet above grade. This would be substantially taller than the other buildings within the Howard Johnson Master Plan area, which do not exceed two stories. The proposed building would likely obstruct views of important scenic elements, especially Mount Tamalpais, from some publicly accessible scenic vistas, including vistas along Shoreline Highway (Figure 2.1-1) and the Mill Valley-Sausalito bicycle/pedestrian path. Views from US 101, which is elevated as it passes through Bothin Marsh, would not be substantially affected. The obstruction of important scenic elements would be limited to small sections of the affected roadways and paths. As vehicles and pedestrians travel along these corridors, views of Mount Tamalpais would be blocked momentarily, then come back into view. The proposed building would not substantially block views of Bothin Marsh, as the Project site is in the middle of the Howard Johnson Master Plan area. While limited, the impact of the Project on scenic vistas, especially views of Mount Tamalpais, would be significant.

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Figure 2.1-1

Source: Google Maps, 2023

View of Mount Tamalpais from Shoreline Highway, April 2023

The nature and extent of the impact is consistent with Impact 4-1, as identified and described in the 2023 HESE FEIR. Therefore, the Project would not result in a new or substantially more severe significant impact than was previously identified. The 2023 HESE FEIR did not offer mitigation measures or alternatives (other than the No Project Alternative[22]) to reduce or avoid this impact. Since the Project's impact would be a consequence of the size of the proposed building, mitigating the impact would require reducing the height and possibly also the mass of the building. This could not be accomplished while maintaining the Project's objective to construct 32 affordable units with a mix of sizes, and so the impact would remain significant and unavoidable.

b) Would the Project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

As stated in the Setting section of the 2023 HESE FEIR, DEIR Chapter 4, Aesthetics, there are no designated State scenic highways in Marin County. Therefore, the 2023 HESE FEIR does not consider an impact associated with this topic. Because the Project would not be within the view corridor of any State scenic highway, there would be no impact of this kind.

c) Would the Project substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the Project conflict with applicable zoning and other regulations governing scenic quality?

Similar to Impact 4-1, discussed above, the 2023 HESE FEIR identifies Impact 4-2: Impacts on Existing Visual Character and Quality, as significant and unavoidable. The 2023 HESE FEIR summarizes Impact 4-2 as follows:

> Potential housing facilitated by the Housing Element Update, including development on vacant sites and also replacing existing developed areas with new development, could degrade the existing visual character or quality of public views of the site and its surroundings resulting from densities, building heights, building massing, and other types of exterior building materials and elements that could occur with new development. These effects could degrade the existing visual character or quality of public views of the site, and would be a significant impact.

The 2023 HESE FEIR states that no feasible mitigation is available to reduce or avoid this impact, and so this impact would also be significant and unavoidable.

The 150 Shoreline Affordable Housing Project site, in its current state, has little aesthetic merit: it is a flat, vacant lot covered in broken concrete and gravel, with mostly scrubby and weedy, non-native vegetation around some of its perimeter. The only aesthetic features of note are the existing

[22] The other two alternatives examined in the 2023 HESE FEIR, the Reduced VMT Alternative and the Reduced Utility Impact Alternative, would not have affected the Project site.

coast redwood trees on the northeastern boundary line. The Project proposes to remove three of the four trees.

The proposed building would be taller than the one- and two-story commercial buildings in the Howard Johnson Master Plan area. Other commercial and residential buildings in the vicinity are one to three stories. No other five-story buildings exist in the vicinity.

The Tamalpais Area Community Plan (TACP), describes the Manzanita commercial area and states the planning objective for the area as follows:

> The Manzanita area is the primary entry gateway to the Tamalpais Planning Area, and as such, contributes directly to the visual image and character of the community. The Bothin Marsh and waters of Richardson Bay also contribute to the visual character and setting of this commercial area. The local community has strong concerns about land use in this area, its effect on the local wetland environment and the statement it makes about the community's character and image. The objective in this area is to enhance the character of the built environment while protecting habitat values and visual opportunities presented by the wetlands that border and traverse the commercial node (Marin County, 1992, p. III-77).

The TACP, Program LU33.1.b.h, establishes a height limit of 25 feet and two stories on the east side of Shoreline Highway in the Manzanita planning area, which includes the Project site (Marin County, 1992).

The Project proposes a five-story building with an articulated façade; a flat roof with a parapet; a variable, earth-tone color pallet; broad eves; and awnings and shutters, surrounded by landscaped areas with footpaths and native vegetation. While its architectural and aesthetic merits can be argued, its design is demonstrably no worse aesthetically than many of the existing structures in the neighborhood, which include nondescript commercial buildings and an unremarkable Holiday Inn hotel within the Howard Johnson Master Plan area, the CalTrans corporation yard just to the east, and the elevated freeway nearby. The Fireside Building, located across Shoreline Highway, stands out for its age and character, but is flanked by buildings with little charm or architectural distinction.

Whether the proposed building would make a positive statement about the community's character and image is also debatable. It would, however, objectively be considerably taller than other buildings in the area; at five stories, it would substantially exceed the height and story limits established in the TACP (see, however, the discussion of consistency with Countywide Plan Land Use Designation and Zoning in Section 2.11, Land Use and Planning, topic d). Especially because of its proposed height, it may be seen as adversely affecting the scenic character of the surroundings. It would also conflict with the building height limit established in the TACP. For these reasons, the Project may be considered to have the potential to substantially degrade the existing visual character or quality of public views of the surroundings. This would be a significant impact.

The nature and extent of this impact is consistent with Impact 4-2, as identified and described in the 2023 HESE FEIR. Therefore, the Project would not result in a new significant impact or a substantially more severe significant impact than was previously identified. The 2023 HESE FEIR does not offer mitigation measures or alternatives to reduce or avoid this impact. Since the impact for the Project is a consequence of the proposed building's scale, and particularly its height, mitigating the impact would require reducing the size of the proposed building. This could not be accomplished while maintaining the Project's objective to construct 32 affordable units with a mix of sizes, and so the impact would remain significant and unavoidable, consistent with the findings in the 2023 HESE FEIR.

d) Would the Project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

The 2023 HESE FEIR, Impact 4-3: Project Light and Glare Effects states the following:

> Potential future housing development facilitated by the Housing Element Update would result in new sources of light from lighting installed as part of new buildings and site improvements to illuminate entries, parking areas, sidewalks, and open spaces for safety and security and to highlight architectural features. This would contribute to overall lighting in the area, which could affect residential neighbors and the natural setting. However, County Code Section 22.16.030.G contains standards for exterior lighting of buildings: "Exterior lighting visible from off-site should be allowed for safety purposes only, shall consist of low-wattage fixtures, and should be directed downward and shielded to prevent adverse lighting impacts on nearby properties, subject to the approval of the Director." Because the low-wattage fixtures, shielding, and downward alignment would minimize light and glare effects, including potentials for nuisance lighting, compliance with these County standards would ensure that impacts related to light and glare from future development facilitated by the [Housing Element Update] would be less than significant.

The area around the 150 Shoreline Affordable Housing Project site has numerous existing sources of artificial light, including lights from vehicles travelling on US 101, Shoreline Highway, and other roadways; street lighting; lights from existing buildings, including buildings within the Howard Johnson Master Plan area, along Shoreline Highway, and on the developed hillslopes of the Almonte and Tamalpais Valley neighborhoods.

Consistent with less-than-significant Impact 4-3 in the 2023 HESE FEIR, the proposed building would be subject to County Code standards for exterior lighting. Furthermore, the proposed building would not have large expanses of glass that would be lit from within at night in occupied units, and that could cause glare or reflection in sunlight (see Figures 1-6 and 1-7 in Chapter 1, Project Description). For these reasons, the Project would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area; like Impact 4-3 in the 2023 HESE FEIR, the impact would be less than significant. Therefore, the Project would not result in a new significant impact, nor in a substantial increase in the severity of a previously identified significant impact of this kind.

Mitigation Measures

The 2023 HESE FEIR provides no mitigation measures to lessen or avoid the two identified significant unavoidable aesthetic impacts. No feasible mitigation measures are offered for the current Project for the same impacts.

Conclusion

There are no changed circumstances and there is no new information of substantial importance regarding aesthetics that has come to light since certification of the 2023 HESE FEIR. As discussed above, the Project could have significant, unavoidable impacts on scenic vistas and scenic quality. These same effects were found to be significant and unavoidable in the 2023 HESE FEIR. Other aesthetic impacts would be less than significant, for the same reasons stated in the 2023 HESE FEIR. Therefore, the current Project would not result in a new significant impact, nor a substantial increase in the severity of a previously identified significant impact related to aesthetics.

References

Marin County, 1992. Tamalpais Area Community Plan. Adopted by the Board of Supervisors September 21, 1992.

2.2 Agriculture and Forestry Resources

Environmental Issue Area	Where Was this Issue Analyzed in the Previous Environmental Document?	Do Proposed Project Changes Affect this Issue?	Are There Any Changed Circumstances that Affect this Issue?	Is There Any New Information of Substantial Importance Pertaining to this Issue?	If Any of the Previous Three Questions Was Answered "Yes," Would Changes or New Information Result in a New or Substantially More Severe Significant Impact?	Are there any New or Reconsidered Mitigation Measures or Alternatives that Would Substantially Reduce Significant Impacts?
2. Agriculture and Forestry Resources. Would the Project:						
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	HESE DEIR Chapter 4, Agricultural and Forestry Resources, Impact 5-1.	No	No	No	N/A	N/A
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	HESE DEIR Chapter 4, Agricultural and Forestry Resources, Impact 5-2.	No	No	No	N/A	N/A
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	HESE DEIR Chapter 4, Agricultural and Forestry Resources, Impact 5-3.	No	No	No	N/A	N/A
d) Result in the loss of forest land of conversion of forest land to non-forest use?	HESE DEIR Chapter 4, Agricultural and Forestry Resources, Impact 5-4.	No	No	No	N/A	N/A
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	HESE DEIR Chapter 4, Agricultural and Forestry Resources, Impact 5-5.	No	No	No	N/A	N/A

Discussion

Would the Project:

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

d) Result in the loss of forest land of conversion of forest land to non-forest use?

e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

The 2023 HESE FEIR, DEIR Chapter 5, Agricultural and Forestry Resources, discusses five impacts related to this topic. The 2023 HESE FEIR finds that proposed housing sites are not located in areas mapped as important farmland, under Williamson Act contracts, or in forest land or timber land, and so would have no conflict with these uses or result in conversion or loss of farmland or agricultural land. For those housing sites located in agricultural zoning districts, depending on the particular type of zoning, some residential uses, such as affordable housing, agricultural worker housing, small group homes, and ADUs, are principally permitted uses, so development of housing would not conflict with the agricultural zoning. The 2023 HESE FEIR concludes that all these impacts would be less than significant, or that there would be no impact.

The 150 Shoreline Affordable Housing Project site is not farmland (California Department of Conservation, 2025) or forestland, is not zoned agricultural or timber production, and is not under a Williamson Act contract. There is therefore no potential for the Project to conflict with agricultural or forestry uses or zoning, or to convert or change farmland or forestland to non-agricultural or non-forest uses. There would be no impact of these kinds, and the Project would not result in a new significant impact, nor in a substantial increase in the severity of any previously identified significant impact related to agricultural or forestry resources.

Mitigation Measures

The 2023 HESE FEIR, found that no significant impacts related to agricultural and forestry resources, and includes no mitigation measures for this topic. Similarly, the Project would have no impact on agricultural or forestry resources, and so no mitigation measures are required.

Conclusion

The Project would not result in a new or substantially more severe significant impact on agricultural and forestry resources than was identified in the 2023 HESE FEIR. There are no changed circumstances and there is no new information of substantial importance regarding agricultural or forestry resources that has come to light since certification of the 2023 HESE FEIR. The 150 Shoreline Affordable Housing Project would not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact related to agricultural or forestry resources.

References

California Department of Conservation, 2025. California Important Farmland Finder. https://maps.conservation.ca.gov/dlrp/ciff/ Accessed April 9, 2025.

2.3. Air Quality

Environmental Issue Area	Where Was this Issue Analyzed in the Previous Environmental Document?	Do Proposed Project Changes Affect this Issue?	Are There Any Changed Circumstances that Affect this Issue?	Is There Any New Information of Substantial Importance Pertaining to this Issue?	If Any of the Previous Three Questions Was Answered "Yes," Would Changes or New Information Result in a New or Substantially More Severe Significant Impact?	Are there any New or Reconsidered Mitigation Measures or Alternatives that Would Substantially Reduce Significant Impacts?
3. Air Quality. Would the Project:						
a) Conflict with or obstruct implementation of the applicable air quality plan?	HESE DEIR Chapter 6, Air Quality, Impact 6-1	Yes	No	No	No	N/A
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard.	HESE DEIR Chapter 6, Air Quality, Impacts 6-1 and 6-2	Yes	No	No	No	N/A
c) Expose sensitive receptors to substantial pollutant concentrations?	HESE DEIR Chapter 6, Air Quality, Impacts 6-3 and 6-4	Yes	No	No	No	N/A
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	HESE DEIR Chapter 6, Air Quality, Impact 6-5	Yes	No	No	No	N/A

Discussion

The 2023 HESE FEIR identifies five impacts of the then-proposed Housing Element Update on air quality, and concludes that three of the impacts would be significant and unavoidable. These impacts are from vehicle emissions associated with projected per capita rates of vehicle miles travelled (VMT) expected from future residents of new housing facilitated by the Housing Element Update, and from construction-related emissions.

The analysis of air quality impacts of the 150 Shoreline Affordable Housing Project includes modeling of construction emissions using the California Emissions Estimator Model (CalEEMod; CAPCOA, 2022), the standard emissions model for land use projects in California, and consideration of VMT expected from future residential use of the Project. There are no changed circumstances, and, other than the modeling performed for this analysis, no new information of substantial importance pertinent to evaluation of air quality impacts of the Project. The

significance thresholds used for analysis of air quality impacts of the 150 Shoreline Affordable Housing Project use Bay Area Air Quality Management District (BAAQMD) recommended thresholds of significance for project-level reviews (BAAQMD, 2017). This differs from the 2023 HESE FEIR, which uses BAAQMD's plan-level thresholds.

a) Would the Project conflict with or obstruct implementation of the applicable air quality plan?

The 2023 HESE FEIR, DEIR Chapter 6, Air Quality, identifies Impact 6-1: Conflict with the Local Air Quality Plan and Result in a Cumulatively Considerable Net Increase in Criteria Air Pollutants for which the Region is Non-Attainment (Operational). The 2023 HESE FEIR states that the residential growth that would be facilitated by the then-proposed Housing Element Update would result in a projected increase in vehicle miles traveled (VMT) that exceeds the projected population increase and, therefore, could conflict with the BAAQMD 2017 Clean Air Plan, which is the applicable clean air plan for Marin County. The 2023 HESE FEIR concludes that this would result in a cumulatively considerable net increase in operational criteria air pollutants for which the region is nonattainment, and therefore this impact would be significant. The 2023 HESE FEIR therefore identifies Mitigation Measure 6-1: Reduce VMT from New Residential Development, which repeats Mitigation Measure 18-4 from Chapter 18, Transportation in the 2023 HESE FEIR. That mitigation measure requires residential development projects facilitated by the Housing Element Update to reduce VMT 15% below the regional average residential VMT per capita. The mitigation measure lists several strategies for reducing VMT, but concludes that, even with implementation of this mitigation measure, this impact would remain significant and unavoidable.

As discussed in Section 2.17, Transportation, in this Supplemental Environmental Review, the 150 Shoreline Affordable Housing Project would not generate VMT in excess of the 15% below regional per capita average threshold, and so would neither contribute to the significant unavoidable impact identified in the 2023 HESE FEIR (most of the housing sites expected to generate higher per capita VMT are located in the rural and western parts of Marin County), nor conflict with the associated control measure contained in the 2017 Clean Air Plan. Furthermore, the Project site is well-served by mass transit, bicycle, and pedestrian facilities, as further discussed in Section 2.17, Transportation, and it would be subject to the green building and other requirements that can be relied upon to ensure consistency with non-transportation control measures contained in the 2017 Clean Air Plan. As discussed under the following topic, the Project would not exceed BAAQMD criteria pollutant emission thresholds during construction or operation. The Project would therefore be consistent with and would not obstruct implementation of the 2017 Clean Air Plan, and would have a less-than-significant impact of this kind. Mitigation Measure 6-1 need not be applied to the Project to reduce this impact.

b) Would the Project result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable federal or state ambient air quality standard?

The 2023 HESE FEIR, DEIR Chapter 6, Air Quality, identifies Impact 6-2: Result in a Cumulatively Considerable Net Increase in Criteria Pollutants for which the Region is Non-

Attainment (Construction). Furthermore, Impact 6-1, discussed under the previous topic, considers the same type of impact during operation of new housing developments (i.e., post-construction residential use). As discussed under the previous topic, the 2023 HESE FEIR concludes that increased per capita VMT associated with housing developments could generate a cumulatively considerable net increase in criteria air pollutant emissions for which the region is nonattainment, including ozone precursors, PM2.5, and PM10. The 2023 HESE concludes that Impact 6-2 could also generate a cumulatively considerable net increase in criteria air pollutant emissions during construction of new housing. Both impacts are found to be significant. As discussed under the previous topic, the 2023 HESE FEIR identifies Mitigation Measure 6-1, which requires measures that would reduce VMT per capita from new housing developments; it also identifies Mitigation Measure 6-2: Evaluate Air Quality Impacts of Proposed Projects and Plans, to address construction-period air emissions. This mitigation measure requires that, as part of the Environmental Review Process, the County shall use the current BAAQMD CEQA Guidelines to evaluate the significance of air quality impacts from projects or plans, and to establish appropriate minimum submittal and mitigation requirements necessary for project or plan approval. Nevertheless, the 2023 HESE FEIR concludes that these mitigation measures cannot guarantee sufficient reduction of emissions to below the significant threshold, and both impacts are therefore found to be significant and unavoidable.

For the 150 Shoreline Affordable Housing Project, the current analysis fulfills the requirement for evaluation of air quality impacts for proposed projects and plans contained in Mitigation Measure 6-2.

The BAAQMD has established screening criteria for determining the significance of construction- and operations-related air emissions from development projects. These screening criteria provide a conservative indication of whether the proposed project would result in the generation of criteria air pollutants and precursors that exceed the BAAQMD's thresholds of significance (BAAQMD, 2017). For projects that fall within the screening criteria, additional emissions modeling is not required to support a conclusion that the project would not result in a cumulatively considerable air quality impact.

The operational screening criteria for mid-rise apartment buildings is 494 dwelling units. Because the 150 Shoreline Affordable Housing Project proposes to construct 32 dwelling units, it is well within the operational screening criterion, and operational emissions for the Project are therefore assumed to be less than significant.

The operational screening criteria for construction emissions for mid-rise apartments buildings includes a limit of 240 dwelling units, which the Project falls within. However, criteria also include the following:

- All Basic Construction Mitigation Measures would be included in the project design and implemented during construction; and

- Construction-related activities would not include any of the following:
  - Demolition;
  - Simultaneous occurrence of more than two construction phases (e.g., paving and building construction would occur simultaneously);
  - Simultaneous construction of more than one land use type (e.g., project would develop residential and commercial uses on the same site) (not applicable to high density infill development);
  - Extensive site preparation (i.e., greater than default assumptions used by the standard land use emissions model[23] for grading, cut/fill, or earth movement); or
  - Extensive material transport (e.g., greater than 10,000 cubic yards of soil import/export) requiring a considerable amount of haul truck activity.

Marin County Code section 22.20.040.C requires adherence to the BAAQMD Basic Construction Mitigation Measures, a provision that is enforced through the building permit process. The Project also meets the criteria for all but one of the construction-related activities: it involves no demolition, would not schedule two construction phases simultaneously; would not involve simultaneous construction of more than one land use type, and would not involve extensive material transport. The Project, however, would involve a greater level of site preparation than is assumed as the default in CalEEMod: CalEEMod assumes 1 day of site preparation and 1 day of grading using heavy equipment (CAPCOA, 2022), while the construction schedule in the Construction Management Plan prepared for the Project plans for 25 days of earthwork.

Because the Project does not meet all the screening criteria for construction, CalEEMod was used to estimate construction emissions. The model defaults were changed to incorporate the construction schedule contained in the Construction Management Plan, and otherwise adjusted to reflect measurements and volumes contained in Chapter 1, Project Description, and the Project plan set. The CalEEMod results are included in Appendix B, Air Emissions Modeling, and summarized in Table 2.3-1. As shown in the table, the Project would not exceed the thresholds of significance established by the BAAQMD for construction emissions of criteria air pollutants for which the region is non-attainment. The Project would therefore not make a cumulatively considerable contribution to regional air pollution during either the construction phase or, because the Project meets the BAAQMD's operational screening criteria, during the operations phase. Unlike the 2023 HESE FEIR, which concludes that these impacts would be significant and unavoidable when considering the entire list of facilitated housing sites contained in the Housing Element Update, the impact for the 150 Shoreline Affordable Housing Project would be less than significant.

[23] The standard land use emissions model in use at the time the BAAQMD established these screening criteria was the Urban Land Use Emissions Model [URBEMIS]. This model has been superseded by the California Emissions Estimator Model (CalEEMod).

Table 2.3-1
Estimated Unmitigated Average Daily Construction Emissions (pounds)

Condition	ROG	NOx	PM_{10}[1]	$PM_{2.5}$[1]	CO
Average Daily Construction Emissions	1.49	2.07	0.09	0.08	2.71
Significance Threshold	54	54	82	54	---
Significant (Yes or No)?	No	No	No	No	No

Note: 1. PM_{10} and $PM_{2.5}$ are exhaust emission only, per BAAQMD guidance.
Source: CalEEMod model run (Appendix B: Air Emissions Modeling)

c) Would the Project expose sensitive receptors to substantial pollutant concentrations?

The 2023 HESE FEIR, DEIR Chapter 6, Air Quality, identifies Impact 6-3: Generate Toxic Air Contaminant Emissions that Expose Sensitive Receptors to Substantial Pollutant Concentrations During Construction; and Impact 6-4, Expose Sensitive Receptors to Substantial Operational Pollutant Concentrations. The 2023 HESE FEIR finds that Impact 6-3 would be significant, because adoption of the then-proposed Housing Element Update would result in construction activities over the next 10 to 20 years that would generate toxic air contaminants (TACs) and PM2.5 emissions that could, at some housing sites, expose nearby sensitive receptors to substantial pollutant concentrations. The 2023 HESE FEIR identifies Mitigation Measure 6-3: Evaluate Air Quality Impacts of Proposed Projects and Plans, which repeats Mitigation Measure 6-2, discussed under the previous topic. This mitigation measure requires the County to evaluate air quality impacts of proposed projects and plans as part of the Environmental Review Process, using the current BAAQMD CEQA Guidelines, and to establish appropriate minimum submittal and mitigation requirements necessary for project or plan approval. Despite imposition of this requirement, the 2023 HESE FEIR concludes that Impact 6-3 would remain significant and unavoidable, because the effectiveness of these measures cannot be guaranteed in all instances of construction of housing developments facilitated by the Housing Element Update.

In the discussion of Impact 6-4, the 2023 HESE FEIR states that the residential land uses proposed by the Housing Element Update would not include operational sources of TACs or PM 2.5 emissions that could result in significant exposures of sensitive receptors. The 2023 HESE FEIR concludes that this impact would be less than significant, because the Project does not propose land uses that support large stationary sources or that support the types of mobile sources that generate large amounts of TACs or PM2.5, such as large diesel trucks.

In a section titled Other Planning Considerations (Exposure of New Receptors to Air Quality Risks and Hazards) following the air quality impact discussion, The 2023 HESE FEIR considers the potential for residents of housing developments facilitated by the Housing Element Update to be exposed to unacceptable health risk from exposure to nearby sources of pollutants. This discussion references Countywide Plan Program AIR-2.a, which requires that sensitive receptors be set back from emissions sources, consistent with BAAQMD screening distances, unless detailed, project-specific studies can demonstrate sensitive receptor land use compatibility with adjacent uses. Program AIR-2.b sets forth similar requirements for risks associated with

roadways. Program AIR-2.c formally requires a health risk analysis to be prepared during environmental review for projects that propose to locate sensitive receptors near roadways and stationary sources. If health risks are found to be significant, they must be mitigated to levels that are consistent with BAAQMD standards.

All three of these considerations are examined here for the Project: exposure of sensitive receptors to pollutant concentrations during construction, exposure of sensitive receptors to pollutant concentrations during operations, and exposure of future residents to ambient or nearby pollutant concentrations. This analysis fulfills the requirement for evaluation of air quality impacts for proposed projects and plans contained in Mitigation Measure 6-3.

Exposure of sensitive receptors to pollutant concentrations during construction

During construction, the Project would emit TACs and PM2.5 primarily as a component of emissions from diesel-powered heavy equipment and trucks. Emission estimates are shown in Table 2.3-1. The closest sensitive receptors to the Project site are the Fireside Apartments, the closest of which are about 300 feet away, across Shoreline Highway. There are no hospitals, schools, daycare centers, or nursing homes within 1,000 feet of the Project site. The Fireside Apartments lie to the south and southeast of the Project site, and so are generally upwind or crosswind with the prevailing northwest winds in the area.

The construction period for the Project, especially for the earth-moving phase of construction during which the highest use of diesel-powered heavy equipment would occur, would be relatively brief. Short-term exposure to TACs from construction activity is generally not considered a significant health risk by BAAQMD. The BAAQMD Air Quality Guidelines note that the current models and methodologies for conducting health risk assessments are associated with longer-term exposure periods of 9, 40, and 70 years, which do not correlate well with the temporary and highly variable nature of construction activities. Only when diesel emissions from construction equipment would occur in close proximity to sensitive receptors over a prolonged period of time does the BAAQMD recommend further evaluation. Since construction of the Project would be short-term, would not be over a large area, and would not be in close proximity to or upwind from sensitive receptors, the Project would not be expected to result in exposure of sensitive receptors to substantial pollutant concentrations during construction, and this impact would therefore be less than significant.

Exposure of sensitive receptors to pollutant concentrations during operations

Residential uses enabled by the Project following construction would not be expected to generate large amounts of TACs or PM2.5, or criteria pollutants. For the same reasons stated in the 2023 HESE FEIR to conclude that Impact 6.4 would be less than significant, operational period exposure of sensitive receptors to substantial pollutant concentrations from the Project would be less than significant.

Exposure of Future Residents of the Proposed Project to Pollutant Concentrations

The 2023 HESE FEIR includes Table 6-9: Potentially Unacceptable Health Risks From Stationary Sources, which identifies several sites then being considered for inclusion in the

Housing Element Update's Sites Inventory that are within the BAAQMD screening distances for permitted stationary sources. The Project site is not on this list. The BAAQMD provides an interactive map of permitted stationary sources that enable the user to identify sources within a user-defined buffer distance of a point or polygon (BAAQMD, 2025a). No permitted stationary sources are located within 1,000 feet of the Project site, which is the recommended screening distance. The Project site is not within an area mapped by the BAAQMD as an "Impacted Community," which are areas where pollutant concentrations exceed State or federal standards for cumulative pollutants, PM2.5, or ozone (BAAQMD, 2025b). Nor is the Project site within an area mapped by the BAAQMD as an "Overburdened Community," which are areas with high burdens of toxic emissions.[24] The Project site is, however, within the BAAQMD's recommended screening distance for freeways (US 101) and major roadways (Shoreline Highway).

For the environmental review of a previous project proposed for the Project site, BAAQMD, at the request of the Marin County Community Development Agency, conducted a health risk assessment to calculate the existing cumulative cancer risk and non-cancer health risk at the Project site (Marin County Community Development Agency, 2022). The health risk assessment was completed in 2020. The results determined that the estimated average annual concentration of $PM_{2.5}$ that future residents of that project would be exposed to would be 0.1481 micrograms per cubic meter ($\mu g/m^3$), which is below the BAAQMD's significance threshold for cumulative concentrations of $PM_{2.5}$ of 0.8 $\mu g/m^3$. BAAQMD calculated that the noncancer risk at the Project site would be close to zero (the significance threshold for cumulative noncancer risk is a Hazard Index of 10). The cumulative cancer risk was calculated to be 6.133 excess cancer cases per million people, which is below the BAAQMD's significance threshold for cumulative cancer risk of 100 excess cancers per million people.

There have been no new emissions sources located in the vicinity of the Project site, and no significant changes in emissions sources since this health risk assessment was completed; therefore, it is applicable to the current Project, and provides an adequate basis for concluding that future residents of the Project would not be exposed to substantial pollutant concentrations.

Conclusion

The Project would not expose sensitive receptors to substantial pollutant concentrations during construction or operations, and future residents of the Project would not be exposed to substantial pollutant concentrations from other sources. The Project would have a less-than-significant impact of this kind. Compared to the 2023 HESE FEIR, there would be no new significant impacts, and no substantial increase in the severity of a previously identified significant impact, related to exposure of sensitive receptors to substantial pollutant concentrations.

[24] BAAQMD Rule 2-1-243 defines "Overburdened Community" as an area located (i) within a census tract identified by the California Communities Environmental Health Screening Tool (CalEnviroScreen), Version 4.0, as having an overall CalEnviroScreen score at or above the 70th percentile, or (ii) within 1,000 feet of any such census tract.

d) Would the Project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

The 2023 HESE FEIR identifies Impact 6-5: Objectionable Odors. The discussion of this impact states that, according to the BAAQMD's CEQA Air Quality Guidelines (BAAQMD, 2017), land uses typically associated with odor complaints include agricultural operations, wastewater treatment plants, landfills, and certain industrial operations such as manufacturing uses that produce chemicals, paper, etc. The 2023 HESE FEIR states that construction of new housing developments could produce odors from fuel combustion and the use of solvents and paints. These odors would be temporary and intermittent, would disperse quickly, and would not affect a substantial number of people, and so the 2023 HESE FEIR concludes that this impact would be less than significant.

For the same reasons stated in the 2023 HESE FEIR, the 150 Shoreline Affordable Housing Project would have a less-than-significant impact with respect to odors or other emissions that would adversely affect a substantial number of people.

Mitigation Measures

The 2023 HESE FEIR identifies Mitigation Measure 6-1: Reduce VMT from New Residential Development; Mitigation Measure 6-2: Evaluate Air Quality Impacts of Proposed Projects and Plans; and Mitigation Measure 6-3: Implement Mitigation Measure 6-2. As discussed above, the 150 Shoreline Affordable Housing Project would not result in high levels of VMT requiring reduction to avoid a significant impact, so Mitigation Measure 6-1 is not applicable to the Project. The discussion above constitutes an evaluation of air quality impacts of the Project, thus fulfilling the requirements of Mitigation Measures 6-2 and 6-3.

Conclusion

The 2023 HESE FEIR identifies three significant and unavoidable air quality impacts for the Housing Element Update. The evaluation of air quality impacts above, however, concludes that the 150 Shoreline Affordable Housing Project would not have a significant air quality impact: the Project would not result in a new significant air quality impact, nor would it result in a substantial increase in the severity of a previously identified significant air quality impact. There are no changed circumstances and, other than the analysis prepared for the Project, there is no new information of substantial importance pertinent to evaluation of the Project's air quality impacts.

References

Bay Area Air Quality Management District (BAAQMD), 2017. California Environmental Quality Act Air Quality Guidelines. May 2017.

BAAQMD, 2025a. Stationary Source Screening Map (interactive map). https://baaqmd.maps.arcgis.com/apps/webappviewer/index.html?id=845658c19eae4594b9f4b805fb9d89a3 Accessed April 10-11, 2025.

BAAQMD, 2025b. Impacted Communities Map (interactive map). https://www.baaqmd.gov/en/about-air-quality/interactive-data-maps Accessed April 10, 2025.

BAAQMD, 2025c. Impacted Communities Map (interactive map). https://www.baaqmd.gov/en/about-air-quality/interactive-data-maps Accessed April 10, 2025.

California Air Pollution Control Officers Association (CAPCOA), 2022. California Emissions Estimator Model (CalEEMod) User Guide, Version 2022.1, Appendix G: Default Data Tables. April 2022.

2.4. Biological Resources

Environmental Issue Area	Where Was this Issue Analyzed in the Previous Environmental Document?	Do Proposed Project Changes Affect this Issue?	Are There Any Changed Circumstances that Affect this Issue?	Is There Any New Information of Substantial Importance Pertaining to this Issue?	If Any of the Previous Three Questions Was Answered "Yes," Would Changes or New Information Result in a New or Substantially More Severe Significant Impact?	Are there any New or Reconsidered Mitigation Measures or Alternatives that Would Substantially Reduce Significant Impacts?
4. Biological Resources. Would the Project:						
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	HESE DEIR Chapter 7, Biological Resources, Impact 7-1.	Yes	No	Yes	No	N/A
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	HESE DEIR Chapter 7, Biological Resources, Impact 7-2	Yes	No	Yes	No	N/A
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	HESE DEIR Chapter 7, Biological Resources, Impact 7-2	Yes	No	Yes	No	N/A
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	HESE DEIR Chapter 7, Biological Resources, Impact 7-3.	Yes	No	Yes	No	N/A

Environmental Issue Area	Where Was this Issue Analyzed in the Previous Environmental Document?	Do Proposed Project Changes Affect this Issue?	Are There Any Changed Circumstances that Affect this Issue?	Is There Any New Information of Substantial Importance Pertaining to this Issue?	If Any of the Previous Three Questions Was Answered "Yes," Would Changes or New Information Result in a New or Substantially More Severe Significant Impact?	Are there any New or Reconsidered Mitigation Measures or Alternatives that Would Substantially Reduce Significant Impacts?
4. Biological Resources. Would the Project:						
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	HESE DEIR Chapter 7, Biological Resources, Impact 7-4.	Yes	No	Yes	No	N/A
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	HESE DEIR Chapter 7, Biological Resources, Impact 7-5.	No	No	No	N/A	N/A

Discussion

The Project Applicant has prepared and submitted a Biological Site Assessment that characterizes the biological resources present at the Project Site and that discusses the potential for the Project to have significant adverse effects on biological resources (Madrone Ecological Consulting, 2025). The Project Applicant has also prepared and submitted an Arborist's report that describes trees present at the Project site and that provides recommendations for tree protection (Michelia Arboriculture, 2025). Swift Biological Consulting, on behalf of Sicular Environmental Consulting, peer-reviewed these two reports to determine their suitability to provide a basis for the biological resources impact analysis presented below (Swift Biological Consulting, 2025). This included a site reconnaissance and rare plants survey, conducted on April 16, 2025. These reports provide new information pertinent to the analysis of biological resources impacts of the Project.

a) Would the Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

The 2023 HESE FEIR, DEIR Chapter 7, Biological Resources, identifies Impact 7-1: Impacts to Special Status Species, and states that the development of new housing facilitated by the then-proposed Housing Element Update could occur on undeveloped or partially developed sites in proximity to areas where there are known occurrences of special status species or habitats that

may support these species. The 2023 HESE FEIR finds that this could have a substantial adverse effect on candidate, sensitive, or special status species, either directly or through habitat modifications. The HESE FEIR states, however, that previously adopted Countywide Plan policies and programs would protect and avoid impacts on special status species and their habitats. Policies BIO-1: Protect Wetlands, Habitat for Special Status Species, Sensitive Natural Communities, and Important Wildlife Nursery Areas and Movement Corridors; BIO-2.1: Include Resource Preservation in Environmental Review; BIO-2.2: Limit Development Impacts; BIO-2.8: Coordinate with Trustee Agencies; and Program BIO-2.a: Require Site Assessments, are specifically related to the protection of special status species from the potentially adverse effects of development. These measures require environmental review pursuant to CEQA of proposed development applications, coordination with trustee agencies during environmental review, site assessments for projects that may impact special status species, evaluation of potential impacts, identification of mitigation measures to protect species, and ensuring that development does not encroach on wildlife habitat. Relying on implementation of these policies and programs, the 2023 HESE FEIR concludes that the Housing Element Update's impact on special status species would be less than significant, and no mitigation is required.[25]

The Biological Site Assessment performed for the 150 Shoreline Affordable Housing Project (Madrone Ecological Consulting, 2025) describes current conditions on and adjacent to the Project site. It states that most of the site is surfaced with asphalt and gravel pavement, and that site soils are classified as Xerothents - artificial fill, by the USDA Natural Resources Conservation Service. Almost all plants observed within the Project site during the field survey were non-native. None of the plant species observed within the Project site were halophytic or typical of the nearby salt marshes. The Biological Site Assessment states that, although the Project site is only approximately 170 feet from the nearest tidal marsh (to the north), it does not support wetland habitat and is separated from the tidal marsh by parking lots. No riparian habitat, sensitive natural communities, wildlife movement corridors or nurseries, wetlands, or other aquatic resources were observed on or around the Project site.

The Biological Site Assessment includes a list of special status species that have been documented in the vicinity of the Project site. Of the many plant species listed, only two were identified as having potential for occurrence at the Project site: bent-flowered fiddleneck (*Amsinckia lunaris*) and congested-headed hayfield tarplant (*Hemizonia congesta ssp. congesta*), both of which were identified as having "extremely low" potential for occurrence on the Project site, which is described as representing "extremely marginal habitat for these species." In addition, the Biological Site Assessment identifies three special status wildlife species, all with "low" potential to occur within the Project site: Pallid bat (*Antrozous pallidus*), Saltmarsh common yellowthroat (*Geothlypis trichas sinuosa*), and Hoary bat (*Lasiurus cinereus*). The Biological Site Assessment states that the redwood trees in the northern portion of the Project site could provide roosting habitat for pallid bat, hoary bat, and other more common bat species, and that saltmarsh common yellowthroat typically nests within and immediately adjacent to salt marshes, but can occupy shrubs a short distance from higher quality habitat. As such, the species

[25] The 2023 HESE FEIR, in discussion of Impact 7-1, goes on to find that the then-proposed Safety Element Update could have a significant impact on special status species, and so includes Mitigation Measure 7-1, which applies only to Safety Element Update policies and programs, not to the Housing Element Update.

has a low potential to nest within the landscaping shrubs within the Project site. The Biological Site Assessment also states that the trees and shrubs along the northern and eastern edges of the Project site provide suitable nesting habitat for common migratory birds protected by the Migratory Bird Treaty Act.

The Biological Site Assessment states that the site was surveyed when the two plant species with potential to occur on the Project site would not have been in bloom, and recommends that an additional site survey be conducted at the appropriate time of year when the target plant species are in bloom. Swift Biological Consulting conducted a site survey for this Supplemental Environmental Review in mid-April during the blooming period for bent-flower fiddleneck, and again in early May during the blooming period for congested-headed hayfield tarweed. Neither species was observed within or adjacent to the Project site, and the biologist confirmed that the site provides only extremely marginal habitat for both species. Therefore, both plant species are considered to be absent from the Project site, and the Project would not have a direct or indirect impact on special status plant species.

The Biological Site Assessment recommends a preliminary bat habitat assessment by a qualified biologist to determine whether there is potentially suitable roosting habitat (cavities in trees) in any of the trees proposed for removal. If so, a pre-construction survey of the potential roosting habitat is recommended prior to tree removal to determine presence or absence of roosting bats. Swift Biological Consulting conducted the recommended bat habitat assessment on April 16, 2025, and concurred with the Biological Site Assessment that the redwood trees provide potential roosting habitat. Swift Biological Consulting therefore conducted a bat survey on the evening of May 6, 2025, and detected no presence of bats. Special status bats are therefore considered not present within the Project site, and the Project would not have a substantial adverse effect on a special status bat species.

The Biological Site Assessment recommends conducting pre-construction nesting bird surveys, if construction activities including tree removal are proposed during the bird nesting season. Marin County Code section 22.20.040.G, Nesting Bird Protection Measures, applies to Project construction; if Project construction involving site disturbance occurs during bird nesting season, defined as February 1 – August 15, the Project applicant would be required to conduct nesting bird surveys prior to site disturbance to determine whether active nests are present, and if so, to implement avoidance and protection measures. With adherence to this regulatory requirement, the Project would not have a direct or indirect impact on any special status bird species.

Consistent with the conclusion of less-than-significant for Impact 7-1 for Housing Element Update policies and programs reached in the 2023 HESE FEIR, the 150 Shoreline Affordable Housing Project would not have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.

b) Would the Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans,

policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

c) Would the Project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

The 2023 HESE FEIR, DEIR Chapter 7, Biological Resources, identifies Impact 7-2, Impacts on Riparian Habitat, Sensitive Natural Communities, and Wetlands, which states that new housing developments facilitated by the then-proposed Housing Element Update could occur on undeveloped or partially developed sites in proximity to riparian areas, wetlands, and other sensitive natural communities. The 2023 HESE FEIR, however, identifies Countywide Plan policies and programs for protection of these sensitive areas (as listed in the discussion of topic a, above), and concludes that they are sufficient to avoid a significant impact.[26]

As described above under topic a, the Biological Site Assessment prepared for the Project, which was peer reviewed and confirmed sufficient for this Supplemental Environmental Review, found no sensitive natural communities within the Project site, and concluded that the Project would not have a significant adverse effect on the nearby salt marsh, due to sufficient buffer distance and the highly developed state of the land between the Project site and the marsh. Site reconnaissance by Swift Biological Consulting confirmed these findings. The Project would therefore not have the potential for a substantial adverse effect on riparian habitat, protected wetlands, or other sensitive natural communities. This is consistent with the conclusion reached in the 2023 HESE FEIR regarding the potential for housing developments facilitated by the Housing Element Update for impacts of this kind.

d) Would the Project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

The 2023 HESE FEIR identifies Impact 7.3, Impacts on Wildlife Movement Corridors and Wildlife Nursery Sites. As discussed under Impact 7.3, the 2023 HESE FEIR found that new development facilitated by the then-proposed Housing Element Update could interfere with the movement of wildlife or result in the loss or reduction of undeveloped or underutilized land that provides movement corridors for wildlife species. In addition, development activities could impair or destroy breeding sites, including the taking of active bird nests and bat maternity roosts. Also, development occurring in proximity to potential movement corridors could potentially increase the risk of birds colliding with buildings. The 2023 HESE FEIR states that existing protections afforded by Countywide Plan policies and other regulatory requirements, including requirements for conducting biological site assessments, would be sufficient to protect movement corridors and nursery sites. However, the 2023 HESE FEIR states that Countywide Plan policy BIO-2.5, which restricts disturbance of nesting habitat during the nesting season, requires

[26] The 2023 HESE FEIR, in discussion of Impact 7-2, goes on to find that the then-proposed Safety Element Update could have a significant impact on sensitive natural communities, and so includes Mitigation Measures 7-2 and 7-3, which apply only to Safety Element Update policies and programs, not to the Housing Element Update.

updating so that the defined nesting season is consistent with the typical nesting season of most birds in Marin County.

Additionally, the 2023 HESE FEIR states that existing Countywide Plan policies are not sufficiently protective of birds. The 2023 HESE FEIR therefore includes Mitigation Measure 7-3.1: Revise Definition of the Nesting Season; and Mitigation Measure 7-3.2: Bird-Safe Design, and states that these would be sufficient to reduce impacts on wildlife movement corridors and nursery sites to less than significant.[27] Mitigation Measure 7-3.1 revises Policy BIO-2.5 to extend the nesting season, previously defined as March 1 through August 1, to February 1 through August 31. During this time, preconstruction nesting bird surveys and imposition of appropriate setbacks would be required prior to disturbance. Mitigation Measure 7-3.2 requires the County to establish design standards for new construction and redevelopment projects to require incorporation of bird-safe features to prevent or reduce avian collision risks with glass windows, consistent with recommendations of the American Bird Conservancy (American Bird Conservancy, 2020). This mitigation measure requires the County to specify thresholds when standards would apply, such as site location relative to avian habitat and amount of contiguous glass proposed on building facades. If projects meet or exceed the thresholds, the County would require application of bird-safe design features including, but not limited to, window treatments, glass treatments, and landscaping and lighting modifications.

The Biological Site Assessment performed for the Project, which was peer reviewed and confirmed for this Supplemental Environmental Review, found no wildlife migratory corridors or nursery sites within or adjacent to the Project site, and found only limited and marginal habitat for nesting birds and roosting bats. While not referenced in the 2023 HESE FEIR, Marin County Code section 22.20.040.G, which requires pre-construction nesting bird surveys, defines the nesting period as February 1 through August 15. As stated above under topic a, adherence to this section of the Marin County Code would protect any bird nesting sites within the Project site from substantial interference during Project construction.

While the County has not yet adopted the bird-safe design standards required by Mitigation Measure 7-3.2, the design for the proposed residential building includes several features that would reduce the potential for bird collisions (Sheppard and Phillips 2015), as illustrated in Figure 1-6: Renderings of the Proposed Development, Figure 1-7: Elevations, and Figure 1-10: Landscaping Plan, in Chapter 1, Project Description. These features include: no large expanses of glass or single large glass panes (glass accounts for a relatively small proportion of the exterior surface area of the building); most windows are divided, and the design includes shutters and overhangs; the north elevation, which would face the remaining redwood tree not proposed for removal, features only three small windows; planned landscape vegetation is mostly low and sparse, and the surrounding parcels have minimal landscaping providing limited habitat for birds; large planted trees will provide a buffer between the building and bird flight areas, and finally, the Project will be constructed in compliance with the CalGreen light pollution reduction standards

[27] The 2023 HESE FEIR also identifies Mitigation Measure 7-3.3, Implement Protective Buffers during Vegetation Management, but this applies only to Safety Element Update policies and programs, not to the Housing Element Update.

(California Title 24, Parts 6 and 11) which will help reduce the impacts of light pollution, light trespass, and glare. Implementing these measures will reduce the risk of bird collisions.

For these reasons, the potential for the Project to result in bird collisions is not expected to interfere substantially with wildlife movement or migratory wildlife corridors, or impede the use of native wildlife nursery sites. The delay in implementation of 2023 HESE FEIR Mitigation Measures 7-3.1 and 7-3.2 notwithstanding, the impact would be less than significant; the 150 Shoreline Affordable Housing Project would not have a new significant impact, nor a substantial increase in the severity of the previously identified impact, related to wildlife movement, migratory wildlife corridors, or native wildlife nursery sites.

e) Would the Project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

The 2023 HESE FEIR identifies Impact 7-4: Conflicts with Local Policies or Ordinances Protecting Biological Resources, which states that adoption of the then-proposed Housing Element Update would facilitate new housing development that could result in the removal of an unknown number of trees, some of which may qualify as protected trees under the Native Tree Preservation and Protection provisions of the Marin County Code (Chapter 22.27). The 2023 HESE FEIR also states that projects facilitated by the Housing Element Update would be required to comply with Countywide Plan policies and programs that require local planning and development decisions to consider impacts to biological resources. The 2023 HESE FEIR finds that, with adherence to these regulations, policies, and programs, the Housing Element Update would not conflict with any local policies or ordinances protecting biological resources.

The Arborist Report prepared for the 150 Shoreline Affordable Housing Project, and peer-reviewed for this Supplemental Environmental Review, evaluates the four coast redwood trees (*Sequoia sempervirens*) along the northeast property line of the Project site. Three are considered "protected" trees and the last is a "heritage" tree under Marin County Code Chapter 22.27. One of the trees is largely off-site but crosses the property line. These are the only trees on the Project site. The Project proposes to remove the three on-site redwoods, and the Arborist Report includes recommendations for protecting the remaining, off-site redwood.

The Project involves the removal of one heritage tree and two protected trees. The proposed landscape plan includes the planting of eight large replacement native trees, including one coast redwood and one coast live oak (*Quercus agrifolia*), along with over 100 native and non-native ground covers and shrubs. Obtaining a Tree Removal Permit and complying with its specific conditions and requirements will ensure that the Project will not conflict with any local policies or ordinances protecting biological resources. As with the conclusion reached in the 2023 HESE FEIR for Impact 7-4, the Project would have no impact of this kind.

f) Would the Project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

The 2023 HESE FEIR identifies Impact 7-5: Conflicts with adopted Habitat Conservation Plans, Natural Community Conservation Plans, or other conservation plans. It states that no Habitat Conservation Plans, Natural Community Conservation Plans, or other approved local, regional, or State habitat conservation plans are present in Marin County.

For the same reason stated in the 2023 HESE FEIR, the 150 Shoreline Affordable Housing Project would have no impact related to conflicts with adopted Habitat Conservation Plans, Natural Community Conservation Plans, or other conservation plans.

Mitigation Measures

The 2023 HESE FEIR identifies two mitigation measures that are applicable to the Housing Element Update: Mitigation Measure 7-3.1. Revise Definition of the Nesting Season, and Mitigation Measure 7-3.2 Bird-Safe Design. As discussed above under topic d, the Project would not have a significant impact on biological resources, and no mitigation is required.

Conclusion

The 2023 HESE FEIR finds that, with implementation of identified mitigation measures, housing projects facilitated by the Housing Element Update would have only less-than-significant impacts on biological resources. The 150 Shoreline Affordable Housing Project would, however, have only less-than-significant biological resources impacts without mitigation; the Project would not have a new significant impact or a substantial increase in the severity of a previously identified significant impact on biological resources.

References

American Bird Conservancy, 2020. Bird-Friendly Building Design. https://abcbirds.org/wp-content/uploads/2020/09/Bird-Friendly-Building-Design.pdf

Madrone Ecological Consulting, 2025. Biological Resources Analysis for the 150 Shoreline Highway Property. Memo from Sarah VonderOhe, Principal, to Lauren Alexander, The Armony Companies. January 23, 2025.

Michelia Arboriculture, 2025. Preliminary Arborist Report, Proposed Affordable Housing at 150 Shoreline Highway, Mill Valley. Letter report from Jennifer Tso, Board Certified Master Arborist, to Lauren Alexander, The Armony Companies. February 14, 2025.

Sheppard, C and G. Phillips. 2015. Bird-Friendly Building Design, 2nd Ed. American Bird Conservancy, 2015.

Swift Biological Consulting, 2025. Biological Resources Peer Review, 150 Shoreline Highway Affordable Housing Project. Prepared by Jennifer Michaud, CWB, for Sicular Environmental Consulting. May 7, 2025.

2.5. Cultural Resources and Tribal Cultural Resources

Environmental Issue Area	Where Was this Issue Analyzed in the Previous Environmental Document?	Do Proposed Project Changes Affect this Issue?	Are There Any Changed Circumstances that Affect this Issue?	Is There Any New Information of Substantial Importance Pertaining to this Issue?	If Any of the Previous Three Questions Was Answered "Yes," Would Changes or New Information Result in a New or Substantially More Severe Significant Impact?	Are there any New or Reconsidered Mitigation Measures or Alternatives that Would Substantially Reduce Significant Impacts?
5. Cultural Resources and Tribal Cultural Resources. Would the Project:						
a) Cause a substantial adverse change in the significance of a historical resource pursuant to Public Resources Code §15064.5?	HESE DEIR Chapter 8, Cultural, Tribal Cultural, and Historical Resources, Impact 8-1.	Yes	No	Yes	No	N/A
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Public Resources Code § 15064.5?	HESE DEIR Chapter 8, Cultural, Tribal Cultural, and Historical Resources, Impact 8-2.	Yes	No	Yes	No	N/A
c) Disturb any human remains, including those interred outside of formal cemeteries?	HESE DEIR Chapter 8, Cultural, Tribal Cultural, and Historical Resources, Impact 8-2.	Yes	No	Yes	No	N/A

Environmental Issue Area	Where Was this Issue Analyzed in the Previous Environmental Document?	Do Proposed Project Changes Affect this Issue?	Are There Any Changed Circumstances that Affect this Issue?	Is There Any New Information of Substantial Importance Pertaining to this Issue?	If Any of the Previous Three Questions Was Answered "Yes," Would Changes or New Information Result in a New or Substantially More Severe Significant Impact?	Are there any New or Reconsidered Mitigation Measures or Alternatives that Would Substantially Reduce Significant Impacts?
5. Cultural Resources and Tribal Cultural Resources. Would the Project:						
d) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code 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, and that is: i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)? ii) 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 Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	HESE DEIR Chapter 8, Cultural, Tribal Cultural, and Historical Resources, Impact 8-2.	Yes	No	Yes	No	N/A

Discussion

The 2023 HESE FEIR evaluates potential impacts of the then-proposed Housing Element Update on Cultural, Tribal Cultural, and Historical resources in DEIR Chapter 8. Because it is a programmatic EIR, the 2023 HESE FEIR does not evaluate all sites that were being considered for inclusion in the Sites Inventory of the then-proposed Housing Element Update, but rather

evaluates potential impacts generally and defers to future environmental review and permitting processes site-specific evaluation.

A Cultural Resources Evaluation was prepared for the Project Site for the environmental review of the previously proposed O'Donnell Financial Group, LLC Master Plan Amendment and Design Review (O'Donnell) project (Archaeological Resource Service (ARS), 2020; Marin County Community Development Agency, 2021). The impact analysis below relies primarily on the ARS report. While the ARS report was available at the time that the 2023 HESE FEIR was being prepared, it was not referenced or cited. Therefore, for the purpose of this Supplemental Environmental Review, it is considered new information of substantial importance that pertains to the current Project. In addition, archaeological testing of the Project site in April 2025 (Evans & DeShazo, 2025) is new information that informs the evaluation of impacts on archaeological resources in this section.

During preparation of the O'Donnell environmental review, the County, per the requirements of Assembly Bill (AB) 52, consulted with the Federated Indians of Graton Rancheria (FIGR) regarding the Tribe's knowledge of tribal cultural resources within the Project site. The results of that consultation are reviewed in the discussion of topics b, c, and d, below.

a) Would the Project cause a substantial adverse change in the significance of a historical resource pursuant to Public Resources Code §15064.5?

The 2023 HESE FEIR, DEIR Chapter 8, Cultural, Tribal Cultural, and Historical Resources, identifies Impact 8-1: Destruction/Degradation of Historical Resources. The discussion of this impact states that there may be one or more properties included as potential housing sites, or features within those sites, that meet the CEQA definition of a historical resource. Where such resources occur, future housing development facilitated by the then-proposed Housing Element Update could cause substantial adverse changes in the significance of the historical resource, which would be a significant impact. The 2023 HESE FEIR therefore identifies Mitigation Measure 8-1, which requires that, for any project facilitated by the Housing Element Update that the County determines may involve a potentially significant historical resource, that resource must be assessed to determine whether it is a significant historic resource and whether the project may have a potentially significant adverse effect on the resource. If the County determines that a project may have a potentially significant effect, the mitigation measure must detail the steps that a project applicant must take to protect or document the resource. The 2023 HESE FEIR concludes, however, that while implementation of these measures would reduce significant impacts on historic resources, they may not be sufficient in all cases to reduce the impact to a less-than-significant level. Consequently, the 2023 HESE FEIR finds that this impact would be significant and unavoidable.

The Cultural Resources Evaluation prepared for the previously proposed O'Donnell project (ARS, 2020) fulfills the requirement for a site-specific cultural resources evaluation of the Project site contained in Mitigation Measure 8-1. The Cultural Resources Evaluation did not identify any evidence of historic-period activity at the Project site, and reported no records or observations of potentially historic resources. Since the Project site is currently vacant land, was previously

occupied by a gas station, and is located on fill placed at the site relatively recently, there is very low potential for previously unrecorded historical resources to be present. In the unlikely event that historic resources are present within the subsurface of the site and are accidentally discovered during Project construction, compliance with Marin County Code section 22.20.040.E, Archaeological, Historical, and Paleontological Resources, would apply. This code section states that, if archaeological, historic, or paleontological resources are discovered during any construction, construction activities shall cease, and the County shall be notified so that the extent and location of discovered materials may be recorded by a qualified archaeologist, and disposition of artifacts may occur in compliance with State and federal law. Compliance with this Code section would ensure that impacts to historic resources would be less than significant. While the 2023 HESE FEIR concludes that Impact 8-1 would be significant and unavoidable, even with implementation of Mitigation Measure 8-1, this impact conclusion does not apply to the 150 Shoreline Affordable Housing Project.

b) Would the Project cause a substantial adverse change in the significance of an archaeological resource pursuant to Public Resources Code § 15064.5?

c) Would the Project disturb any human remains, including those interred outside of formal cemeteries?

d) Would the Project cause a substantial adverse change in the significance of a tribal cultural resource?

The 2023 HESE FEIR identifies Impact 8-2: Potential for Disturbance of Archaeological Resources, Including Human Remains, and Tribal Cultural Resources. Discussion of this impact states that development facilitated by the Housing Element Update could disturb unrecorded sensitive archaeological resources or Tribal cultural resources. During preparation of the EIR, the County consulted with FIGR pursuant to AB 52 and Senate Bill (SB) 18 requirements, but the consultation did not result in formal suggestions for the EIR or Housing or Safety Element policies. The 2023 HESE FEIR concluded that existing Countywide Plan policies, State laws, and County Code requirements would ensure that potential impacts on archaeological resources, including human remains, and on tribal cultural resources from future development facilitated by the Housing Element Update would be less-than-significant.

The cultural resources investigation of the 150 Shoreline Affordable Housing Project site conducted for the previously proposed O'Donnell project (ARS, 2020) included research at the Northwest Information Center (NWIC), a surface reconnaissance of the accessible parts of the Project site, and an inquiry with the Native American Heritage Commission (NAHC) to determine if there are sites listed in the Sacred Lands file located within or near to the Project site. The investigation identified all previously recorded archaeological sites, historic properties, and previously evaluated properties within an approximately one-half mile radius of the Project site. Several archaeological sites were identified nearby the Project site; however, ARS determined that the Project site is outside the boundaries of any of these previously documented sites (ARS, 2020).

The Project site was once part of the marshes on the margins of Richardson Bay. The Project site and the other parcels making up the Howard Johnson Master Plan area were subsequently filled and developed. ARS concluded that the precontact condition of the area appears to have been unsuitable for settlement by Native Americans, and noted that exploitable resources of stone or other material are lacking. The area was likely used as a gathering territory, and ARS states that, while there is some potential for the presence of isolated tools or artifacts in the sediments beneath the fill material that now covers the Project site, the potential for discovery of artifact concentrations is very low and considered unlikely to occur.

During AB 52 consultation between the County and FIGR regarding the O'Donnell project, FIGR expressed concern about potential impacts to tribal cultural resources during project construction. FIGR expressed concern that a precontact site recorded nearby could extend beneath the Project site, and that the surface reconnaissance survey that had been conducted by ARS would not have detected its presence. To address these concerns, the County agreed to require supplemental archaeological testing of the Project site, with the involvement of FIGR, prior to construction of the then-proposed project, including requirements for recovery and documentation of any cultural materials encountered. While this mitigation measure is not legally binding on the applicant for the 150 Shoreline Affordable Housing Project, the applicant agreed to conduct archaeological testing prior to Project construction. The testing occurred during April 2025 with a FIGR tribal monitor present. The testing yielded no evidence of archaeological materials within the Project site (Evans & DeShazo, 2025). There is therefore no evidence that the site contains archaeological or tribal cultural resources or precontact human remains.

Marin County Code section 22.20.040.E would apply to the Project: if archaeological, historic, or paleontological resources are discovered during any construction activities, such activities must cease, and the Community Development Agency must be notified. The find must be evaluated and recorded by a qualified archaeologist, and disposition of any recovered artifacts must be completed in compliance with State and federal law. Furthermore, California Health and Safety Code Section 7050.5 and California Public Resources Code Sections 5097.5, 5097.9 et seq., require construction contractors to halt construction in the vicinity of any accidental discovery involving potential human remains, and to contact the County coroner. With adherence to these laws, the 150 Shoreline Affordable Housing Project would not cause a substantial adverse change in the significance of an archaeological resource or a tribal cultural resource, or result in significant disturbance of accidentally discovered human remains. As was concluded for Impact 8-2 in the 2023 HESE FEIR, any impacts of these kinds would be less than significant for the 150 Shoreline Affordable Housing Project.

Mitigation Measures

The 2023 HESE FEIR includes one mitigation measure, Mitigation Measure 8-1, to address impacts to historical resources. As no known historical resources exist on the Project site, Mitigation Measure 8-1 is not applicable to the 150 Shoreline Affordable Housing Project. No other mitigation measures are identified or necessary.

Conclusion

The 2023 HESE FEIR identified Impact 8-1: Destruction/Degradation of Historical Resources, as significant and unavoidable, even with implementation of Mitigation Measure 8-1. The 150 Shoreline Affordable Housing Project, however, does not have the potential for a significant impact on cultural, tribal cultural, or historical resources: the Project would not result in a new or substantially more severe impact on these resources than was previously identified in the 2023 HESE FEIR. There are no changed circumstances that affect these issues. The ARS Cultural Resources Evaluation report prepared for a previously proposed project at the Project site (ARS, 2020), and the results of the archaeological testing performed during April 2025 (Evans & DeShazo, 2025), constitute pertinent new information that informs the evaluation of potential impacts to these resources for the current Project, and supports the conclusion of only less-than-significant impacts.

References

Archaeological Resource Service (A.R.S.), 2020. A Cultural Resources Evaluation of the O'Donnell Property, 150/156 Miller Avenue, Mill Valley, Marin County, California. Submitted by William Roop, M.A., RPA, Archaeological Resource Service, Submitted to Daniel Chador for O'Donnell Financial, LLC. A.R.S. Project 20-031. October 7, 2020. (Report contains sensitive information and is stored in a restricted-access file).

Evans & DeShazo, 2025. Results of an Extended Phase I (XPI) Archaeological Study for the Proposed Project at 150 Shoreline Highway, Mill Valley, Marin County, California. Prepared for Lauren Alexander, Pacific West Communities, Inc. May 2, 2025.

Marin County Community Development Agency, 2021. O'Donnell Financial Group Master Plan Amendment and Design Review: Initial Study and Mitigated Negative Declaration. Prepared by Douglas Herring and Associates, January 2021.

2.6. Energy

Environmental Issue Area	Where Was this Issue Analyzed in the Previous Environmental Document?	Do Proposed Project Changes Affect this Issue?	Are There Any Changed Circumstances that Affect this Issue?	Is There Any New Information of Substantial Importance Pertaining to this Issue?	If Any of the Previous Three Questions Was Answered "Yes," Would Changes or New Information Result in a New or Substantially More Severe Significant Impact?	Are there any New or Reconsidered Mitigation Measures or Alternatives that Would Substantially Reduce Significant Impacts?
6. Energy. Would the Project:						
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	HESE DEIR Chapter 10, Greenhouse Gas Emissions and Energy, Impact 10-2.	Yes	Yes	No	No	N/A
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	HESE DEIR Chapter 10, Greenhouse Gas Emissions and Energy, Impact 10-3.	Yes	Yes	No	No	N/A

Discussion

The 2023 HESE FEIR, DEIR Chapter 10, combines analysis of energy impacts with analysis of impacts associated with greenhouse gas emissions. Greenhouse gas emissions are considered separately in this Supplemental Environmental Review in Section 2.8. The 2023 HESE FEIR identifies two energy impacts and finds that both would be less than significant without mitigation. These conclusions are based primarily on projections of State-wide improvements in energy efficiency and mandatory compliance of housing developments facilitated by the Housing Element Update with energy efficiency standards contained in California Title 24, Part 6 (Energy Code) and Part 11 (California Green Building Code, or CalGreen), and Marin County Code Title 19, Subchapter 2 (the Marin County Green Building Code). The 2023 HESE FEIR references the 2019 version of California Title 24 and Marin County Code Title 19, Subchapter 2. Both were last amended in 2022. The current versions of both State and County codes constitute changed circumstances pertinent to the current Project, as the Project will be required to comply with the current version of the codes. There are no other changed circumstances or new information of substantial importance pertinent to this topic.

a) Would the Project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

The 2023 HESE FEIR, Chapter 10, Greenhouse Gas Emissions and Energy, identifies Impact 10-2: Wasteful, Inefficient, or Unnecessary Consumption of Energy Resources, which states that implementation of the then-proposed Housing Element Update could increase the need for electricity and natural gas within the County and gasoline and diesel consumption in the region during construction and operation of new housing developments facilitated by the Housing Element Update.

The 2023 HESE FEIR states that electricity used for construction would be temporary and would have a negligible contribution to the overall energy consumption in the County, and that electricity use during operations (that is, residential use of new housing) would be necessary and, due to compliance of new construction with State and County energy efficiency standards contained in CalGreen and the Marin County Green Building Code, would be efficient, and not wasteful.

Regarding natural gas, the 2023 HESE states that natural gas consumption would not be substantial during construction activities (most construction equipment is powered by liquid petroleum fuels). The 2023 HESE FEIR states that operational use of natural gas would be limited by implementation of the all-electric construction provisions of the Marin County Green Building Code, which prohibits use of natural gas, including construction of new natural gas infrastructure, in most new construction.[28] Even without this requirement, the 2023 HESE FEIR concludes that Statewide trends including increased use of electrical appliances in lieu of gas appliances, and increased efficiency of natural gas appliances, means that natural gas use in future housing developments would not be wasteful, inefficient, or unnecessary.

For diesel and gasoline fuels, the 2023 HESE FEIR states that these petroleum fuels would be consumed during construction of future housing developments, primarily by construction equipment and transportation of construction materials, and by worker vehicle trips. The 2023 HESE FEIR concludes that, since petroleum use during construction would be temporary at each location, and would be necessary to conduct construction activities, it would not be unnecessary, wasteful, or inefficient. For operational use of new housing developments, the 2023 HESE FEIR states that petroleum fuels would be consumed by residents traveling to or from work, shopping, school, or other destinations, but that overall petroleum consumption per capita is expected to decrease by approximately 28 percent over the next 20 years, largely due to actions being taken at the State level to increase fuel economy and the use of EVs. The 2023 HESE FEIR finds that petroleum-fueled vehicles are necessary for transportation while the State enacts its long-term plans to shift to non-petroleum vehicles. In addition, petroleum-fueled vehicles will become more

[28] The all-electric provisions of the Marin County Green Building Code were in development but not yet adopted at the time the 2023 HESE FEIR was being prepared. As further discussed in Section 2.8, Greenhouse Gas Emissions, the 2023 HESE FEIR includes Mitigation Measure 10-1A: Prohibit Natural Gas Plumbing and Appliances in New Housing Sites. With adoption of the 2022 amendments to the Marin County Green Building Code, this mitigation measure, which was needed to reduce a greenhouse gas emissions impact, not an energy impact, was implemented, but has since been suspended, and is not currently in effect; see discussion in Section 2.10, Greenhouse Gas Emissions.

efficient over time, and therefore the operational use of new housing developments would not result in wasteful or unnecessary consumption of petroleum fuels.

Overall, the 2023 HESE FEIR concludes that the then-proposed Housing Element Update would not result in wasteful, inefficient, or unnecessary consumption of energy resources during construction or operation of new housing, and that Impact 10-2 would therefore be less than significant.

The same evidence used to support the conclusion of less than significant for consumption of energy resources applies to the 150 Shoreline Affordable Housing Project as well: the Project would consume necessary amounts of energy during construction; the building design and materials would be required to comply with energy efficiency standards contained in CalGreen and the Marin County Green Building Code, and future residents can be expected to rely decreasingly on petroleum-powered vehicles and natural gas appliances. As further discussed in Section 2.17, Transportation and Traffic, vehicle use by future residents, measured in vehicle miles traveled (VMT), is expected to be below the regional average for the Project; the Project includes installation of EV charging facilities; the Project site is close to transit and regional bicycle paths; and it is within walking distance to shops and services. Therefore, the 150 Shoreline affordable Housing Project would not have a significant environmental effect due to wasteful, inefficient, or unnecessary consumption of energy resources during Project construction or operation; there would be no new significant impact of this kind, and there would not be a substantial increase in the severity of a significant impact previously identified in the 2023 HESE FEIR.

b) Would the Project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

The 2023 HESE FEIR identifies Impact 10-3: Conflict with or Obstruct a State or Local Plan for Renewable Energy or Energy Efficiency. Discussion of this impact states that the County would enforce State and County Green Building Code standards (discussed under the previous topic) during design review and the building permit approval process for individual housing developments facilitated by the Housing Element Update. With adherence to these and other State and County policies and regulations for reducing energy consumption, the 2023 HESE FEIR concludes that the Housing Element Update would comply with applicable state standards and would not impede any plan related to increasing renewable energy or energy efficiency. This impact, therefore, would be less than significant.

For the same reasons, the 150 Shoreline Affordable Housing Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency; the Project would not result in a new significant impact of this kind, nor would it result in a substantial increase in the severity of a previously identified significant impact.

Mitigation Measures

Because the 2023 HESE FEIR identifies no significant energy impacts, no mitigation measures are included. Because the 150 Shoreline Affordable Housing Project would also have no significant energy impacts, no mitigation measures are needed.

Conclusion

The conclusion of only less-than-significant energy impacts for the Project is the same as the conclusion reached in the 2023 HESE FEIR for the Housing Element Update: the Project would not result in a new significant impact of this kind, nor would it result in a substantial increase in the severity of a previously identified significant impact. Changed circumstances considered in this evaluation included the current version of CalGreen and the Marin County Green Building Code. No new information of substantial importance has come to light, and there are no other changed circumstances that affect this issue.

2.7. Geology and Soils

Environmental Issue Area	Where Was this Issue Analyzed in the Previous Environmental Document?	Do Proposed Project Changes Affect this Issue?	Are There Any Changed Circumstances that Affect this Issue?	Is There Any New Information of Substantial Importance Pertaining to this Issue?	If Any of the Previous Three Questions Was Answered "Yes," Would Changes or New Information Result in a New or Substantially More Severe Significant Impact?	Are there any New or Reconsidered Mitigation Measures or Alternatives that Would Substantially Reduce Significant Impacts?
7. Geology and Soils. Would the Project:						
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:						
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	2023 HESE FEIR, DEIR Chapter 9, Geology and Soils, Impact 9-1.	Yes	No	Yes	No	N/A
ii) Strong seismic ground shaking?	2023 HESE FEIR, DEIR Chapter 9, Geology and Soils, Impact 9-2.	Yes	No	Yes	No	N/A
iii) Seismic-related ground failure, including liquefaction?	2023 HESE FEIR, DEIR Chapter 9, Geology and Soils, Impact 9-4.	Yes	No	Yes	No	N/A
iv) Landslides?	2023 HESE FEIR, DEIR Chapter 9, Geology and Soils, Impact 9-4.	Yes	No	Yes	No	N/A
b) Result in substantial soil erosion or the loss of topsoil?	2023 HESE FEIR, DEIR Chapter 9, Geology and Soils, Impact 9-3.	Yes	No	Yes	No	N/A

Environmental Issue Area	Where Was this Issue Analyzed in the Previous Environmental Document?	Do Proposed Project Changes Affect this Issue?	Are There Any Changed Circumstances that Affect this Issue?	Is There Any New Information of Substantial Importance Pertaining to this Issue?	If Any of the Previous Three Questions Was Answered "Yes," Would Changes or New Information Result in a New or Substantially More Severe Significant Impact?	Are there any New or Reconsidered Mitigation Measures or Alternatives that Would Substantially Reduce Significant Impacts?
7. Geology and Soils. Would the Project:						
c) Be located on geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	2023 HESE FEIR, DEIR Chapter 9, Geology and Soils, Impact 9-4.	Yes	No	Yes	No	N/A
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	2023 HESE FEIR, DEIR Chapter 9, Geology and Soils, Impact 9-4.	Yes	No	Yes	No	N/A
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	2023 HESE FEIR, DEIR Chapter 9, Geology and Soils, Impact 9-5.	No	No	No	N/A	N/A
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	2023 HESE FEIR, DEIR Chapter 9, Geology and Soils, Impact 9-6.	Yes	No	Yes	No	N/A

Discussion

Because the 2023 HESE FEIR is a programmatic EIR, it generally considers geology and soils impacts that may occur with development of any of the many sites then being considered for inclusion in the Sites Inventory of then-proposed Housing Element Update, but defers to later environmental review and permitting processes any site-specific evaluation of geology and soils impacts. The 2023 HESE FEIR identifies six impacts in Chapter 9, Geology and Soils, and finds that all would be less than significant.

The applicant for the 150 Shoreline Affordable Housing Project has submitted a Geotechnical Engineering Study (geotechnical study) as part of the application package for the Project (Allerion Consulting Group, 2024) The geotechnical study characterizes geology and soils at the

Project site, including the results of subsurface investigations, reviews geological hazards that the Project site is subject to, and provides recommendations for foundation and other building systems to enable construction of the proposed building. The geotechnical study constitutes new information of substantial importance pertaining to the evaluation of the Project's potential impacts related to geology and soils, and serves as the basis for much of the impact analysis in this section. No changed circumstances that affect this issue have been identified.

a.i) Would the Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?

The 2023 HESE FEIR identifies Impact 9-1: Effects of Rupture of a Known Earthquake Fault. The 2023 HESE FEIR states that the San Andreas Fault runs through the western part of Marin County and is delineated on the most recent Alquist-Priolo Earthquake Zoning Map. Housing development facilitated by the then-proposed Housing Element Update in known earthquake areas, especially in western Marin, could be at risk from earthquake fault rupture; however, the 2023 HESE FEIR states that Marin County Code section 22.16.030(J)(6) addresses developments proposed in an Alquist-Priolo Fault Zone: "construction shall not be permitted on identified seismic or geologic hazard areas such as on slides, on natural springs, on identified fault zones, or on bay mud without approval from the Department of Public Works, based on acceptable soils and geologic reports." Based on required compliance with this code section, the 2023 HESE FEIR concludes that Impact 9-1 would be less than significant.

The geotechnical study prepared for the 150 Shoreline Affordable Housing Project states that the Project site is not located within an Alquist-Priolo Special Studies Zone, and states that the potential for fault rupture, damage from fault displacement, or fault movement directly below the site to be low. The Project would therefore not have an impact related to potential fault rupture; there would be no new significant impact of this kind, nor a substantial increase in the severity of a previously identified significant impact.

a.ii) Would the Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?

The 2023 HESE FEIR identifies Impact 9-2: Effects of Strong Seismic Ground Shaking. The discussion of this impact states that new housing development facilitated by the then-proposed Housing Element Update could experience strong seismic ground shaking and related effects in the event of an earthquake on the regional fault system. The 2023 HESE FEIR states that mandated compliance with the stringent seismic design provisions of the latest California Building Standards Code (CBSC), as adopted by the County, would reduce these effects to less than significant.

The geotechnical study prepared for the 150 Shoreline Affordable Housing Project (Allerion Consulting Group, 2024) provides an analysis of potential ground shaking at the Project site in

the event of an earthquake, and provides seismic design criteria for the Project for compliance with the 2022 California Building Code. As was concluded for this impact in the 2023 Housing Element FEIR, Project compliance with Building Code requirements for seismic design would avoid a significant impact of the Project related to risk of loss, injury, or death involving strong seismic ground shaking. The Project would not result in a new significant impact, nor a substantial increase in the severity of a previously identified significant impact of this kind.

a.iii, a.iv) Would the Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: iii. seismic-related ground failure, including liquefaction, or iv. landslides?

c) Would the Project be located on geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?

d) Would the Project be located on expansive soil, as defined in Table 18 1 B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

The 2023 HESE FEIR addresses several topics related to ground stability in Impact 9.4: Potential Ground Instability Impacts. The discussion of this impact states that the potential for ground instability can depend on specific, highly localized underlying soil conditions. Some of the locations being considered for new housing development in the then-proposed Housing Element Update would be in locations with potential risk of differential settlement, liquefaction, lateral spreading, landslides, or subsidence. If not properly engineered, development at these sites could result in associated significant damage to buildings, other improvements, and adjacent property, with direct or indirect risks to life or property. The discussion further states that projects requiring a grading permit would be required to comply with County Code Chapter 23.08 – Excavating, Grading and Filling, including submittal of a soils investigation report, a geological report, and other information and plans as necessary and requested by the Public Works Director. These reports would be required to provide adequate descriptions of the geology of the site; conclusions regarding the effect of geologic conditions on the proposed work and adjacent areas; and recommendations for design and engineering refinements necessary to reduce the degree of impacts to less-than-significant levels. The County would require recommendations from these reports to be incorporated into the project being considered. The 2023 HESE FEIR concludes that compliance with County grading and building requirements would ensure that impacts related to ground instability involving future housing development facilitated by the Housing Element Update would be less than significant.

The 150 Shoreline Affordable Housing Project does not require a separate grading permit, but issues related to land and soil stability are addressed through the land development and building permit processes. The geotechnical study prepared for the Project (Allerion Consulting Group, 2024), which has been submitted to and reviewed by Marin County Department of Public Works, fulfills the requirements of a grading permit outlined above. The geotechnical study states that, based on US Geological mapping, the Project site is underlain by quaternary “artificial fill” over marine and marsh deposits. These features were confirmed in site borings, which indicated the

depth of the artificial fill ranges from seven to nine feet below ground surface. Below the fill, marsh deposits were encountered consisting of medium stiff, moist to wet, gray, organic clay, sandy clay, and clay to depths varying between approximately 13½ to 15 feet below ground surface. The soils encountered below these layers to a depth of approximately 21½ feet below ground surface were very soft, moist, gray, organic clay and clay. Cone penetration tests showed the soft organic clay layer extends to depths varying between approximately 40 feet to the maximum explored depth of 50 feet.

Observations of groundwater conditions were made during and just after drilling the exploratory borings and cone penetration tests. Groundwater was encountered at varying depths between six and eight feet below ground surface during drilling and between four and six feet below ground surface after drilling. Groundwater was not encountered in one boring that was drilled to a depth of about 21½ feet begs.

The geotechnical study analyzed the potential for seismic induced settlement, including liquefaction, and ground lurching, and determined that the Project site is subject to these hazards. Consequently, the geotechnical study recommends measures to improve soil conditions through excavation of the artificial fill, compaction of soil subgrades, and placement of engineered fill to final grade, and concludes that these measures, together with a recommended foundation system, would reduce the risk of structural collapse and life safety concerns. The recommended foundation system consists of foundations placed on Rammed Aggregate Piers (RAP) or on Drilled Displacement Columns (DDC). The piers or columns would extend to a depth of 30 to 40 feet below ground surface.

The geotechnical study states that California Geological Survey mapping shows that the Project site is not within a seismically induced landslide hazard zone. There are no steep slopes on or adjacent to the Project site, and, therefore, the potential for slope instability and landslides, including seismically induced landsides, is negligible.

The geotechnical study states that expansion potential of the uppermost subsurface soils is low, but that these soils may be compressible and subject to differential settlement. The recommended soil improvements, including excavation of the undocumented fill and its replacement with engineered fill, would address this issue.

The geotechnical study demonstrates that with the recommended soil improvement measures and foundation system, the Project would not directly or indirectly cause substantial adverse effects, including the risk of loss, injury, or death involving ground instability. The impact would be less than significant. The same conclusion is reached for Impact 9-4 in the 2023 HESE FEIR. Therefore, the Project would not result in a new significant impact, nor in a substantial increase in the severity of a previously identified significant impact related to risks to life and property from ground instability.

b) Would the Project result in substantial soil erosion or the loss of topsoil?

The 2023 HESE FEIR identifies Impact 9-3: Potential Soil Erosion and Loss of Topsoil, and states that new housing development facilitated by the then-proposed Housing Element Update

would include grading and construction activities that could result in minor erosion or the minor loss of some topsoil. To obtain a grading permit, the County requires a soils investigation report, which must include data regarding the nature, distribution and strength of existing soils, conclusions and recommendations for grading procedures and design criteria; a geological report, which must include an adequate description of the geology of the site and conclusions and recommendations regarding the effect of geologic conditions on the proposed work and adjacent areas; and an erosion and sedimentation control plan (ESCP), which must include all temporary and permanent devices necessary to avoid drainage and erosion related problems both during and after construction. In addition, project applicants are required to follow the most recent version of the Marin County Stormwater Pollution Prevention Program (MCSTOPPP) Construction Erosion and Sediment Control Plan Applicant Package when preparing the ESCP. (Chapter 12, Hydrology and Water Quality, provides a detailed discussion of erosion and sediment control requirements that pertain to the Project.) The 2023 HESE FEIR concludes that compliance with County grading and erosion control requirements would ensure that impacts related to soil erosion and loss of topsoil would be less than significant.

The geotechnical study prepared for the 150 Shoreline Affordable Housing Project (Allerion Consulting Group, 2024) states that soils on the Project site are slightly to moderately susceptible to erosion where drainage concentration occurs, and includes recommendations for grading and drainage to avoid soil erosion. These recommendations will be required to be incorporated into the Project. Furthermore, as detailed in Section 2.10, Hydrology and Water Quality, the Project applicant has prepared a drainage study and a stormwater control plan to comply with MCSTOPPP requirements, and will also be required to submit an ESCP to address erosion and sedimentation during construction. With adherence to these recommendations and requirements, the Project would not result in substantial soil erosion or the loss of topsoil, and the impact would be less than significant. The same conclusion is reached in the 2023 HESE FEIR for Impact 9-3: the Project would not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact related to soil erosion and loss of topsoil.

e) Would the Project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

The Project site is served by a municipal wastewater collection and treatment system, as discussed further in Section 2.18, Utilities and Service Systems. The Project does not propose the use of septic tanks or alternative wastewater disposal systems. Therefore, this topic is not applicable to the Project.

f) Would the Project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

The 2023 HESE FEIR identifies Impact 9-6: Potential for Disturbance of Paleontological Resources, which states that new housing development facilitated by the then-proposed Housing Element Update could result in disturbance of unrecorded paleontological resources. The discussion states that Marin County's surficial geologic units include alluvial and Bay mud deposits, including young alluvial fan deposits (less than 30,000 years old) and even younger areas of Holocene Bay mud (less than 11,800

years ago). The Franciscan Complex, which underlies these young deposits, could potentially contain paleontological resources. The 2023 HESE FEIR states that, although there are documented finds in the County of rocks containing both megafossils and microfossils of Late Jurassic and Early Cretaceous age, the Holocene unit is not typically considered paleontologically sensitive because of the geological youth of the remains.

Although it is possible that additional paleontological resources could be discovered during ground-disturbing activities for construction of new housing facilitated by the Housing Element Update, and contact with such fossil resources during ground-disturbing activities could result in significant impacts, the measures required by County Code section 22.20.040.E, Archaeological, Historical, and Paleontological Resources, would ensure that if paleontological resources are discovered during construction, construction activities would cease and the Community Development Agency would have to be notified so that a qualified professional could record the extent and location of discovered materials and coordinate the disposition of artifacts in compliance with State and Federal law. The 2023 HESE FEIR concludes that compliance with this County Code requirement would ensure that any potential impacts on paleontological resources from future housing development facilitated by the Housing Element Update would be less than significant.

As described in the geotechnical study prepared for the 150 Shoreline Affordable Housing Project (Allerion Consulting Group, 2024), the Project site is underlain by young marsh deposits consisting of organic clays and sandy clays. As described in the 2023 HESE FEIR's discussion of Impact 9-6, these units are not considered paleontologically sensitive. In addition, County Code section 22.20.040.E would apply to the Project. For the same reasons as stated in the 2023 HESE FEIR for supporting a conclusion of a less-than-significant impact on paleontological resources for future housing developments facilitated by the Housing Element Update, the Project would also have a less than significant impact of this kind. The Project would not result in a new significant impact, nor in a substantial increase in the severity of a previously identified significant impact of this kind.

Mitigation Measures

Finding no significant impacts related to geology and soils, the 2023 HESE FEIR does not include mitigation measures related to this issue. Similarly, because no significant impacts related to geology and soils are identified here for the 150 Shoreline Affordable Housing Project, no mitigation measures are required.

Conclusion

The 150 Shoreline Affordable Housing Project would not have a significant impact related to geology and soils. There would not be a new significant impact, nor a substantial increase in the severity of a previously identified significant impact of this kind.

References

Allerion Consulting Group, 2024. Geotechnical Engineering Study, Proposed Apartment Building, 150 Shoreline Highway, Mill Valley, California 94941. Prepared by Mohammed Khalid, MS, PE, for Pacific West Communities. Revised October 16, 2024.

2.8. Greenhouse Gas Emissions

Environmental Issue Area	Where Was this Issue Analyzed in the Previous Environmental Document?	Do Proposed Project Changes Affect this Issue?	Are There Any Changed Circumstances that Affect this Issue?	Is There Any New Information of Substantial Importance Pertaining to this Issue?	If Any of the Previous Three Questions Was Answered "Yes," Would Changes or New Information Result in a New or Substantially More Severe Significant Impact?	Are there any New or Reconsidered Mitigation Measures or Alternatives that Would Substantially Reduce Significant Impacts?
8. Greenhouse Gas Emissions. Would the Project:						
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	2023 HESE FEIR, DEIR Chapter 10, Energy and Greenhouse Gas Emissions, Impact 10-1	Yes	Yes	No	No	No
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	2023 HESE FEIR, DEIR Chapter 10, Energy and Greenhouse Gas Emissions, Impact 10-1	Yes	Yes	No	No	No

Discussion

The 2023 HESE FEIR, DEIR Chapter 10, combines analysis of impacts related to greenhouse gas emissions with analysis of impacts related to energy. Energy impacts are considered in this Supplemental Environmental Review in Section 2.8. The 2023 HESE FEIR combines the discussion of the two greenhouse gas emissions topics shown in the table above into one impact, which it finds significant and unavoidable.

As stated in the introductory discussion in Section 2.6, Energy, the 2023 HESE FEIR cites the energy efficiency standards contained in the 2019 versions of California Title 24, Part 6 (Energy Code) and Part 11 (California Green Building Code, or CalGreen), and Marin County Code Title 19, Subchapter 2 (the Marin County Green Building Code), both of which are also relevant to the evaluation of greenhouse gas emissions impacts. Both codes were last amended in 2022. Subsequent to adoption of the 2022 Green Building code, however, the federal Court of Appeals for the 9th Circuit reached a decision in *California Restaurant Association v. City of Berkeley*, striking down a City of Berkeley ordinance prohibiting natural gas infrastructure and appliances in new construction.[29] Marin County has interpreted this decision to mean that the all-electric construction provision in the 2022 Green Building Code (Marin County Code Section 19.04.125) is unenforceable, and so the Board of Supervisors, on July 30, 2024, suspended enforcement of

[29] *California Restaurant Association v. City of Berkeley*, 89 F.4th I 094 (9th Circ. 2024)

this provision. The County now recommends, but does not require, all-electric construction in new buildings.

The current versions of both State and County codes, and the suspension of the all-electric construction provision in the County's 2022 Green Building Code, constitute changed circumstances pertinent to the 150 Shoreline Affordable Housing Project, as the Project would be required to comply with the current version of the codes now in effect. There are no other changed circumstances or new information of substantial importance pertinent to this topic.

a) Would the Project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

b) Would the Project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

The 2023 HESE FEIR, DEIR Chapter 10, identifies Impact 10-1: Generate Significant Greenhouse Gas Emissions and Conflict with an Applicable Plan, Policy, or Regulation Adopted for the Purposes of Reducing Greenhouse Gas Emissions. The summary of this impact states that, "The residential housing growth that would be facilitated by the proposed Project would generate greenhouse gas emissions in significant quantities and would be inconsistent with the California Air Resources Board (CARB) 2017 Scoping Plan, the Metropolitan Transportation Commission/Association of Bay Area Governments (MTC/ABAG) Plan Bay Area 2050, and the Marin County 2030 Climate Action Plan (CAP)." The 2023 HESE FEIR concludes that his would be a potentially significant impact.

The 2023 HESE FEIR's analysis of greenhouse gas emissions associated with new housing facilitated by the then-proposed Housing Element Update considers both construction emissions and emissions from future residents, using the same assumptions and methodologies used in the Marin County 2030 Climate Action Plan (Marin County, 2020), and comparing them to the Bay Area Air Quality Management District's (BAAQMD) plan-level CEQA threshold of significance (BAAQMD, 2022), which requires that plans meet the State's goals to achieve carbon neutrality by 2045 (the Marin County 2030 Climate Action Plan has the same goal). Finding that future greenhouse gas emissions from buildout and residential use of housing facilitated by the Housing Element Update would be significant, the 2023 HESE FEIR identifies three mitigation measures to lower future emissions:

Mitigation Measure 10-1A: Prohibit Natural Gas Plumbing and Appliances in New Housing Sites, requires the County to adopt then-proposed changes to the Marin County Green Building Code. These changes, including requirements for all-electric construction, were adopted in 2022. As described above, however, the all-electric construction provision has since been suspended, and is not now in effect.);

Mitigation Measure 10-1B: Residential Bicycle Parking Requirements, requires housing developments to comply with the Tier II bicycle parking requirements contained in the latest editions of the California Green Building Standards Code (CalGreen) in effect at the time the

building permit application is submitted to the County (these requirements are in effect and are enforced through the Building Permit process).

Mitigation Measure 10-1C: Reduce Vehicle Miles Traveled (VMT) from New Residential Development, by implementing Transportation Mitigation Measure 18-4. This measure requires residential development projects that the County determines may result in a significant VMT impact to achieve the VMT significance threshold of 15% below the regional average by implementing Traffic Demand Management (TDM) measures. The measure only applies to housing development projects facilitated by the Housing Element Update that the County determines may result in a significant VMT impact. As discussed below and in Section 2.17, Transportation, the 150 Shoreline Affordable Housing Project would not result in a significant VMT impact, and so this measure does not apply to the Project.

The 2023 HESE FEIR concludes that, while these measures will substantially lower greenhouse gas emissions from new housing facilitated by the Housing Element Update, the reductions would not be sufficient to contribute to achieving the Marin County CAP target and meeting the BAAQMD's plan-level significance threshold of carbon neutrality (BAAQMD, 2022). Therefore, the 2023 HESE FEIR concludes that this impact would be significant and unavoidable.

The analysis of the greenhouse gas impacts of the 150 Shoreline Affordable Housing Project presented below is based not on plan-level thresholds, as the 2023 HESE FEIR was, but on project-level thresholds. Specifically, BAAQMD's threshold of significance for climate impacts of land use projects (BAAQMD, 2022) requires demonstration of a project's "fair share" contribution to meeting the State's 2045 carbon neutrality goal. The BAAQMD's threshold states that a project's fair share can be met by demonstrating either A or B in the following:

Option A. Projects must include, at a minimum, the following project design elements:

1. Buildings

    a. The project will not include natural gas appliances or natural gas plumbing (in both residential and nonresidential development).

    b. The project will not result in any wasteful, inefficient, or unnecessary energy usage as determined by the analysis required under CEQA Section 21100(b)(3) and Section 15126.2(b) of the State CEQA *Guidelines*.

2. Transportation

    a. Achieve a reduction in project-generated VMT below the regional average. For residential projects, the standard is 15 percent below the existing VMT per capita.

    b. Achieve compliance with off-street electric vehicle requirements in the most recently adopted version of CalGreen Tier 2.

Option B. Projects must be consistent with a local GHG reduction strategy that meets the criteria under State CEQA Guidelines Section 15183.5(b).

The analysis of the 150 Shoreline Affordable Housing Project examines the Project's consistency with the four requirements contained in Option A.

Natural Gas Plumbing and Appliances

As discussed above, in 2022 Marin County adopted amendments to the Green Building Code to include all-electric construction requirements. These requirements prohibit new natural gas infrastructure, including construction of natural gas plumbing and installation of natural gas appliances, in most new construction. As further discussed above, however, a legal decision after the adoption of the 2022 Green Building Code has led Marin County to conclude that it cannot enforce the all-electric provision, and the Board of Supervisors has suspended its enforcement. The County now considers all-electric construction to be an option that it encourages, but does not require, new developments to adhere to. For the 150 Shoreline Affordable Housing Project, the Project applicant has not voluntarily committed to all-electric construction, but plans use of natural gas cooking appliances.

Wasteful, Inefficient, or Unnecessary Energy Usage

As discussed in Section 2.6, Energy, topic a, the 150 Shoreline Affordable Housing Project will not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation. Based on that impact discussion and conclusion, the Project meets this requirement.

Achieve a Reduction in Project-Generated VMT 15 Percent Below Regional Per Capita Average

The significance threshold of 15% below regional per capita VMT was also recommended for use by lead agencies in CEQA reviews in the 2018 *Technical Advisory on Evaluating Transportation Impacts in CEQA* (OPR, 2018) published by the Governor's Office of Planning and Research (the name of the agency has since changed to the Governor's Office of Land Use and Climate Innovation). The Technical Advisory also identifies several criteria that may be used by lead agencies to identify projects that can be "screened" from quantitative VMT analysis, because they are presumed to meet the threshold of 15% below the regional per capita VMT. The Technical Advisory identifies 100% affordable residential development in infill locations as being presumed to have a less-than-significant impact on VMT. As further discussed in Section 2.17, Transportation, topic b, the 150 Shoreline Affordable Housing Project meets these criteria, and so can be presumed to meet the requirement of 15 percent below regional per capita VMT.

Achieve compliance with off-street electric vehicle charging requirements in the most recently adopted version of CalGreen Tier 2.

The Project proposes to install two EV charging stations in the proposed eight-stall parking area. For new multifamily projects with 20 or more dwelling units, the CalGreen Tier 2 EV Charger requirement is that fifteen percent of the total number of parking spaces shall be equipped with Level 2 EV charging stations. Where common use parking is provided, at least one EV charger shall be located in the common use parking area and shall be available for use by all residents or guests. The Project's proposal to install two EV charging stations represents 25 percent of the

proposed eight parking spaces. The proposed parking area would be common use, and so the Project meets this requirement.

As discussed above, the Project would meet three of the four requirements in BAAQMD threshold Option A for land use projects. The Project therefore would not be considered to make a fair-share contribution to reducing greenhouse gas emissions and to meeting the State and County goals of carbon neutrality. The Project would therefore also be inconsistent with State and local plans, policies and regulations for reducing greenhouse gas emissions. Therefore, the Project's greenhouse gas emissions would be significant. Since the County has determined that it lacks the authority to impose the all-electric construction requirement, mitigation of this impact is infeasible. Therefore, as was concluded in the 2023 HESE for the Housing Element Update, the 150 Shoreline Affordable Housing Project would result in a significant, unavoidable increase in GHG emissions. The Project's impact is within the scope of Impact 10-1 identified in the 2023 HESE FEIR, and is neither a new impact, nor a substantially more severe impact.

Mitigation Measures

The 2023 HESE FEIR identifies Impact 10-1 as significant when considering the plan-level impacts of developing thousands of new housing units to meet the County's Regional Housing Needs Assessment. The 2023 HESE FEIR includes three mitigation measures (one of which has been implemented) to reduce this impact, but concludes that these would not be sufficient to reduce the impact to less than significant, and so finds the impact significant and unavoidable. The 150 Shoreline Affordable Housing Project would generate significant greenhouse gas emissions due to the planned use of natural gas appliances. Because the requirement for all-electric construction has been found to be unenforceable, there is no feasible mitigation to reduce these emissions. Mitigation Measure 10-1B: Residential Bicycle Parking Requirements, is applicable to the Project. Mitigation Measure 10-1C: Reduce Vehicle Miles Traveled (VMT) from New Residential Development, is not applicable to the Project.

Conclusion

The 2023 HESE FEIR concluded that the Housing Element Update would facilitate new housing developments that, when considered together, would result in significant and unavoidable greenhouse gas emissions. Similarly, the 150 Shoreline Project's greenhouse gas emissions would be significant and unavoidable. The Project's impact is within the scope of Impact 10-1 identified in the 2023 HESE FEIR, and is neither a new impact, nor a substantially more severe impact. Amendments to the Marin County Green Building Code and California Title 24, adopted in 2022, and the subsequent suspension of the County's adopted Green Building Code requirement for all-electric construction, based on the County's interpretation of a legal decision that the requirement is unenforceable, are changed circumstances affecting the analysis of GHG impacts of the Project.

References

Bay Area Air Quality Management District (BAAQMD), 2022. Justification Report: CEQA Thresholds for Evaluating the Significance of Climate Impacts From Land Use Projects and Plans. April 2022.

Governor's Office of Planning and Research (OPR; now the Governor's Office of Land Use and Climate Innovation), 2018. Technical Advisory on Evaluating Transportation Impacts in CEQA. December 2018.

Marin County. 2020. Marin County Unincorporated Area Climate Action Plan 2030. December 2020. https://www.marincounty.org/-/media/files/departments/cd/planning/sustainability/climate-and-adaptation/cap-2030_12082020final.pdf

2.9. Hazards and Hazardous Materials

Environmental Issue Area	Where Was this Issue Analyzed in the Previous Environmental Document?	Do Proposed Project Changes Affect this Issue?	Are There Any Changed Circumstances that Affect this Issue?	Is There Any New Information of Substantial Importance Pertaining to this Issue?	If Any of the Previous Three Questions Was Answered "Yes," Would Changes or New Information Result in a New or Substantially More Severe Significant Impact?	Are there any New or Reconsidered Mitigation Measures or Alternatives that Would Substantially Reduce Significant Impacts?
9. Hazards and Hazardous Materials. Would the Project:						
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	HESE DEIR Chapter 11, Hazards and Hazardous Materials, Impact 11-1.	Yes	No	Yes	No	N/A
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	HESE DEIR Chapter 11, Hazards and Hazardous Materials, Impacts 11-2, 11-3, and 11-4.	Yes	No	Yes	No	N/A
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	HESE DEIR Chapter 11, Hazards and Hazardous Materials, Impact 11-5.	No	No	No	N/A	N/A
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	HESE DEIR Chapter 11, Hazards and Hazardous Materials, Impact 11-6.	Yes	No	Yes	No	N/A
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	HESE DEIR Chapter 11, Hazards and Hazardous Materials, Impact 11-7.	No	No	No	N/A	N/A

Environmental Issue Area	Where Was this Issue Analyzed in the Previous Environmental Document?	Do Proposed Project Changes Affect this Issue?	Are There Any Changed Circumstances that Affect this Issue?	Is There Any New Information of Substantial Importance Pertaining to this Issue?	If Any of the Previous Three Questions Was Answered "Yes," Would Changes or New Information Result in a New or Substantially More Severe Significant Impact?	Are there any New or Reconsidered Mitigation Measures or Alternatives that Would Substantially Reduce Significant Impacts?
9. Hazards and Hazardous Materials. Would the Project:						
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	HESE DEIR Chapter 11, Hazards and Hazardous Materials, Impact 11-8.	No	Yes	No	N/A	N/A

Discussion

The 2023 HESE FEIR includes DEIR Chapter 11, Hazards and Hazardous Materials, which discusses eight potential impacts of the then-proposed Housing Element and Safety Element Updates, and finds them all less than significant. The 2023 HESE FEIR, however, defers more detailed analysis of this topic to future environmental reviews and permitting processes for each housing site in the Sites Inventory as applications are submitted for their development. The analysis of hazards and hazardous materials for the 150 Shoreline Affordable Housing Project presented here fulfills this expectation. Sources relied upon for the completion of this analysis include a Phase I Environmental Site Assessment (Phase I ESA) report prepared for the Project site (KCE Matrix, 2024) and a search of databases of hazardous waste sites maintained by the State (Cal EPA, 2025). These are considered new information of substantial importance pertinent to this analysis.

a) Would the Project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

The 2023 HESE FEIR, DEIR Chapter 11, Hazards and Hazardous Materials, examines this topic in Impact 11-1: Project-Related Potential Impacts Due to Hazardous Materials Transport, Use, Storage, or Disposal. The discussion of this impact states that residences do not typically or routinely transport, use, or dispose of substantial quantities of hazardous materials. While construction of new residences facilitated by the then-proposed Housing Element Update would likely involve the intermittent transport, use, and disposal of potentially hazardous materials, including fuels and lubricants, paints, solvents, and other materials commonly used in construction, during construction activities any on-site hazardous materials that may be used, stored, or transported would be subject to applicable local, State, and federal regulations for maintaining health and safety.

The 2023 HESE FEIR states that, once construction activities are completed for a specific project, occasional transport, use, storage, or disposal of common hazardous substances such as fuel, paint, and solvents would be expected for routine maintenance, but on a smaller scale than during construction. Such post-construction activities would also be subject to applicable local, State, and federal regulations and would be unlikely to involve routine transport, use, or disposal of hazardous materials, or result in hazardous emissions. In addition, the 2023 HESE FEIR states that the County operates a household hazard waste facility that accepts drop-off by residents of wastes such as electronic waste, household batteries, bulbs, household cleaning products, paint and related products, personal care products, and other hazardous wastes.

Based on these points, the 2023 HESE FEIR concludes that new residential housing facilitated by the Housing Element Update would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials, and so this would be a less-than-significant impact.

The same points used to support the finding of less-than-significant impacts for the Housing Element Update in the 2023 HESE FEIR also apply to the 150 Shoreline Affordable Housing Project: the Project would not be expected to routinely transport, use, or dispose of hazardous materials, either during construction or residential use of the proposed building in quantities or in a manner that would create a significant hazard to the public or the environment. Local, State, and federal regulations governing transport, storage, and use of hazardous materials would apply. Future residents of the Project would have access to the existing Household Hazardous Waste collection program. The conclusion of less than significant in the 2023 HESE FEIR is the same for the 150 Shoreline Affordable Housing Project.

b) Would the Project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

The 2023 HESE FEIR identifies Impact 11-2, Significant Hazards Due to Reasonably Foreseeable Upset and Accident Conditions Involving Release of Hazardous Materials into the Environment. This topic is also addressed in Impact 11-3: Project-Related Potential Asbestos and PCB Exposure, and Impact 11-4: Project-Related Potential Lead-Based Paint Exposure. Impacts 11-3 and 11-4, however, address the potential for encountering hazardous substances during renovation, alteration, or demolition of existing structures. Since the 150 Shoreline Affordable Housing Project site has no existing structures, these impacts do not apply to the Project.

In its discussion of Impact 11-2, the 2023 HESE FEIR states that there is always a possibility that during new construction facilitated by both the Housing Element Update, construction workers, visitors, or other passers-by could encounter contamination or be exposed to existing spilled, leaked, or otherwise discharged hazardous materials or wastes present at the construction site. The 2023 HESE FEIR states however, that a Phase I ESA is typically prepared for any real estate development, as it is usually required as a due diligence investigation by lending institutions. Furthermore, Marin County Code section 22.22.080.F, Lots Dedicated to Affordable Housing, states that, “Any required inclusionary lot shall be offered in a condition that is suitable for development, including appropriate access and services, consistent with sound community

planning principles, and shall be devoid of contaminants and other hazardous wastes." The 2023 HESE FEIR concludes that this requirement and common practices would reduce or avoid the potential for significant hazards due to reasonably foreseeable upset and accident conditions involving release of hazardous materials into the environment, and this impact would therefore be less than significant.

A Phase I ESA was prepared for the 150 Shoreline Affordable Housing Project in 2024 (KCE Matrix, 2024). The Phase I ESA recounts the history of the Project site, as reconstructed from historical aerial photographs and topographical maps, and other historical and property records; provides the results of a comprehensive search of government databases of hazardous and toxic sites, and reports on the results of a site inspection and interviews with the Project applicant.

The Phase I ESA found that the Project site was vacant land with no structures between at least 1946 and 1968. During this time, historic topographical maps and aerial photos indicate a change in surface cover from natural marshland to dry land. Between 1974 and 1994, the property was occupied by a gasoline service station, and between 1986 and 1995, a car rental company. As of approximately 1995 and through the present, the Project site has consisted of vacant land with no structures, though between approximately 2018 and 2020 it was used for storage of construction materials and equipment.

The Phase I states that the Project site is listed in the State's Geotracker database (the record identifies the site as "EXXON," Case # 21-0044, and gives the address as 156 Shoreline Highway) as a Leaking Underground Storage Tank (LUST) Cleanup Site. An unauthorized release of gasoline was reported in 1991. Subsequently, between 1991 and 1995, extensive subsurface environmental site assessment and remediation work was conducted, including the removal of four underground storage tanks (USTs), subsurface soil test borings, installation of four groundwater monitoring wells, excavation of contaminated soil, and purging of contaminated groundwater from underneath the site. The San Francisco Regional Water Quality Control Board (SFRWQCB) closed the case in a letter dated November 20, 1996, confirming completion of site investigations and remedial action and stating that, "…no further action related to the underground storage tank release is required" (SFRWQCB, 1996). The Phase I report identifies this case as a "Historical Recognized Environmental Condition" (HREC).

The Phase I ESA identified no active contaminated sites within 500 feet of the Project area. The Phase I revealed no Recognized Environmental Conditions (RECs) or Controlled Recognized Environmental Conditions (CRECs), De Minimis Conditions, or significant data gaps in connection with the Project site.

A search of the State's Cortese List Data Resources databases (Cortese List) conducted on April 19, 2025, confirmed that neither the Project site nor surrounding parcels are listed as active contaminated sites (CalEPA, 2025).

Based on the Phase I ESA prepared for the Project site, and confirmed by a more recent search of State databases, there is a low likelihood that the Project site is contaminated. The Project therefore would not be expected to create a significant hazard to the public or the environment

through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. As was also concluded for the 2023 HESE FEIR, any impact of this kind would be less than significant.

c) Would the Project Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

The Project site is not located within one-quarter mile of an existing school. The closest schools are the Horizon Community School and Dr. Martin Luther King, Jr. Academy, located about 3,200 feet to the southeast in Marin City; and Tamalpais Valley Elementary School, located about 3,300 feet southwest on Tennessee Valley Road (Google Maps, 2025). No new schools are proposed in the area. Therefore, the Project would have no impact related to hazardous emissions or handling hazardous materials within one-quarter mile of an existing or proposed school.

d) Would the Project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

The 2023 HESE FEIR identifies Impact 11-6: Protocols for Government Code Section 65962.5 Sites. The 2023 HESE FEIR includes a review of the Cortese List data resources compiled pursuant to Government Code section 65962.5, and reviews the sites within Marin County that are included in the several databases that make up the Cortese List. The 2023 HESE FEIR states that compliance with federal, State, regional, and local regulations and completion of any mandatory site remediation activities would reduce potential exposure to existing hazardous materials contamination and prevent exacerbation of existing contamination or accidental release. Project compliance with regulatory requirements, as they pertain to specific sites identified in the Housing Element Update's Sites Inventory, would ensure that any potential contamination impacts from future development facilitated by the Project would be less-than-significant.

As discussed under topic b, above, a recent search of the Cortese List databases confirmed the findings of the Phase I ESA for the Project site: the Project site is not included in any of the Cortese List databases as an active contaminated site. Past contamination from the gas station that previously occupied the site has been remediated, and the case has been formally closed. Therefore, while the Project would be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, it would not, as a result, create a significant hazard to the public or the environment. This impact would therefore be less than significant. The same conclusion was reached for the 2023 HESE FEIR.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project result in a safety hazard or excessive noise for people residing or working in the Project area?

As discussed in the 2023 HESE FEIR, there is one public or public use airport in Marin County, Gnoss Field, and four private air facilities, San Rafael Airport, San Rafael Heliport, and Seaplane

Adventures/Commodore Center Heliport. The Project site is located about 18 miles south of Gnoss Field, nine miles south of the San Rafael Airport, and 4 miles south of San Rafael Heliport. Seaplane Adventures and the Commodore Center Heliport, however, are located approximately 1,600 feet southeast of the Project site, at 242 Redwood Highway. There is no adopted airport land use plan for this facility.

The 2023 HESE FEIR cites California Utilities Code section 21659(a), which states: "No person shall construct or alter any structure or permit any natural growth to grow at a height which exceeds the obstruction standards set forth in the regulations of the Federal Aviation Administration (FAA) relating to objects affecting navigable airspace contained in Title 14 of the Code of Federal Regulations, Part 77, Subpart C, unless the Federal Aviation Administration has determined that the construction, alteration, or growth does not constitute a hazard to air navigation or would not create an unsafe condition for air navigation." Notification of the FAA would therefore be required for individual proposed structures that would exceed this airspace surface. 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 project compliance with any conditions set forth in such FAA determinations, would ensure that the structure would not be an air safety hazard. Project compliance with FAA protocols would ensure that any potential airport hazard impacts from future development facilitated by the Project would be less than significant. The same points support a finding of less-than-significant impacts regarding airport operations hazards for the 150 Shoreline Affordable Housing Project.

Seaplane Adventures, which also operates the associated Commodore Center Heliport, offers excursion helicopter and seaplane tours of the area. The 2023 HESE FEIR states that there are three helicopters based at the facility, and the facility averages approximately 57 flights a week. This is an increase from the level of activity reported in the Marin Countywide Plan, Chapter 3.10, Noise, which identifies the facility as the Richardson Bay Heliport, and cites a figure of 25 takeoffs and landings per week. The Countywide Plan also includes Map 3-15. Existing Noise Contours for the Richardson Bay Heliport, which shows that the Project site is well outside the 55-decibel noise contour for this facility. Seaplanes use Richardson Bay for takeoffs and landings, making it unlikely that planes would pass over the Project site during takeoff or landing. Due to the infrequency of flights, the use of Richardson Bay for seaplane takeoffs and landings, and the location of this facility on the other side of US 101, which is the major noise source affecting the Project site (see Section 2.13, Noise), this facility would not be expected to generate excessive noise affecting people residing or working at the Project site. The impact would therefore be less than significant.

f) Would the Project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

The 2023 HESE FEIR identifies Impact 11-8: Impacts Related to Adopted Emergency Response Plans or Emergency Evacuation Plans. The discussion of this impact states that as part of the County's evacuation planning and response efforts, the entire county has been divided into individual evacuation zones. The County also has established emergency evacuation routes,

which include Shoreline Highway past the Project site as a primary evacuation route (MarinMap, 2025). The 2023 HESE FEIR states that future housing development facilitated by the then-proposed Housing Element Update would be subject to Fire Department review and would be required to comply with County Fire and California Fire Code standards, County building standards, and development standards. Project compliance with these standards would ensure that any potential impacts on adopted emergency response plans or emergency evacuation plans from future development facilitated by the Project would be less-than-significant.

There are no adopted emergency evacuation plans for the area that includes the Project site. The Southern Marin Fire District has reviewed and commented on the Project application, and has requested changes to Project plans to ensure adequate access for firefighting equipment, as further discussed in Section 2.17, Transportation. As concluded in the 2023 HESE FEIR, this process will ensure that the Project will not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan: the Project, like the 2023 HESE FEIR, would have a less-than-significant impact of this kind.

Mitigation Measures

Finding no significant impacts related to hazards and hazardous materials, the 2023 HESE FEIR does not include mitigation measures related to this issue. Similarly, because no significant impacts related to hazards and hazardous materials are identified here for the 150 Shoreline Affordable Housing Project, no mitigation measures are required.

Conclusion

The 150 Shoreline Affordable Housing Project would not have a significant impact related to hazards and hazardous materials. There would not be a new significant impact, nor a substantial increase in the severity of a previously identified significant impact of this kind.

References

California Environmental Protection Agency (CalEPA), 2025. Cortese List Data Resources. https://calepa.ca.gov/sitecleanup/corteselist/ Accessed April 19, 2025

KCE Matrix, 2024. Phase 1 Environmental Site Assessment Report, Vacant Land, 150 &156 Shoreline Highway, Mill Valley, CA 94941. Prepared for Pacific West Communities, August 28, 2024.

Marin County, 2023. Marin Countywide Plan. Adopted November 6, 2007. Revised January 24, 2023.

San Francisco Bay Regional Water Quality Control Board, 1996. Letter from Loretta K. Barsamian, Executive Officer, RWQCB, to Marla Guensler, Exxon Company, USA, Subject: Underground Storage Tank (UST) Case Closure for Former Exxon Station #7-0226, 156 Shoreline Highway, Mill Valley, Marin County, UST Case No. 21-0044.

2.10. Hydrology and Water Quality

Environmental Issue Area	Where Was this Issue Analyzed in the Previous Environmental Document?	Do Proposed Project Changes Affect this Issue?	Are There Any Changed Circumstances that Affect this Issue?	Is There Any New Information of Substantial Importance Pertaining to this Issue?	If Any of the Previous Three Questions Was Answered "Yes," Would Changes or New Information Result in a New or Substantially More Severe Significant Impact?	Are there any New or Reconsidered Mitigation Measures or Alternatives that Would Substantially Reduce Significant Impacts?
10. Hydrology and Water Quality. Would the Project:						
a) Violate any water quality standards or waste discharge requirements, or otherwise substantially degrade surface or groundwater quality?	HESE DEIR Chapter 12, Hydrology and Water Quality, Impact 12-1.	Yes	No	Yes	No	N/A
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	HESE DEIR Chapter 12, Hydrology and Water Quality, Impact 12-2.	Yes	No	Yes	No	N/A
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces, in a manner which would: i) result in substantial erosion or siltation on- or off-site; ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or iv) Impede or redirect flood flows?	HESE DEIR Chapter 12, Hydrology and Water Quality, Impact 12-3.	Yes	No	Yes	No	N/A

Environmental Issue Area	Where Was this Issue Analyzed in the Previous Environmental Document?	Do Proposed Project Changes Affect this Issue?	Are There Any Changed Circumstances that Affect this Issue?	Is There Any New Information of Substantial Importance Pertaining to this Issue?	If Any of the Previous Three Questions Was Answered "Yes," Would Changes or New Information Result in a New or Substantially More Severe Significant Impact?	Are there any New or Reconsidered Mitigation Measures or Alternatives that Would Substantially Reduce Significant Impacts?
10. Hydrology and Water Quality. Would the Project:						
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	HESE DEIR Chapter 12, Hydrology and Water Quality, Impact 12-4.	Yes	No	Yes	No	N/A
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	HESE DEIR Chapter 12, Hydrology and Water Quality, Impact 12-5.	Yes	No	Yes	No	N/A

Discussion

The 2023 HESE FEIR, DEIR Chapter 12, Hydrology and Water Quality, identifies five potential impacts that may be associated with by housing projects facilitated by the then-proposed Housing Element Update. Based on an assumption that all these housing projects would be required to comply with laws and regulations protecting water quality, both during construction and occupation of these developments, the 2023 HESE FEIR concludes that all these impacts would be less than significant.

The analysis presented below for the 150 Shoreline Affordable Housing Project relies primarily on a drainage study (Atlas Civil Design, 2024) a stormwater management plan (Atlas Civil Design, 2025), and Geotechnical Study (Allerion Consulting Group, 2025) prepared for the Project, also in compliance with regulatory requirements. These studies constitute new information of substantial importance to the evaluation of the Project's impacts.

a. Would the Project violate any water quality standards or waste discharge requirements, or otherwise substantially degrade surface or groundwater quality?

The 2023 HESE FEIR, DEIR Chapter 12, Hydrology and Water Quality, identifies Impact 12-1: Water Quality Impacts, as a less-than significant impact, due to the assumed compliance of all housing developments facilitated by the then-proposed Housing Element Update to comply with mandatory regulatory requirements for water quality protection promulgated and enforced by the Marin County Stormwater Pollution Prevention Program (MCSTOPPP); by Marin County, through the building and other development permitting processes; and by the California Regional Water Quality Control Board (RWQCB), which administers the federal Clean Water Act locally.

The 2023 HESE FEIR states that MCSTOPP and County water quality protection requirements and conditions applicable to development of new housing facilitated by the Housing Element Update are intended to reduce potential construction period and post-construction water quality impacts to a less-than-significant level, consistent with federal and State water quality regulations and plans. These requirements, conditions, regulations, and plans are detailed in Section 12.2, Regulatory Setting, of the 2023 HESE FEIR.

The 150 Shoreline Affordable Housing Project site has no surface water features, and as discussed further under the following topic, is not situated atop an identified groundwater basin. Consistent with the discussion of Impact 12-1 in the 2023 HESE FEIR, the 150 Shoreline Project would be subject to the construction and post-construction period requirements of MCSTOPP and Marin County.

Construction Period

Because the Project would disturb soil during construction, the Project applicant must submit an Erosion and Sediment Control Plan (ESCP) for approval by Marin County Department of Public Works prior to the issuance of the Building Permit, pursuant to Marin County Code section 24.04.625, Erosion and Sediment Control and MCSTOPP regulations. The purpose of the ESCP is to: 1. Identify potential pollutant sources that may affect the quality of stormwater runoff discharges from the construction site. 2. Document the Best Management Practices (BMPs) that will be implemented to prevent, to the maximum extent practicable, construction site pollutants from leaving the site and entering the storm drain system during all phases of construction. 3. Document erosion control, sediment control, and good housekeeping BMPs that must be implemented year-round as appropriate based on construction activities (MCSTOPP, 2015). Preparation, submittal, and implementation of the required ESCP will ensure that the Project would not violate any water quality standards or waste discharge requirements, or otherwise substantially degrade surface or groundwater quality during construction.

Post-Construction Period

As described in Chapter 1, Project Description, the Project includes a Stormwater Control Plan (SCP) for managing stormwater runoff from the Project site post-construction (Atlas Civil Design, 2025). The stormwater management plan is based on a drainage study that examines the current hydrology and drainage patterns of the Project site (Atlas Civil Design, 2024). The Project would increase impervious surface on the Project site from the current .34 acres (approximately 14,800 square feet) to .43 acres (approximately 18,700 square feet). The Project would integrate stormwater treatment facilities to capture site runoff during precipitation events in accordance with the objectives of the Bay Area Stormwater Management Agencies Association (BASMAA) Post Construction Manual: Design Guidance for Stormwater Treatment and Control for Projects in Marin, Sonoma, Napa, and Solano Counties (BASMAA, 2014).

Planned stormwater treatment facilities, consisting of bioretention facilities located in the northeastern and southeastern portions of the Project site, would double as stormwater detention basins to attenuate runoff. All drainage from impervious surfaces, including roofs and impervious pavement, would be directed to these bioretention facilities. The SCP also includes provisions for

future maintenance of stormwater control facilities. The SCP will be reviewed and must be found adequate by Marin County Department of Public Works prior to issuance of a building permit. Implementation of the SCP will ensure that the Project would not violate any water quality standards or waste discharge requirements, or otherwise substantially degrade surface or groundwater quality during the post-construction period.

With adherence to the regulatory requirements for construction and post-construction period stormwater management, the Project would not violate any water quality standards or waste discharge requirements, or otherwise substantially degrade surface or groundwater quality. Consistent with the conclusion for Impact 12-1 in the 2023 HESE FEIR, this impact would be less than significant.

b) Would the Project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

The 2023 HESE FEIR, DEIR Chapter 12, Hydrology and Water Quality, Section 12.1.3, Groundwater Conditions, states that there are four identified groundwater basins in Marin County: Sand Point Area, Novato Valley, San Rafael Valley, and Ross Valley. This section of the 2023 HESE FEIR also states that The Marin Municipal Water District, which serves the 150 Shoreline Affordable Housing Project site, does not use groundwater as a water supply source.

The 2023 HESE FEIR identifies Impact 12-2, Groundwater Recharge and Groundwater management Impacts. The 2023 HESE FEIR finds that existing regulatory requirements would be sufficient to avoid and minimize impacts to groundwater recharge and groundwater quality, and so Impact 12-2 is found to be less than significant.

The 150 Shoreline Affordable Housing Project site is not located within any identified groundwater basins, and so the State Sustainable Groundwater Management Act requirements do not apply to the Project site.

According to the geotechnical study prepared for the Project (Allerion Consulting Group, 2024), groundwater was observed during and just after exploratory borings at varying depths between approximately six and eight feet below the ground surface during drilling, and at four to six feet after drilling. Groundwater was not encountered in one boring (Boring B-2), which was drilled to a depth of about 21½ feet. The report states that groundwater levels could be seasonally or tidally influenced, and that there may be perched groundwater (i.e., groundwater located above the water table) present. The report states that groundwater seepage into excavations during construction is expected and can be controlled by pumping or diversion. The report also states that the uppermost soils may become saturated in the wet season, and states that this condition would likely impede or delay grading operations, if excavation were to occur during the wet season. The geotechnical study therefore recommends excavation to occur during the dry season only.

Given the regulatory requirements to control stormwater pollution and runoff, and the geotechnical study's findings and recommendations regarding groundwater conditions at the Project site, the Project would not substantially decrease groundwater supplies or interfere

substantially with groundwater recharge. Consistent with the conclusion of the 2023 HESE FEIR, this impact would be less than significant.

c) Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces, in a manner which would:

i) result in substantial erosion or siltation on- or off-site;

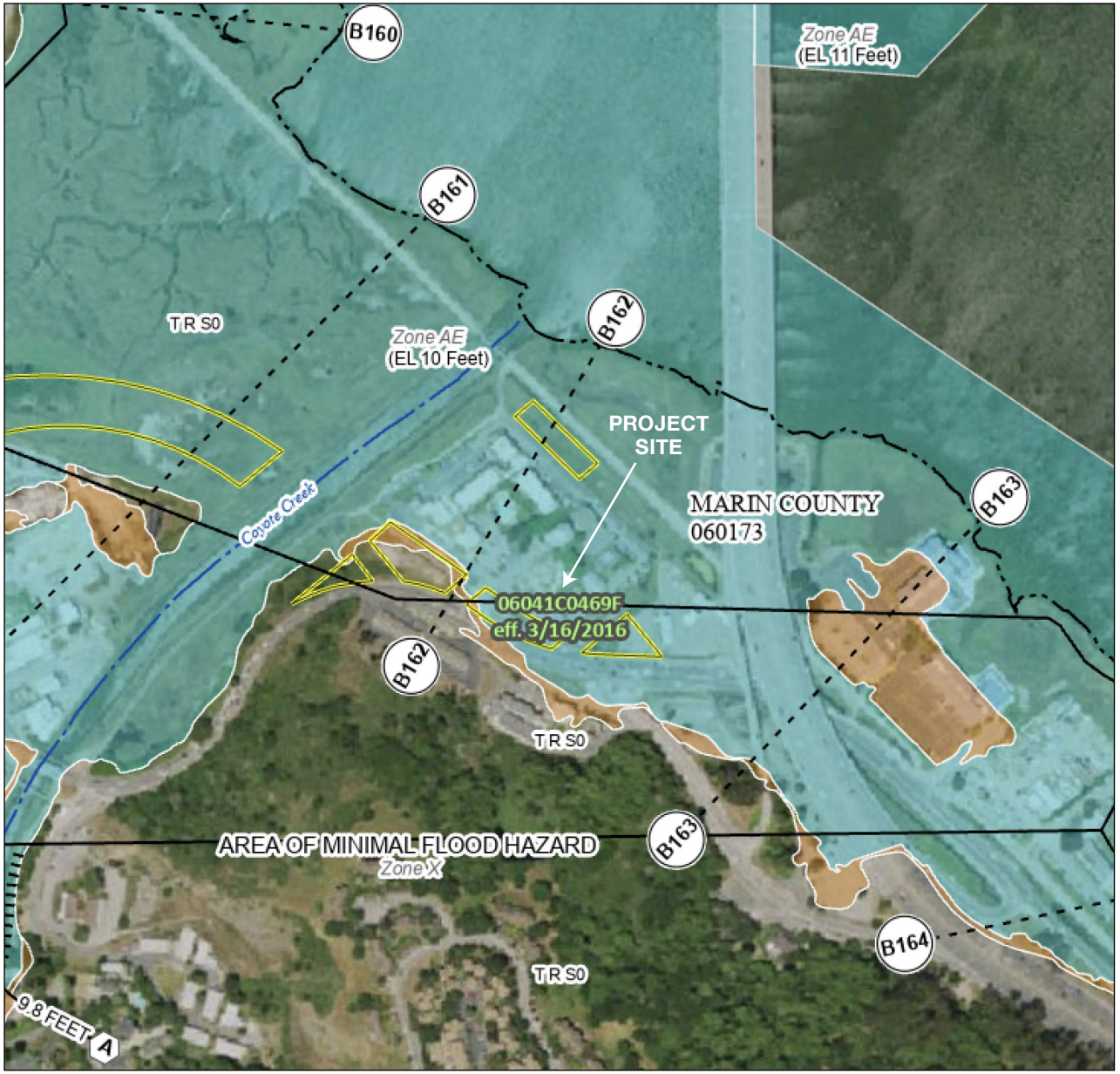
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;

iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or

iv) Impede or redirect flood flows?

The 2023 HESE FEIR, DEIR Chapter 12, Hydrology and Water Quality, identifies Impact 12.3, Stormwater Runoff and Drainage Impacts, which addresses the potential for the development of housing projects facilitated by the then-proposed Housing Element Update to substantially alter existing drainage patterns. The impact points to the discussion of Impact 12.1, Water Quality Impacts (see topic a, above), stating that the same required stormwater management measures and techniques described in that impact discussion are designed to reduce the volume and rate of stormwater runoff and allow water to infiltrate the underlying soil naturally, or capture water for reuse, and that these measures would reduce the effects of new or replaced impervious surfaces due to potential future development facilitated by the Housing Element Update. The discussion refers to Impact 12-4, Risks from Pollutant Release due to Project Inundation (discussed below under topic d) regarding future development in a flood hazard area and other areas subject to inundation, which states that housing developments would be required to comply with the County's floodplain management standards in County Code section 23.09, which are designed to prevent or regulate construction of barriers that might unnaturally divert floodwaters or increase flood hazards in other areas. The 2023 HESE FEIR concludes that these requirements would reduce Impact 12.3 to less than significant.

As described in Chapter 1, Project Description, the Project site, which has a ground surface elevation of about 10 feet above mean sea level, is within the 100-year floodplain, as mapped by the Federal Emergency Management Agency (FEMA; Figure 2.10-1). The Project site is within the floodplain of Coyote Creek, which runs through Bothin Marsh just north of the Howard Johnson Master Plan area. The whole Howard Johnson Master Plan area is therefore subject to shallow flooding during storm events, especially when they occur during exceptionally high tides.



SPECIAL FLOOD HAZARD AREAS

- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD

- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS

- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES

- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES

- Cross Sections with 1% Annual Chance
- Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS

- Digital Data Available
- No Digital Data Available
- Unmapped

0 400
Feet

150 SHORELINE HIGHWAY AFFORDABLE HOUSING PROJECT

Source: FEMA, 2024

Figure 2.10-1

FEMA Flood Zones

Consistent with the requirements of County Code section 23.09, the Project applicant proposes to elevate the first finished floor of the proposed building above the FEMA-defined Base Flood Elevation (the predicted level of the 100-year flood). Also, as discussed above under topic a, the Project would be required to comply with applicable construction-period and post-construction-period requirements for erosion and sediment control and for stormwater management. Under current conditions, stormwater runoff flows across the Project site to two privately owned and maintained drain inlets, and from there to a County 36-inch storm sewer below Shoreline Highway, which discharges into Coyote Creek (Atlas Civil Design, 2024). The Project proposes to route overflow from the proposed bioretention basins to the existing drain inlets. Prior to issuance of a building permit, the Project applicant will be required to demonstrate that all existing and proposed new stormwater facilities have adequate capacity to handle anticipated post-construction runoff, in accordance with regulatory requirements.

Because the new building would cover about 7,000 square feet, it would eliminate a small amount of the volume capacity of the Coyote Creek floodplain. For comparison, the Bothin Marsh Preserve, which is in the floodplains of both Coyote Creek and, to the north, Arroyo Corta Madera del Presidio, occupies about 106 acres of floodplain. Seven thousand square feet is about one-sixth of an acre, and about one-six-hundredth the size of the Bothin Marsh Preserve. The Coyote Creek floodplain also extends south of Coyote Creek outside of the Bothin Marsh Preserve and upstream of Shoreline Highway, so the Project site represents a much smaller portion of the entire floodplain. Furthermore, the marsh area is at a lower elevation, and so has greater flood capacity per unit area of land, compared to the Project site. Marin County's process for approval of development within the floodplain, contained in County Code Section 23.09, requires the Project applicant to demonstrate to the satisfaction of the Floodplain Administrator – in this case, the Public Works Director – that the proposed development does not adversely affect the carrying capacity of the floodplain (County Code Section 23.09.033.d.3). This section of the County Code defines "adversely affects" to mean that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will increase the water surface elevation of the base flood more than one foot at any point. Given that the Project would occupy a small area of shallow floodplain, and that it must comply with the County Code section cited above, the Project would not be expected to substantially redirect flood flows: it would not substantially alter flood patterns nor substantially increase the depth of flooding in the remainder of the floodplain.

For these reasons, the Project would not substantially alter the existing drainage pattern of the site or area, and, consistent with the conclusion reached in the 2023 HESE FEIR for Impact 12-3, this impact would be less than significant.

d) In flood hazard, tsunami, or seiche zones, would the Project risk release of pollutants due to inundation?

The 2023 HESE FEIR, DEIR Chapter 12, Hydrology and Water Quality, identifies Impact 12-4: Risks from Pollutant Release due to Project Inundation. The 2023 HESE states that future potential development facilitated by the then-proposed Housing Element Update located in FEMA-designated flood areas would be required to comply with standard FEMA provisions and

County Code floodplain management standards contained in County Code section 23.09, Floodplain Management. Through application of Chapter 23.09 to development projects involving new construction in the FEMA-mapped 100-year floodplain, the County applies uniform regulations for increasing structural elevations and incorporating floodproofing measures. The 2023 HESE FEIR states that these measures, in addition to implementation of other programs contained in the Countywide Plan Environmental Hazards chapter designed to reduce risk of flooding, would reduce the potential for impacts from release of pollutants during a flooding, tsunami, or seiche event for those housing projects located in the floodplain. Impacts would therefore be less than significant.

In addition to being in the FEMA-mapped AE floodplain (the 100-year floodplain) the Project site is mapped by the California Geological Survey as a tsunami hazard area (California Geological Survey, 2025). The geotechnical study prepared for the Project states that, due to the Project site's location at some distance from large bodies of water, its elevation at approximately 10 feet above mean sea level, and the geometry of the site, the potential for tsunami damage or damage caused by oscillatory waves (seiche) is considered to have a low to moderate probability to occur at the site, depending on the tide elevation. The Project site thus has the potential for inundation during flood or, less likely, in the event of a tsunami or seiche. Because of the existing elevation of the site, at about the same level as the FEMA-defined Base Flood Elevation (BFE; the predicted elevation of the 100-year flood), inundation would likely be shallow in all but the most extreme events.

If inundation of the Project site were to occur during Project construction, it could lead to erosion and the entrainment of sediment from disturbed and stockpiled soil. If construction equipment and materials were inundated, this could cause dispersal of automotive fuels, lubricants and other petrochemicals. These pollutants would eventually flow toward the Bay with receding waters. Because construction of the Project is planned to take place during the dry season, however, flooding from a large storm event is precluded. While a tsunami or seiche, which are triggered by an earthquake or large landslide, could occur during the dry season, these are infrequent occurrences, and there is a low likelihood that they would occur during the phase of construction when the ground surface is disturbed.

The Project proposes to elevate the Project site such that the first finished floor of the proposed building has an elevation of 11.1 feet, or 1.1 feet above BFE. This would decrease the potential for inundation during flooding of the site, whether from storm events, tsunami, or seiche; flooding that did occur would be shallower. Extreme flooding from a flood that reaches a higher elevation than BFE could still inundate the site, but with little potential for entrainment of pollutants: the landscaped and parking areas around the building could flood, but few pollutants would be expected to be susceptible to entrainment in flood waters. The building itself would be required to meet the "flood-proofing" construction standards contained in County Code section 23.09.034, which include, in addition to elevation of the lowest floor above BFE, the following:

- anchoring of the structure to prevent flotation, collapse or lateral movement resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy;

- construction with materials and utility equipment resistant to flood damage;
- design and location of electrical, heating, ventilation, plumbing and air conditioning equipment and other service facilities to prevent water from entering or accumulating within the components during flooding;
- any enclosed areas, including crawl spaces, that are below the base flood elevation must be provided with flood openings that provide for equalization of hydrostatic flood forces on exterior walls by allowing for the automatic entry and exit of floodwaters;
- all new and replacement water supply and sanitary sewage systems must be designed to minimize or eliminate infiltration of floodwaters into the system or discharge from systems into floodwaters.

Given the regulatory requirement to elevate and otherwise floodproof the building, and the nature of the development itself, flooding of the Project site following construction of the proposed new building would not be expected to result in the release of pollutants due to inundation.

Sea Level Rise

The Marin Countywide Plan Environmental Hazards chapter recognizes rising sea levels as a secondary effect of climate change, due to thermal expansion of ocean water from rising temperatures and from the addition of water from melting glaciers and ice caps. The Countywide Plan states that the California coast saw a rise in sea level of four to eight inches over the 20th century due to climate change and forecasts that by 2100, around 7,000 acres, 9,000 parcels, 10,000 buildings, and 120 miles of roads throughout Marin County will be exposed to sea level rise and 100-year storm events, with most of these located along the Bayshore. The Countywide Plan also identifies the potential for saltwater intrusion into groundwater and rising water tables as consequences of sea level rise.

Given the uncertainty in the magnitude and timing of future sea level rise, the Countywide Plan uses a scenario-based approach to assess a range of potential sea level rise impacts. These scenarios are derived from the U.S. Geologic Survey (USGS) Coastal Storm Modeling System (CoSMoS) which constructs various sea level rise scenarios based on global and regional climate and wave models to produce local hazard projections. Generally consistent with the Ocean Protection Council's 2022 State Agency Sea-Level Rise Action Plan for California (Ocean Protection Council, 2022), which uses CoSMoS projections, Marin County has chosen to plan for the following Sea Level Rise scenarios, which go beyond the minimums established by the State:

- 1.6 feet of Sea Level Rise Near-term (2040-2050)
- 3.3 feet of Sea Level Rise Medium-term (2050-2070)
- 6.6 feet of Sea Level Rise Long-term (2100)

The Countywide Plan Environmental Hazards chapter includes Policy EH-5.3: Adapt to Sea Level Rise. This policy calls for the safeguarding of the Marin shoreline, coastline, natural resources, recreational resources, and urban uses from flooding due to rising sea levels. While the Countywide

Plan includes several implementing programs for Policy EH5.3, the County has not yet established regulatory requirements for projects located in areas subject to flooding due to sea level rise.

In the near-term, with a projected 1.6 feet (50 centimeters) of sea level rise, the Project site, at its existing elevation, can be expected to remain above sea level, but may be subject to shallow inundation in a moderate to large storm event, or during a storm surge (Our Coast Our Future, 2025). In the medium-term, with 3.3 feet (100 centimeters or 1 meter) of sea level rise, the Project site, at its current elevation, would experience regular shallow flooding, and deeper flooding during storm events, especially if they coincide with high tides (ibid). The proposed building, which would be elevated above the current ground level, may also be subject to shallow flooding, but the required flood-proofing features contained in County Code section 23.09 would likely prevent substantial release of pollutants. In the long-term, with 6.6 feet (2 meters) of sea level rise, the entire Project site would be inundated (ibid), at least at higher tides. Flooding would impact the first floor of the proposed building, and the potential for the release of pollutants would increase.

While it is reasonably foreseeable that, without development of additional protections from inundation, sea level rise would eventually result in a situation where the Project may contribute to release of pollutants into rising waters, it is also reasonably foreseeable that actions will be taken by public or private entities to either protect developed areas of the Bayshore, or, where protections would be too costly or otherwise prohibitive, to manage a retreat from the Bayshore. The Project would not itself exacerbate or contribute to sea level rise. The County has not yet acted to regulate development in areas subject to inundation under future sea level rise scenarios. Like large portions of the County where the shoreline has been developed but is now threatened by sea level rise, steps to protect the Project site from this threat can be expected, but are not yet in place.

Given that the Project site would not at the present time pose a substantial risk of inundation and consequent risk of release of pollutants due to flooding, tsunami, or seiche, the Project would not have a significant impact of this kind. The same conclusion was reached in the 2023 HESE FEIR for Impact 12.4; the Project would not have a new significant impact, nor a substantial increase in the severity of a previously identified significant impact.

e) Would the Project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

The 2023 HESE FEIR, DEIR Chapter 12, Hydrology and Water Quality, identifies Impact 12-5: Conflicts with Water Quality Control or Sustainable Groundwater Management Plans. The discussion of this impact points to Impact 12-1 (discussed above under topic a), which describes the established regulatory programs for controlling stormwater runoff and reducing pollutants in stormwater. These regulatory programs, which include Marin County Code stormwater regulations and the MCSTOPPP program requirements, would apply to future development facilitated by the Housing Element Update. The 2023 HESE FEIR states that these programs and regulations are designed for consistency with the National Pollutant Discharge Elimination System (NPDES) MS4 permit, which itself complies with the federal Clean Water Act and is consistent with State clean water laws. Because future development facilitated by the Housing Element Update would incorporate these NPDES MS4 and Marin County Code stormwater

measures, it would be consistent with the San Francisco Bay Water Quality Control Plan (Basin Plan) and would not obstruct implementation of the Basin Plan. The discussion of Impact 12-5 further states that none of the four groundwater basins in the county have been designated a medium- or high-priority basin by the California Department of Water Resources, and so none require a groundwater management plan. The 2023 HESE FEIR finds that the Project would therefore not result in a conflict with a sustainable groundwater management plan.

For the same reasons stated in the 2023 HESE FEIR, the Project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan; in both instances, the conclusion is that any impact would be less than significant.

Mitigation Measures

Finding no significant impacts related to hydrology and water quality, the 2023 HESE FEIR does not include any mitigation measures for such impacts. Similarly, no significant hydrology and water quality impacts are identified for the Project, and no mitigation measures are needed.

Conclusion

With compliance with existing regulatory requirements for stormwater management and new construction in a floodplain, which is enforced through the building permit process, the Project would have only less-than-significant impacts on hydrology and water quality; there would be no new significant impacts, nor a substantial increase in the severity of a previously identified significant impact, compared to the 2023 HESE FEIR.

References

Allerion Consulting Group, 2024. Geotechnical Engineering Study, Proposed Apartment Building, Mill Valley California. Prepared for Pacific West Communities, Inc., June 14, 2024. Revised October 16, 2024.

Atlas Civil Design, 2024. Final Drainage Study for Shoreline Affordable Housing. Prepared for The West Pacific Companies, Inc. November 2024.

Atlas Civil Design, 2025. Stormwater Control Plan for Shoreline Affordable Housing. Prepared for The West Pacific Companies, Inc. January 9, 2025.

California Geological Survey. Tsunami Hazard Area Map. Accessed April 9, 2025.

Marin County Stormwater Pollution Prevention Program, 2015. Construction Erosion and Sediment Control Plan Applicant Package. Revised November 2015.

Ocean Protection Council, 2022. State Agency Sea Level Rise Action Plan for California. Updated February 2024. https://opc.ca.gov/sea-level-rise/

Our Coast Our Future, 2025. Hazards Map. Flooding scenarios at the Project site with various levels of sea level rise and storm frequencies. https://ourcoastourfuture.org/hazard-map/ Accessed April 8, 2025.

2.11. Land Use and Planning

Environmental Issue Area	Where Was this Issue Analyzed in the Previous Environmental Document?	Do Proposed Project Changes Affect this Issue?	Are There Any Changed Circumstances that Affect this Issue?	Is There Any New Information of Substantial Importance Pertaining to this Issue?	If Any of the Previous Three Questions Was Answered "Yes," Would Changes or New Information Result in a New or Substantially More Severe Significant Impact?	Are there any New or Reconsidered Mitigation Measures or Alternatives that Would Substantially Reduce Significant Impacts?
11. Land Use and Planning. Would the Project:						
a) Physically divide an established community (including a low-income or minority community)?	HESE DEIR, Chapter 13, Land Use and Planning, Impact 13-1.	Yes	No	No	No	N/A
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	HESE DEIR, Chapter 13, Land Use and Planning, Impact 13-2.	Yes	No	No	No	N/A
c) Result in substantial alteration of the character or functioning of the community, or present planned use of an area?	This issue was not examined in the 2023 HESE FEIR.	Yes	No	No	No	N/A
d) Conflict with applicable Countywide Plan designation or zoning standards?	Same as issue 11.b, above.	Yes	No	No	No	N/A

Discussion

The 2023 HESE FEIR, DEIR Chapter 13, Land Use and Planning, identifies two impacts, and finds that housing developments facilitated by the then-proposed Housing Element Update would result in only less-than-significant impacts of this kind.

Other than the adoption of the Housing Element Update in 2023, and the specifics of the 150 Shoreline Affordable Housing Project contained in the Project application, there are no changed circumstances, and no new information of substantial importance pertaining to the analysis of the Project's impacts related to land use and planning.

a) Would the Project physically divide an established community (including a low-income or minority community)?

The 2023 HESE FEIR identifies Impact 13-1: Project Potential for Physically Dividing an Established Community, which it finds less than significant for the following reasons:

> No development sites or major infrastructure improvements are planned that would divide existing communities. The Project goals, policies, and implementing programs have been purposely formulated to avoid physically dividing any established communities in unincorporated Marin County and to comply with applicable State, regional, and local plans and programs while meeting the County's RHNA. The Project goals, policies, and implementing programs do so through programs that facilitate development on sites that can accommodate additional housing units.

The Project would alter the planned density currently assigned to 150 Shoreline, the Project site, which is currently identified as a housing site in the 2023 Housing Element Update Sites Inventory. The Project would not require major infrastructure improvements and would not affect surrounding land uses. For the same reasons stated in the 2023 HESE FEIR for concluding that Impact 13-1 would be less than significant, the Project, too, would have a less-than-significant impact regarding its potential to physically divide an established community.

b) Would the Project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

The 2023 HESE FEIR identifies Impact 13-2: Project Consistency with Land Use Plans, Policies, and Regulations Adopted for the Purpose of Avoiding or Mitigating Environmental Effects, as a less-than-significant impact. The discussion of this impact states that consistency with specific environmental plans, programs, and regulations, as discussed in the individual environmental topic chapters (e.g., Biological Resources, Air Quality, Greenhouse Gases), find that the then-proposed Housing Element Update would be inconsistent with several interrelated regional and Countywide plans, including MTC/ABAG Plan Bay Area 2050 (Transportation), the CARB 2017 Scoping Plan (Climate Change), and the Marin County 2030 Climate Action Plan (CAP). The inconsistency would be caused primarily by increased vehicle miles traveled (VMT) that would result from development of the housing sites, especially those located in more rural and less densely populated areas of the County, that were then under consideration for inclusion in the Housing Element Update's Sites Inventory.

The discussion of Impact 13-2 also states that candidate housing sites would all require site-specific County approvals before individual projects could be constructed. Some of the identified housing sites were found to conflict with 2007 Countywide Plan land use designations and with zoning. The project evaluated in the 2023 HESE FEIR, however, included proposed amendments to the zoning designation for selected sites to allow for the number of housing units identified as part of the project. Development of these sites would enable the County to meet its RHNA. The 2023 HESE FEIR states that all proposed Countywide Plan designation changes and zoning changes would be consistent with existing Marin County land use classifications as defined in the Countywide Plan and Zoning Code, and that the County intended to redesign and rezone potential housing sites by January 31, 2023, to allow for new housing.

The 2023 HESE FEIR finds that, for these reasons, the then-proposed Housing Element Update would not conflict with a land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects, and this impact would therefore be less-than-significant.

As described in Section 2.17, Transportation, topic b, the 150 Shoreline Affordable Housing Project would not significantly increase VMT; the housing sites identified in the 2023 HESE Update associated with high VMT are those located in western Marin County and rural areas, where travel distances to services, amenities, and job centers are greater. The Project site, by contrast, is located along the US 101 corridor, close to services, public transportation, and bicycle routes. The Project therefore would not conflict with applicable transportation plans or climate action plans.

As described below under topic d, with the State Density Bonus Law, the Project is consistent with the existing Countywide Plan and Tamalpais Area Community Plan (TACP) land use designations for the site, and with site zoning.

The major County policies adopted for the purpose of avoiding and mitigating environmental effects include Countywide Plan policies for protection of wetlands (Policy 3.1, Protect Wetlands), streams and riparian areas (Policy 4.1, Restrict Land Use in Stream Conservation Areas), and views of ridgelines and upland greenbelts, hillsides, water, and trees (Policy DES-4.1). Because the Project site is not located within a riparian corridor, is not adjacent to a wetland, and is not along a ridge or within a greenbelt, on a hillside, adjacent to water, or in a forested area, there would not be an inconsistency with any of these key environmental protection policies. Compliance with regulations based on other Countywide Plan policies adopted for avoiding and mitigating environmental effects, such as policies to prevent water pollution and alterations to stream channels from stormwater runoff (see Section 2.10, Hydrology and Water Quality, topics a and c), is mandatory and is addressed through the planning and building permit processes. Though the Project site was formerly used as a gas station, site contamination has been remediated, and there are no covenants restricting land use.

For these reasons, the Project would not cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

c) Would the Project result in substantial alteration of the character or functioning of the community, or present planned use of an area?

This topic was not examined in the 2023 HESE FEIR.

The Howard Johnson's Master Plan was amended on December 14, 2021to allow a mixed-use development on the Project site. Also on this date, the Marin County Board of Supervisors approved a two-story building on the Project site, consisting of 10 residential units, 11 extended hotel rooms, 20 on-site parking spaces, common areas, and other improvements. The TACP designates land use for the Project site as Multiple Residential-Visitor Commercial (MRVC), which allows both commercial and multi-family housing development. The Project would construct 32 residential units (see Chapter 1, Project Description). This does not represent a substantial alteration of the present planned use of the site.

The developed areas around the Project site are characterized by mixed uses, including hotels, small commercial buildings, and affordable housing. The Project would not introduce a new or

incompatible land use to the area. Like the nearby residential communities in the Tamalpais Valley and Almonte neighborhood, future residents of the Project site, if the Project is constructed, would have ready access to the shops and other amenities located in the nearby Tam Junction commercial area; the area has adequate public services and is served adequately by utilities to ensure that the Project would not affect the functioning of the community (see Sections 2.15, Public Services and 2.19, Utilities and Service Systems).

For these reasons, the Project would not result in substantial alteration of the character or functioning of the community or present planned use of an area, and this impact would be less than significant.

d) Would the Project conflict with applicable Countywide Plan designation or zoning standards?

The 2023 HESE FEIR covered this issue generally for all then-proposed changes to the HESE's housing inventory sites in Impact 13-2; please refer to topic b, above, for a summary of that impact discussion and conclusion. The following discussion focuses on Countywide Plan land use designation and zoning standards that apply specifically to the 150 Shoreline Affordable Housing Project site.

Countywide Plan

The Countywide Plan is the governing general plan for the unincorporated areas of the County and establishes goals, policies, and programs that govern existing and future land uses and developments. The Countywide Plan also includes adopted community area plans as they pertain to specific unincorporated communities. The Community Development (Chapter 3.4) and Planning Areas (Chapter 3.12) sections of the Countywide Plan together form the Land Use Element of the Countywide Plan. The Countywide Plan designates the Project site with a land use designation of General Commercial/Mixed-Use (GC). Under the Countywide Plan, the development limit on the site is expressed in terms of Floor Area Ratio (FAR),[30] with a range of 0.05 to 0.35 (floor area equal to 5-35% of the lot area).

Tamalpais Area Community Plan

The Project site is within the area covered by the TACP and specifically within the Manzanita/Shoreline area delineated in the TACP (Marin County, 1992). The TACP designates land use for the Project site as Multiple Residential-Visitor Commercial (MRVC), which allows both commercial and multi-family housing development. The TACP declares that "multiple family housing is an appropriate and acceptable use within [the MRVC] land use designation."

Zoning

The Project site is zoned Planned Commercial (CP), which allows mixed-use and multi-family affordable housing development subject to the Design Review process. Moreover, entirely income-restricted developments are principally permitted uses. The CP zoning district permits 30 dwelling units per acre.

[30] Floor Area Ratio, or FAR, is the ratio of floor area to lot size.

The State Density Bonus Law (Gov't Code Sec. 65915-65918)

The State Density Bonus Law allows developers who provide affordable housing in their residential projects to receive an increase over the otherwise maximum density allowed by the applicable zoning (a "density bonus"). To determine how many bonus units are awarded, the Density Bonus Law uses a sliding scale based on the percentage of affordable units provided and their level of affordability.

As discussed above, the Project site is located within the Commercial Planned (CP) zoning district, which permits a density of 30 units per acre. Given the site's area of 0.587 acres, the CP zoning allows for the development of 18 units prior to the application of any additional units under the State Density Bonus law (Table 2.11-1).

Since the Project proposes constructing housing exclusively for lower-income households,[31] the Project qualifies for a density bonus increase of 80 percent, or 15 units above the otherwise maximum allowable density under the zoning. As shown in Table 2.11-1, under the State Density Bonus Law, the allowable density for the Project site would increase from 18 units to 33 units. The Project is proposing 32 units, and so the density is consistent with the zoning, as conditioned by the State Density Bonus Law.

Table 2.11-1
Density Bonus Calculations

Base Project	Base Project	Affordable Units	Density Bonus Earned	Density Bonus Units	Total Units
Project without Density Bonus (0.587 acre x 30 units per acre)	Base project (rounded up per Govt. Code Sec. 65915 (q))	Low Income (less than 80% of the Adjusted Median Income)	80% (per Govt. Code Sec. 65915.7(b)(1)(G))	Base x Bonus (18 x 80%, rounded up)	Maximum allowable units (Base project plus density bonus units)
17.61	18	100% (18 dwelling units)	80%	15	33

Concessions and Incentives: The State Density Bonus Law also provides for "concessions and incentives"[32] that allow a reduction in site development standards or a modification of zoning code requirements or architectural design requirements. Concessions and incentives may include, but are not limited to, a reduction in setback and square footage requirements; and a reduction in the ratio of parking spaces that would otherwise be required. Concessions and incentives must result in identifiable, financially sufficient, and actual cost reductions. Because it is a 100% affordable housing project with all units restricted to low-income households, the Project is entitled to receive five incentives or concessions, as well as an unlimited number of waivers or modifications to the development standards for construction. The Project applicant has requested three concessions:

31 As defined in Health and Safety Code § 50079.5.
32 As defined in Government Code § 65915(k)(1).

1. Relief from TACP Policy 33.1.b.h, to increase the height limit from 25 feet to 54 feet, five inches above the surrounding grade;

2. Relief from the CWP's floor area standards for the designated land use, to increase the maximum FAR from 0.35 to 1.3; and,

3. Relief from Marin County Code Section 24.04.340(a) to reduce the required residential parking from 51 spaces to 8 spaces.

The Project applicant has also requested the following waivers of development standards:

- Relief from the requirement of the Multi-Family Design Guidelines Policy DG-20, for reduction of windows and fenestration from 25 percent to 12 percent on the south elevation;
- Relief from the requirement of the Multi-Family Design Guidelines Policy DG-20, for reduction of windows and fenestration from 25 percent to less than ten percent on the north elevation;
- Relief from the requirement of the Multi-Family Design Guidelines Policy DG-80, for a reduction in tree canopies from 25 percent to 5 percent; and,
- Relief from the Multi-Family Design Guidelines Policy DG-29 to reduce the required open space from 32,000 square feet to zero square feet.

Conclusion

The application of the State Density Bonus Law for a density bonus and concessions, incentives, and waivers for development standards renders the Project consistent with the applicable Countywide Plan (including the TACP) land use designation and County zoning standards. The Project would therefore have a less-than-significant impact of this kind. There would be no new significant impact, and no increase in the severity of a previously identified significant impact of this kind.

Mitigation Measures

The 2023 HESE FEIR identifies no significant impacts related to land use and planning. No new significant impacts of this kind are identified for the Project, and so there is no need for new or modified mitigation measures.

Conclusion

Other than the specifics of the proposed Project and the adoption of the Housing Element Update in 2023, there are no changed circumstances and there is no new information of substantial importance regarding land use and planning that has come to light since certification of the 2023 HESE FEIR. As discussed above, the Project would not have a significant impact with respect to land use and planning. The same conclusion was reached in the 2023 HESE FEIR for the Housing Element Update as a whole. Therefore, the current Project would not result in a new

significant impact or a substantial increase in the severity of a previously identified significant impact on land use and planning.

References

Marin County, 1992. Tamalpais Area Community Plan. Adopted by the Board of Supervisors September 21, 1992.

2.12. Mineral Resources

Environmental Issue Area	Where Was this Issue Analyzed in the Previous Environmental Document?	Do Proposed Project Changes Affect this Issue?	Are There Any Changed Circumstances that Affect this Issue?	Is There Any New Information of Substantial Importance Pertaining to this Issue?	If Any of the Previous Three Questions Was Answered "Yes," Would Changes or New Information Result in a New or Substantially More Severe Significant Impact?	Are there any New or Reconsidered Mitigation Measures or Alternatives that Would Substantially Reduce Significant Impacts?
12. Mineral Resources. Would the Project:						
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	HESE DEIR Chapter 14, Mineral Resources, Impact 14-1.	No	No	No	N/A	N/A
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	HESE DEIR Chapter 14, Mineral Resources, Impact 14-2.	No	No	No	N/A	N/A

Discussion

In DEIR Chapter 14, Mineral Resources, the 2023 HESE FEIR states that none of the candidate sites then being considered for inclusion in the Sites Inventory of potential housing sites in the then-proposed Housing Element Update was in a known mineral resource site or mineral resource recovery site. The 2023 HESE FEIR therefore finds that the Housing Element Update would have no impact on availability of mineral resources.

The analysis of mineral resources impacts of the 150 Shoreline Affordable Housing Project is based on a geotechnical study prepared for the Project (Allerion Consulting Group, 2024) and the Marin Countywide Plan, Chapter 3.7, Mineral Resources.

a) Would the Project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

b) Would the Project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

The Project site consists of artificial fill placed over marsh deposits made up of clay, organic clay, and sandy clay (Allerion Consulting Group, 2024). These are not valuable mineral resources. The Marin Countywide Plan, Map 3-5, Location of Mineral Resource Preservation Sites, does not

identify the Project site or any of the lands around it as a mineral resource preservation site. Therefore, the Project would not result in the loss of availability of a known valuable mineral resource or a locally important mineral resource recovery site. There would be no impact of this kind.

Mitigation Measures

Neither the 2023 HESE FEIR nor the 150 Shoreline Affordable Housing Project would have a significant impact on mineral resources. No mitigation measures are necessary.

Conclusion

The 150 Shoreline Affordable Housing Project would have no impact on mineral resources. The same conclusion was reached in the 2023 HESE FEIR for the Housing Element Update. The Project therefore would not result in a new significant impact, nor in a substantial increase in the severity of a previously identified significant impact on mineral resources. There is no new information of substantial importance or changed circumstances that pertain to this issue.

References

Allerion Consulting Group, 2024. Geotechnical Engineering Study, Proposed Apartment Building, Mill Valley California. Prepared for Pacific West Communities, Inc., June 14, 2024. Revised October 16, 2024.

2.13. Noise

Environmental Issue Area	Where Was this Issue Analyzed in the Previous Environmental Document?	Do Proposed Project Changes Affect this Issue?	Are There Any Changed Circumstances that Affect this Issue?	Is There Any New Information of Substantial Importance Pertaining to this Issue?	If Any of the Previous Three Questions Was Answered "Yes," Would Changes or New Information Result in a New or Substantially More Severe Significant Impact?	Are there any New or Reconsidered Mitigation Measures or Alternatives that Would Substantially Reduce Significant Impacts?
13. Noise. Would the Project result in:						
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	HESE DEIR Chapter 15, Noise, Impacts 15-1, 15-2, and 15-3.	Yes	No	No	No	N/A
b) Generation of excessive groundborne vibration or groundborne noise levels?	HESE DEIR Chapter 15, Noise, Impacts 15-4.	Yes	No	No	No	N/A
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	HESE DEIR Chapter 15, Noise, Impacts 15-5.	Yes	No	No	No	N/A

Discussion

The 2023 HESE FEIR, DEIR Chapter 15, Noise, examines the potential for housing developments facilitated by the then-proposed Housing Element Update to increase noise and vibration levels in the environment around potential housing sites, and to expose people working and residing in new developments to excessive airport noise. The 2023 HESE FEIR identifies five impacts and finds that increases in traffic noise from new housing would in some locations be significant and unavoidable. All other impacts were found to be less than significant.

Like the analysis in the 2023 HESE FEIR, the analysis of potential noise and vibration impacts of the 150 Shoreline Affordable Housing Project considers increases in traffic noise, noise and vibration from construction, and noise associated with eventual residential use of the proposed new building, as well as exposure of workers and residents to airport noise.

a) Would the Project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

The 2023 HESE FEIR considers three impacts of the then-proposed Housing Element Update related to increases in temporary and permanent ambient noise levels in the vicinity of sites identified for future development of housing: Impact 15-1: Substantial Permanent Increases in Traffic Noise Levels; Impact 15-2: Permanent Increases in Stationary and Other On-site Noise Levels; and Impact 15-3: Temporary Construction Noise Levels.

The 2023 HESE FEIR establishes the following significance criteria for these impacts:

- Conflict with or violate any applicable noise-related provision of the Marin County Code, including:
  - The allowable construction time periods set forth in County Code Section 6.70.030 (5);
- Conflict with or violate any applicable noise-related standard or policy in the County's Built Environmental Element, including:
  - Generate transportation noise levels that increase ambient noise levels at off-site locations by:
    - 5 dBA or more where the ambient noise level would remain below the County's acceptable noise level for the affected land use (see Table 15--10);
    - 3 dBA or more where the existing ambient noise level would change; or
    - 1 dBA or more where the existing ambient noise level is already normally unacceptable.
  - Generate stationary source noise levels that exceed the General Plan's Allowable Noise Exposure standards summarized in Table 15-11

Traffic Noise

The discussion of Impact 15-1 in the 2023 HESE FEIR examines the potential for increased traffic levels associated with housing developments at sites throughout the unincorporated County area to result in substantial increases in traffic noise. The analysis projects out to the year 2040, using modeling of traffic generated by new housing, increases in roadway traffic, and the resulting increase in traffic noise. Several road segments are identified as having a large enough increase in traffic to result in an increase in traffic noise of greater than 3 dBA, which would be considered significant. The 2023 HESE FEIR therefore identifies Mitigation Measure 15-1: Reduce Vehicle Miles Travelled (VMT) from New Residential Development. This measure repeats Mitigation Measure 18-4 from DEIR Chapter 18, Transportation, of the 2023 HESE FEIR, which requires implementation of traffic demand management (TDM) measures to reduce traffic generated by new housing. Even with this measure, however, the 2023 HESE FEIR concludes that increased traffic from housing developments would increase traffic on certain roadways to the extent that ambient noise levels would increase significantly, and so this impact would be significant and unavoidable.

Shoreline Highway (State Route 1) where the 150 Shoreline Affordable Housing Project is located is not identified as one of the roadway segments that would experience a significant increase in traffic noise. Most of the roadway segments that the 2023 HESE FEIR identifies as potentially significantly impacted are relatively low-volume roads that would have a relatively large increase in traffic levels with buildout of housing sites facilitated by the Housing Element Update. Shoreline Highway between US 101 and Tennessee Valley Road, by contrast, is a high-volume road, with a weekday daily average of 30,120 vehicles and weekend daily average of 26,385 vehicles (Transportation Authority of Marin, 2025), and the Project would result in a small incremental increase in traffic volumes on this road: the traffic study prepared for the Project estimates that it would generate 154 trips per day (W-Trans, 2025). This represents a 0.5% increase in traffic volume on this section of Shoreline Highway. This would not be expected to result in a substantial or detectable increase in traffic noise on this section of Shoreline Highway, which would be used by all vehicles leaving from and arriving to the Project site. Other roadways in the area would be less impacted by the Project, since trips generated by the Project would travel in different directions. The impact of the Project on traffic noise would therefore be less than significant; the impact related to increased traffic noise would be lesser than the impact that the 2023 HESE FEIR identifies for the Housing Element Update as a whole.

Permanent Noise

The discussion of 2023 HESE FEIR Impact 15-2: Permanent Increases in Stationary and Other On-site Noise Levels, states that, in general, residential land uses are not a substantial noise-generating land use type because they do not include substantial outdoor mechanical equipment, do not involve substantial noise-generating activities during the more noise-sensitive nighttime hours, and usually screen or enclose typically noisier amenities such as swimming pools. The 2023 HESE concludes that housing developments facilitated by the Housing Element Update, once occupied, would not result in substantial permanent increases in ambient noise levels, and so this impact would be less than significant.

For the same reason – residential uses are usually not excessively noisy – the Project would not be expected to generate a substantial permanent increase in ambient noise levels. As was concluded for the 2023 HESE FEIR, this impact would be less than significant.

Temporary Noise

The 2023 HESE FEIR, in the discussion of Impact 15-3: Temporary Construction Noise Levels, states that Section 6.70.030(5) of the Marin County Code limits construction activities to 7 AM to 6 PM, Monday to Friday, and 9 AM to 5 PM on Saturday; construction activities are prohibited on Sundays and holidays. Furthermore, the County Code restricts the use of loud noise-generating construction equipment such as (but not limited to) backhoes, generators, and jackhammers to the hours of 8 AM to 5 PM Monday through Friday. Since construction of new housing facilitated by the Housing Element Update would be required to adhere to this code section, it would not result in a substantial temporary increase in noise levels, and the impact is therefore concluded to be less than significant.

For the same reason, construction of the 150 Shoreline Affordable Housing Project would not result in a substantial temporary increase in noise levels, and the impact would also be less than significant.

Conclusion

In summary, the 2023 HESE FEIR identifies three impacts under the topic of generation of a substantial temporary or permanent increase in ambient noise levels, and finds one, increases in traffic-related noise, to be significant and unavoidable, and the other two to be less than significant. The 150 Shoreline Affordable Housing Project would have only less-than-significant impacts involving increased noise levels related to traffic, construction, and future residential use of the proposed development.

b) Would the Project result in generation of excessive groundborne vibration or groundborne noise levels?

The 2023 HESE FEIR identifies Impact 15-4: Generation of Groundborne Vibration and Noise. The discussion of this impact states that the development of future housing sites could result in temporary sources of groundborne vibration and noise, especially during construction from use of pile drivers and other pieces of high-impact construction equipment. The discussion points out, however, that groundborne vibration and noise attenuate quickly, and typically affect only the immediate area around the source. Table 15-16 in the 2023 HESE FEIR shows that vibration from typical impact pile drivers attenuates to 0.3 inches per second peak particle velocity (ips PPV) at 50 feet from the source, which is well below the CalTrans guidelines standard, cited in the 2023 HESE FEIR, for potential structural damage to modern residential and commercial and industrial structures, which is 0.5 ips PPV for continuous vibration sources. The 2023 HESE FEIR therefore concludes that the future development of potential housing sites is not anticipated to result in structural damage to other buildings.

Regarding annoyance caused by exposure to groundborne noise and vibration, although typical construction activities may generate perceptible groundborne vibration levels at structures within approximately 150 feet of work areas, these levels would not be excessive because they would be intermittent, would be limited in duration, and would occur during the daytime only. In addition, the enforceable code requirements contained in the Marin County Code for limiting construction noise, cited in the discussion of the previous topic, would also protect nearby receptors from potential construction vibration levels. For these reasons, the 2023 HESE FEIR states that construction of housing facilitated by the Housing Element Update would not result in generation of excessive groundborne vibration or groundborne noise levels, and this impact would therefore be less than significant.

The geotechnical study prepared for the 150 Shoreline Affordable Housing Project (Allerion Consulting Group, 2024) recommends a foundation system for the proposed new building that would include Rammed Aggregate Piers (RAP) or Drilled Displacement Columns (DDC). The piers or columns would extend to a depth of 30 to 40 feet below ground surface. RAP are constructed with one of several proprietary processes generally involving deep auguring of unsuitable soils and use of a tamper to construct a pier from layers of aggregate placed in the

bottom of the bore hole and compacted. The result is a dense column of aggregate surrounded by stiffened matrix soils that provides improved settlement control and allows for high bearing capacities (Geopier, 2025). RAP installation causes substantially lower vibration than standard impact pile drivers, with PPV falling below 0.5 ips at 20 feet from the drill site (Fiegel and Farrell, 2008; Geopier Foundation Company, 2016). DDC is another proprietary foundation system using deep displacement pressure-grouting, and is suitable for use in deep, soft, and loose soil sites such as bay mud (Farrell Design-Build, 2020). DDC construction produces low noise and no vibration (ibid).

As described in Chapter 1, Project Description, the proposed new building would be set back 28 feet from the southwest front property line; 30 feet, two inches from the southeast side property line; 56 feet, nine inches from the northwest side; and 23 feet, seven inches from the northeast (rear) property line. The northern corner of the proposed building, however, would be closer to the property boundary, and about 25 feet away from the existing commercial building on the adjoining parcel to the north. At this distance, installation of RAP would not be expected to cause vibration above 0.5 inches per second PPV that could cause structural damage (Geopier Foundation Company, 2016). As stated above, DDC installation does not cause substantial vibration. Construction of either type of foundation element, therefore, would not be expected to result in generation of excessive groundborne vibration. Groundborne noise from use of either type of system would fall within the range of typical construction equipment, and so would not be expected to result in excessive groundborne noise levels. The impact would therefore be less than significant. The same conclusion of less than significant was reached for Impact 15-4 in the 2023 HESE FEIR.

c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project expose people residing or working in the project area to excessive noise levels?

The 2023 HESE FEIR identifies Impact 15-5: Exposure to Airport-related Noise Levels, and finds that people living and working in housing developments facilitated by the then-proposed Housing Element Update would not be exposed to excessive aircraft noise.

This topic was considered with respect to the 150 Shoreline Affordable Housing Project in Section 2.9, Hazards and Hazardous Materials, topic e, and found to be less than significant. The same conclusion of a less-than-significant impact was reached for Impact 15-5 in the 2023 HESE FEIR.

Mitigation Measures

The 2023 HESE FEIR identifies one significant noise impact, and includes Mitigation Measure 15-1: Reduce VMT from New Residential Development. Even with this measure, however, the HESE FEIR concludes that the Housing Element Update would result in substantial permanent increases in traffic noise levels on several County roadway segments, and that the impact would be significant and unavoidable. The analysis presented in this Supplemental Environmental

Review concludes, however, that the 150 Shoreline Affordable Housing Project would not result in a significant noise or vibration impact, and therefore no mitigation measures are necessary.

Conclusion

The 150 Shoreline Affordable Housing Project would have only less-than-significant noise and vibration impacts: the Project would not result in a new significant noise or vibration impact, nor in a substantial increase in the severity of a previously identified significant noise or vibration impact.

References

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2.14. Population and Housing

Environmental Issue Area	Where Was this Issue Analyzed in the Previous Environmental Document?	Do Proposed Project Changes Affect this Issue?	Are There Any Changed Circumstances that Affect this Issue?	Is There Any New Information of Substantial Importance Pertaining to this Issue?	If Any of the Previous Three Questions Was Answered "Yes," Would Changes or New Information Result in a New or Substantially More Severe Significant Impact?	Are there any New or Reconsidered Mitigation Measures or Alternatives that Would Substantially Reduce Significant Impacts?
14. Population and Housing. Would the Project:						
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	HESE DEIR Chapter 16, Population and Housing, Impacts 16-1 and 16-2.	Yes	No	No	N/A	N/A
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	HESE DEIR Chapter 16, Population and Housing, Impact 16-2.	Yes	No	No	N/A	N/A
c) Increase density that would exceed official population projections for the planning area within which the project site is located as set forth in the Countywide Plan and/or community plan?	HESE DEIR Chapter 16, Population and Housing, Impact 16-1.	Yes	No	No	N/A	N/A
d) Displace existing housing, especially affordable housing?	HESE DEIR Chapter 16, Population and Housing, Impact 16-2.	Yes	No	No	N/A	N/A
e) Result in any physical changes which can be traced through a chain of cause and effect to social or economic impacts?	This topic was not examined in the 2023 HESE FEIR. Social and Economic effects discussed in Chapter 21, Other CEQA and Social-Economic Analysis	Yes	No	No	N/A	N/A

Discussion

The 2023 HESE FEIR, Chapter 16, Population and Housing, identifies three potential impacts of the then-proposed Housing Element Update related to unplanned population growth and displacement of existing housing. All three impacts are found to be less than significant.

The 2023 HESE FEIR does not consider topic e: would the Project result in any physical changes which can be traced through a chain of cause and effect to social or economic impacts, though it does consider social and economic effects generally in Chapter 21, Other CEQA and Social-Economic Analysis. The discussion below includes consideration of this specific topic for the 150 Shoreline Affordable Housing Project.

a) Would the Project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

c) Would the Project increase density that would exceed official population projections for the planning area within which the project site is located as set forth in the Countywide Plan and/or community plan?

The 2023 HESE FEIR identifies Impact 16-1: Project Inducement of Substantial Unplanned Population Growth, and Impact 16-2, Temporary Construction-Related Employment Impacts. The discussion of these impacts focuses on the intended effects of the then-proposed Housing Element Update to facilitate new housing development in the unincorporated areas of Marin County, in accordance with State mandates. The discussion of Impact 16-1 recounts that the Housing Element Update assumes an average of 2.371 persons per new household (pph) in the Planning Area, based on State demographic data. Using this pph factor, buildout of all 5,197 housing units listed in the Sites Inventory of the then-proposed Housing Element Update could result in the addition of up to approximately 12,322 new residents to the population of the unincorporated County area by the year 2031.

Implementation of the Housing Element Update would generally facilitate "infill development." This is consistent with Countywide Plan sustainability goals and policies and is intended to accommodate the County's mandated share of regional growth while encouraging reuse of underutilized parcels and preserving well-established residential neighborhoods. Future development facilitated by the Project would be planned in accordance with the Housing Element Update, and therefore would not result in unplanned population growth.

The discussion of Impact 16-1 also states that utilities improvements would be required in some areas of the County to support new development and could potentially induce some growth in adjacent areas, but these improvements would not extend utilities to areas that are not currently served and would typically be sized to serve only the planned new housing units and existing development. As such, the Housing Element Update would not directly induce substantial unplanned population growth through developing new housing, or indirectly induce substantial population growth through the extension of roads or other infrastructure to new areas. In addition, the then-proposed Housing Element Update proposed amendments to the Countywide Plan land

use designations and zoning to allow for this new housing development and to maintain consistency with the Countywide Plan and County Code. Therefore, population growth facilitated by the Housing Element Update would not be "unplanned," and the impact would be less than significant.

The discussion of Impact 16-2 states that construction of new housing facilitated by the Housing Element Update would be expected to result in the temporary creation of construction jobs over the timeframe of implementation. The 2023 HESE FEIR states that there is an adequate construction workforce in the County and region, and that a temporary increase in employment would not be anticipated to generate substantial population growth in the County. No new housing would need to be built for these workers because the jobs would be temporary, and the workforce is expected to be local and mobile. Physical effects on the environment would be limited to worker commutes, which would also be temporary. Based on the temporary nature of the work proposed and the use of the local construction workforce, no substantial population growth would be anticipated, and this impact was therefore found to be less than significant.

The 150 Shoreline Affordable Housing Project proposes to construct 32 affordable, 1- and 2-bedroom housing units. Given the per-unit average of 2.371 used in the Housing Element Update, the proposed new development would house approximately 76 people. While the Housing Element Update currently lists the Project site for development of ten units of housing, the Housing Element Update anticipates the application of the State Density Bonus in some instances. As discussed in Section 2.11, Land Use and Planning, topic d, with application of the State Density Bonus, the Project would be consistent with the applicable Countywide Plan (including the TACP) land use designation and County zoning standards, as well as the Housing Element Update's overall planned population growth and density. Therefore, the Project would have a less-than-significant impact related to unplanned population growth or density.

As with other housing developments facilitated by the Housing Element Update, the 150 Shoreline Affordable Housing Project would create temporary construction jobs. As with other developments, these jobs would likely be filled primarily by the existing local and regional construction workforce. Construction workers would not be likely to relocate or require new housing. Impacts of temporary employment required to construct the proposed Project would be less than significant.

b) Would the Project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

d) Would the Project displace existing housing, especially affordable housing?

The 2023 HESE FEIR identifies Impact 16-3: Population and Housing Displacement Effects. The discussion of this impact states that while most sites then being considered for inclusion in the Housing Element Update's Site Inventory are vacant, some already contain existing housing, but are identified for potential redevelopment or expansion to increase the total number of units on the site. This could result in the temporary displacement of some existing housing units and residents. Moreover, the discussion points out that under State Law (AB 1397), development on non-vacant sites containing existing residential units is subject to the requirement to replace units

with new units that are affordable to the same or lower income level. The 2023 HESE FEIR concludes that, because the Housing Element Update is designed to increase the overall amount of housing available in the County, and State law requires replacement housing for development on nonvacant sites, this impact would be less than significant.

The Project site for the 150 Shoreline Affordable Housing Project is currently vacant. The Project would not displace any housing or people. The Project would have no impact of this kind.

e) Would the Project result in any physical changes which can be traced through a chain of cause and effect to social or economic impacts?

This topic was not considered in the 2023 HESE FEIR.

The 150 Shoreline Affordable Housing Project proposes to develop a lot that has been vacant for over 30 years, and construct 32 units of affordable housing. The Project would bring new residents to the area, which would tend to increase economic activity and add to the vitality of the community. The Project may have the indirect effect of increasing the possibility that other nearby parcels would be redeveloped with housing; three other parcels within the Howard Johnson's Master Plan area are included in the Housing Element Update's Sites Inventory for potential development of above-moderate income housing, and the Holiday Inn parcel is included for development of up to 72 units of lower-income housing. Redevelopment of all these parcels would displace existing commercial uses, and result in the entire Howard Johnson's Master Plan area converting to residential uses. As with the Project itself, this would tend to add to economic activity and vitality in the area. There is no reasonably foreseeable chain of cause and effect leading from the physical changes being proposed by the Project, to adverse social and economic impacts. This impact would therefore be less than significant.

Mitigation Measures

The 2023 HESE FEIR concludes that the then-proposed Housing Element Update would result in only less-than-significant impacts related to population and housing. Therefore, no mitigation measures are needed or identified. As the 150 Shoreline Affordable Housing Project would likewise have only less-than-significant impacts on population and housing, no mitigation measures are needed.

Conclusion

As was concluded in the 2023 HESE FEIR for the Housing Element Update as a whole, the 150 Shoreline Affordable Housing Project would have only less-than-significant impacts related to population and housing. The Project would not have a new significant impact, nor a substantial increase in the severity of a previously identified significant impact, related to population and housing. There is no new information of substantial importance, nor changed circumstances pertaining to the evaluation of population and housing impacts.

2.15. Public Services

Environmental Issue Area	Where Was this Issue Analyzed in the Previous Environmental Document?	Do Proposed Project Changes Affect this Issue?	Are There Any Changed Circumstances that Affect this Issue?	Is There Any New Information of Substantial Importance Pertaining to this Issue?	If Any of the Previous Three Questions Was Answered "Yes," Would Changes or New Information Result in a New or Substantially More Severe Significant Impact?	Are there any New or Reconsidered Mitigation Measures or Alternatives that Would Substantially Reduce Significant Impacts?
15. Public Services.						
Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, 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 protection?	2023 HESE FEIR, DEIR Chapter 17, Public Services, Impact 17-1	Yes	No	No	No	N/A
Police protection?	2023 HESE FEIR, DEIR Chapter 17, Public Services, Impact 17-2	Yes	No	No	No	N/A
Schools?	2023 HESE FEIR, DEIR Chapter 17, Public Services, Impact 17-3	Yes	No	No	No	N/A
Parks?	2023 HESE FEIR, DEIR Chapter 17, Public Services, Impact 17-4 and 17-6	Yes	No	No	No	N/A
Other public facilities, including roads?	2023 HESE FEIR, DEIR Chapter 17, Public Services, Impact 17-5	Yes	No	No	No	N/A

Discussion

The 2023 HESE FEIR, DEIR Chapter 17, Public Services, examines the potential for new housing facilitated by the then-proposed Housing Element Update to increase demand for fire, police, and emergency services, to increase enrollment in schools, to increase use of parks and recreational facilities, and to affect other public services in a manner that would lead to substantial physical impacts resulting from the need to construct new or expanded facilities. For all services, the 2023 HESE FEIR concludes that existing services throughout the unincorporated areas of Marin County would be adequate, that Countywide Plan policies for maintaining service

levels would continue to ensure their adequacy, that Marin County Code requirements for new developments include contribution of fees for fire prevention and new parks, and that State SB 50 fees levied on new developments support modernization, construction, and expansion of schools. The discussion of Impact 17-1: Increase in Fire Protection/Emergency Medical Service Demands, states that development applications are subject to review and approval by the local fire district for compliance with applicable County and State fire regulations, and by the Marin County Sheriff's Office, which uses uniformly applied standards and regulations to determine the ability of the Department to maintain acceptable levels of service. For these reasons, the 2023 HESE FEIR concludes that the impacts on public services of new housing facilitated by the then-proposed Housing Element Update would be less than significant.

The 150 Shoreline Affordable Housing Project is within the Southern Marin Fire Protection District, which provides fire protection and emergency medical services to the area. The Project site is within the Sausalito Elementary School District and the Tamalpais Union High School District. Police services are provided by the Marin County Sheriff. There are no parks or public recreational facilities within the Howard Johnson's Master Plan Area, but it is nearly adjacent to the Bothin Marsh Preserve. A multi-use path (bicycle and pedestrian) passes near the site and leads to the Tamalpais Junction (Tam Junction) commercial area a short distance away. This path also connects to the regional Mill Valley-Sausalito path, which is Route 5 in the Marin Countywide Bicycle Route System. Other nearby parks include Kay Park and, in Marin City to the south, George Rocky Graham Park. The Tamalpais Valley Community Center is nearby, on Marin Avenue adjacent to Tennessee Valley Road. The Project site is also close to Tamalpais State Park and portions of the Golden Gate National Recreation Area, including the Tennessee Valley Trailhead and Miwok Stables, and the Marin Headlands. The closest public library to the Project site is the Marin City Library, on Donahue Street, about a half-hour walk or 10-minute bicycle ride via the Mill Valley-Sausalito Path. The Project, which proposes to construct 32 affordable housing units which would house approximately 76 new residents, would add incrementally to demand for these services, but would not be expected to require new or expanded facilities to ensure adequate service levels.

For the same reasons stated in the 2023 HESE FEIR for concluding that new housing facilitated by the Housing Element Update would have only less-than-significant impacts on public services, the 150 Shoreline Affordable Housing Project would also have only less-than-significant impacts of this kind.

Mitigation Measures

The 2023 HESE FEIR concludes that new housing facilitated by the Housing Element Update would have only less-than-significant impacts on public services, and so no mitigation measures are identified. As the 150 Shoreline Affordable Housing Project would also have only less-than-significant impacts of this kind, no mitigation measures are needed.

Conclusion

The Project would not result in a new significant impact on public services, and would not result in a substantial increase in the severity of a previously identified significant impact of this kind. There is no new information of substantial importance, nor changed circumstances pertaining to the evaluation of this issue area.

2.16. Recreation

Environmental Issue Area	Where Was this Issue Analyzed in the Previous Environmental Document?	Do Proposed Project Changes Affect this Issue?	Are There Any Changed Circumstances that Affect this Issue?	Is There Any New Information of Substantial Importance Pertaining to this Issue?	If Any of the Previous Three Questions Was Answered "Yes," Would Changes or New Information Result in a New or Substantially More Severe Significant Impact?	Are there any New or Reconsidered Mitigation Measures or Alternatives that Would Substantially Reduce Significant Impacts?
16. Recreation.						
a) Would the project 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?	HESE DEIR Chapter 17, Public Services, Impacts 17-4 and 17-6.	Yes	No	No	No	N/A
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	HESE DEIR Chapter 17, Public Services, Impacts 17-4 and 17-6.	Yes	No	No	No	N/A

Discussion

The 2023 HESE FEIR, DEIR Chapter 17, combines consideration of impacts on recreation with public services, specifically in Impacts 17-4: Impacts on Parks and Recreational Facilities, and Impact 17-6: Increase the Use of Existing Neighborhood and Regional Parks.

In the discussion of Impact 17-4, the 2023 HESE FEIR states that as many as 5,214 housing units could potentially be facilitated by the Housing Element Update, which would result in a population increase of approximately 12,566 new residents. These residents would be expected to increase demand for parks and recreational facilities. The 2023 HESE FEIR states that, based on compliance with the Subdivision Map Act, Government Code Section 66477(a)(2), 3 acres of land for each 1,000 persons residing within the County must be devoted to neighborhood and community parks and recreational purposes. To ensure this standard is met, the Marin County Code Chapter 22.98.040 requires new developments to provide additional developed parkland or to pay in-lieu fees to support its development elsewhere. New residential development facilitated by the Housing Element Update would therefore be required to pay a park fee or to dedicate land for park development. The 2023 HESE FEIR concludes that these requirements of the County Code would ensure that impacts on parks and recreational facilities would be less than significant.

Impact 17-6 focuses on increased use of parks and recreational facilities by residents residing in new housing facilitated by the Housing Element Update. The discussion of this impact states that this increase would not be expected to lead to a substantial physical deterioration of these facilities that would not be mitigated by in-lieu park fees or the required development of additional parkland, as discussed above. In addition, the 2023 HESE FEIR points out that development of additional recreational facilities, if they are needed, would be required to comply with County development standards, and potentially to undergo CEQA review, which would reduce or avoid most negative physical environmental effects. The 2023 HESE FEIR therefore concludes that Impact 17-6 would be less-than-significant.

As described in Section 2-15, Public Services, the 150 Shoreline Affordable Housing Project site is near numerous parks and recreational facilities. The Project would be subject to Marin County Code, Chapter 22.98.040, as described above, requiring either the development of new parkland or payment of in-lieu fees. For the same reasons as stated above for the Housing Element Update as a whole, the Project would have a less-than-significant impact on recreation.

Mitigation Measures

Because the 2023 HESE FEIR identifies no significant impacts of the Housing Element Update on recreation, no mitigation measures are needed. Similarly, the 150 Shoreline Affordable Housing Project would have only less-than-significant impacts on recreation, and so no mitigation measures are required.

Conclusion

The Project would not result in a new significant impact on recreation, and would not result in a substantial increase in the severity of a previously identified significant impact of this kind. There is no new information of substantial importance, nor changed circumstances pertaining to the evaluation of this issue area.

2.17. Transportation

Environmental Issue Area	Where Was this Issue Analyzed in the Previous Environmental Document?	Do Proposed Project Changes Affect this Issue?	Are There Any Changed Circumstances that Affect this Issue?	Is There Any New Information of Substantial Importance Pertaining to this Issue?	If Any of the Previous Three Questions Was Answered "Yes," Would Changes or New Information Result in a New or Substantially More Severe Significant Impact?	Are there any New or Reconsidered Mitigation Measures or Alternatives that Would Substantially Reduce Significant Impacts?
17. Transportation. Would the Project:						
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	HESE DEIR Chapter 18, Transportation, Impacts 18-1, 18-2, and 18-3.	Yes	No	No	No	N/A
b) Conflict or be inconsistent with CEQA *Guidelines* section 15064.3, subdivision (b)?	HESE DEIR Chapter 18, Transportation, Impact 18-4.	Yes	No	No	No	N/A
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	HESE DEIR Chapter 18, Transportation, Impact 18-5.	Yes	No	Yes	No	N/A
d) Result in inadequate emergency access?	HESE DEIR Chapter 18, Transportation, Impact 18-6.	Yes	No	No	No	N/A

Discussion

The 2023 HESE FEIR, DEIR Chapter 18, Transportation, examines the potential for new housing facilitated by the then-proposed Housing Element Update to conflict with policies and programs addressing the transportation and circulation system, to result in a substantial increase in vehicle miles travelled (VMT), to increase road hazards, or to result in inadequate emergency access. As explained in the 2023 HESE FEIR, changes to CEQA that took effect several years ago altered the significance threshold for impacts of vehicles on roadways: previously, CEQA reviews considered a project's potential to increase roadway traffic and adversely affect traffic congestion, typically measured as intersection level-of-service (LOS). Since implementation of Senate Bill 743 (Public Resources Code section 21099) in 2020, analysis of transportation impacts in CEQA reviews focuses on VMT, rather than LOS. This change was intended to contribute to the State's long-term sustainability and greenhouse gas reduction bills by encouraging denser, infill development, reducing reliance on individual vehicles, and improving mass transit. The required VMT analysis is considered below under topic b.

A traffic study has been prepared for the Project (W-Trans, 2025), which updates an earlier traffic study prepared for the previously proposed O'Donnell Financial Group Master Plan Amendment and Design Review project at the Project site (W-Trans, 2019). For the purpose of this Supplemental Environmental Review, these traffic studies constitute new information of substantial importance pertinent to the analysis of transportation impacts of the 150 Shoreline Affordable Housing Project.

a) Would the Project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

This topic is considered in the 2023 HESE FEIR in DEIR Chapter 18, Transportation, in three separate impacts: Impact 18-1: Conflict with Adopted Policies, Plans, or Programs Regarding Roadways; Impact 18-2: Conflict with Adopted Policies, Plans, or Programs Regarding Public Transit; and Impact 18-3: Conflict with Adopted Policies, Plans, or Programs Regarding Bicycle and Pedestrian Facilities.

For all three impacts, the discussion focuses on the overall consistency of new housing developments facilitated by the then-proposed Housing Element Update with Countywide Plan transportation policies and programs. For all three impacts, the 2023 HESE FEIR concludes that adopted policies and implementing programs in the Transportation Element of the Countywide Plan would help manage the transportation needs created by development of the potential housing sites identified in the Housing Elements Update, including policies and implementing programs intended to maintain and improve the County's roadway network; reduce VMT; support and encourage use of transit as a travel mode; and improve bicycle and pedestrian facilities and networks.

The 2023 HESE FEIR also states that, as part of the permitting process, individual development projects proposed on any of the housing sites identified in the Housing Element Update would be subject to review by the County to ensure that adequate access to available transit and adequate pedestrian and bicycle facilities would be provided, in accordance with applicable Countywide Plan policies, implementing programs, and Development Code requirements.

Because the 2023 HESE finds that new housing developments facilitated by the Housing Element Update would be substantially consistent with transportation programs, plans, ordinances and policies addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities, Impacts 18-1, 18-2, and 18-3 are all found to be less than significant.

As an in-fill development in a location already well-served by roadway, transit, bicycle, and pedestrian facilities, the 150 Shoreline Affordable Housing Project would generally be consistent with Countywide Plan policies and programs intended to reduce VMT and to promote transit and non-motorized transport options. As discussed further under topic b, below, the Project is expected to generate relatively low VMT. The Project site is located close to several transit stops. The Manzanita Park & Ride Lot is located about one-quarter mile away at the intersection of Shoreline Highway and US 101 (Google Maps, 2025). The Manzanita Park & Ride Lot is accessible from the Project site via a grade-separated sidewalk on the north side of Shoreline

Highway and a signal-controlled crosswalk across Shoreline Highway to the entrance to the park & ride lot. The bus stop at the Manzanita Park & Ride Lot is served by Golden Gate Transit, Marin Transit, and the Marin Airporter, with service to downtown San Francisco, the Marin City and San Rafael transportation hubs, and San Francisco International Airport (Golden Gate Transportation District, 2025; Marin Airporter, 2025). The Manzanita Park & Ride Lot is, however, subject to frequent tidal flooding, especially during the winter months, and may be inaccessible during high tides (OurSausalito.com, 2025). Additional transit stops, located at a slightly greater distance, are located at the intersection of Shoreline Highway and Almonte Boulevard in Tam Junction, and at Shoreline Highway and Pohono St. (Google Maps, 2025).

The Project site is also well served by pedestrian and bicycle facilities. A multi-use path (bicycle and pedestrian) passes near the site and leads to the Tam Junction commercial area a short distance away. This path also connects to the regional Mill Valley-Sausalito path, which is Route 5 in the Marin Countywide Bicycle Route System. The Project proposes to provide 15 short-term, outdoor bicycle parking spaces, and 16 long-term, enclosed spaces, as required by Marin County Development Code section 24.04.340.

Vehicular access to the Project site is via a driveway from Shoreline Highway. A two-way left-turn lane is provided in the center of Shoreline Highway for vehicles turning into and out of the site from and to the eastbound direction. The Southern Marin Fire Protection District is requiring the Project to add a second, emergency vehicle access driveway into the Howard Johnson's Master Plan area from Shoreline Highway, located a short distance to the east of the existing driveway.

Based on the availability of existing facilities for private vehicular, transit, bicycle, and pedestrian transport, and proposed compliance with County Development Code standards for bicycle parking, the Project would not conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities. As was also concluded for the Housing Element Update in the 2023 HESE FEIR, the 150 Shoreline Affordable Housing Project would have a less-than-significant impact of this kind.

b) Would the Project conflict or be inconsistent with CEQA Guidelines *section 15064.3, subdivision (b)?*

The 2023 HESE FEIR identifies Impact 18-4: Impacts Related to Vehicle Miles Traveled. The VMT analysis models future VMT associated with development of the potential housing sites identified in the then-proposed Housing Element Update in the year 2040, using the Transportation Authority of Marin Demand Model (TAMDM). TAMDM uses a set of mathematical procedures and equations that represent the variety of transportation choices that people make, and how those choices result in trips on the transportation network. The TAMDM output indicates that the 5,214 potential housing units facilitated by the Housing Element Update would generate approximately 19.5 VMT per capita. The 2023 HESE establishes the significance threshold for VMT impacts at 10.7 VMT per capita, which is 15% below the regional (Bay Area) average. The 2023 HESE FEIR therefore finds that VMT associated with buildout of the potential

housing sites identified in the Housing Element Update would be approximately 84 percent above the significance threshold, and that this would therefore be a significant impact.

The 2023 HESE FEIR identifies Mitigation Measure 18-4. This measure requires residential development projects facilitated by the Housing Element Update to achieve the targeted VMT significance threshold of 15% below the regional average. For housing development projects that the County determines may result in a significant VMT impact, applicants are required to submit documentation that demonstrates how the necessary VMT per capita reductions will be achieved. VMT reduction techniques may include a suite of transportation demand management (TDM) strategies as appropriate to the particular project. These TDM strategies may include, but are not limited to the following:

- Subsidize resident transit passes;
- Provide or participate in established ride-matching programs;
- Provide information, educational, and marketing resources for residents and visitors managed by a TDM Coordinator;
- Complete bus stop improvements or on-site mobility hubs;
- Construct off-site pedestrian and/or bicycle network improvements, particularly those that fill gaps and/or connect the project and surrounding neighborhood to transit;
- Reduce parking supply at affordable or senior projects and projects that are well-served by transit;
- Unbundle parking costs (sell or lease parking separately from the housing unit) where appropriate on-street management is present;
- Provide or participate in car-sharing, bike sharing, or scooter sharing programs;
- Contribute to future VMT mitigation fee programs, banks, or exchanges as they become available.

The 2023 HESE FEIR states that this mitigation measure would reduce the VMT impacts associated with future residential development projects. The recognition of the inability to guarantee that these measures would be effective in reducing VMT per capita to below significance thresholds, however, leads the 2023 HESE FEIR to conclude that this impact would be significant and unavoidable.

The significance threshold of 15% below regional per capita VMT was recommended for use by lead agencies in CEQA reviews in the 2018 Technical Advisory on Evaluating Transportation Impacts in CEQA (OPR, 2018), published by the Governor's Office of Planning and Research (the name of the agency has since changed to the Governor's Office of Land Use and Climate Innovation). This technical advisory also identifies several criteria that may be used by lead agencies to identify projects that can be "screened" from quantitative VMT analysis, because they are presumed to meet the threshold of 15% below the regional per capita VMT. The Technical Advisory identifies 100% affordable residential development in infill locations as being presumed to have a less-than-significant impact on VMT.

The 150 Shoreline Affordable Housing Project site meets the definition of an "infill site" contained in Public Resource Code Section 21061.3(b),[33] because the site was previously developed with a gas station, which is a "qualified urban use" per Public Resources Code Section 21072.[34]

The Project is consistent with the evidence cited in the Technical Advisory as a basis for concluding that 100% affordable residential developments would have a less-than-significant impact on VMT. The Technical Advisory states that adding affordable housing to infill locations generally improves the jobs-housing balance, in turn shortening commutes and reducing VMT. This statement applies to Marin County in general, and to the Project site in particular: as stated in the 2023 Housing Element Update, Marin County currently imports lower-wage workers from neighboring counties where more affordable housing is located; indeed, the 2023 Housing Element Update states that, " …a focus of this Housing Element is to address the issue of matching housing costs and types to the needs and incomes of the community's workforce" (Marin County, 2023, p. 26). To the extent that the Project would house people who work in Marin County, but currently commute from other counties to Marin, the Project would tend to lower commute distances and VMT.

The Technical Advisory also states that, "… low-wage workers in particular would be more likely to choose a residential location close to their workplace, if one is available."[35] The Project site is centrally located along the US 101 corridor, where most of Marin County's commercial activity, schools, medical services, industries, and population are concentrated, raising the likelihood that at least some future residents of the Project would be housed in closer proximity to their workplace (as well as to essential services), thus reducing VMT by shortening commute trips and trips for purposes other than work.

Furthermore, as discussed under topic a, above, the Project site is well-served by public transit and regional bicycle routes, and shops and services at Tam Junction are within walking distance; alternative transportation modes that do not contribute to VMT would be available and feasible for future residents of the Project.

For all these reasons, which constitute substantial evidence, the Technical Advisory's screening criterion for 100% affordable residential developments is applicable to the 150 Shoreline Affordable Housing Project: the Project can be presumed to meet the requirement of achieving

[33] Public Resource Code Section 21061.3. INFILL SITE
"Infill site" means a site in an urbanized area that meets either of the following criteria:
(a) The site has not been previously developed for urban uses and both of the following apply:
(1) The site is immediately adjacent to parcels that are developed with qualified urban uses, or at least 75 percent of the perimeter of the site adjoins parcels that are developed with qualified urban uses and the remaining 25 percent of the site adjoins parcels that have previously been developed for qualified urban uses.
(2) No parcel within the site has been created within the past 10 years unless the parcel was created as a result of the plan of a redevelopment agency.
(b) The site has been previously developed for qualified urban uses.

[34] Public Resources Code Section 21072. QUALIFIED URBAN USE; DEFINITION
"Qualified urban use" means any residential, commercial, public institutional, transit or transportation passenger facility, or retail use, or any combination of those uses.

[35] Quoting Benner and Karner, 2016.

15% below regional per capita VMT, and therefore to have a less-than-significant impact with respect to VMT. While the 2023 HESE FEIR finds that the Housing Element Update would facilitate new housing that in the aggregate can be expected to have a significant and unavoidable VMT impact, the 150 Shoreline Affordable Housing Project would not contribute to this impact.

c) Would the Project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

The 2023 HESE FEIR identifies Impact 18-5: Hazards Due to Design Features or Incompatible Uses. The discussion of this impact states that, while the designs of individual residential development projects covered by the Housing Element Update are not known at this time, vehicular access is anticipated to generally take place via existing streets. Where new roads or access points are required, specific access schemes would be determined during project design, and would undergo review for compliance with safety and design standards by the County. During such reviews, routine assessments include consideration of the potential need for traffic control or turn lane improvements to maintain safety, the potential for queueing conditions that could lead to safety concerns, and safety related to site accessibility for non-auto modes. Any new transportation facilities would be designed and constructed to local, regional, and federal standards, and as such, would not be expected to introduce any hazardous design features.

The 2023 HESE FEIR also states that several potential housing development sites are located on or adjacent to Highway 1 (Shoreline Highway), which is a Caltrans facility. Caltrans provides guidance on how jurisdictions may assess transportation safety topics where proposed land use projects and plans affect the State Highway System. Individual housing development proposals that might affect the State highway would be referred by the County to Caltrans for review and potentially to apply for an encroachment permit. Site-specific safety assessments and required improvement measures would be established during such reviews, ensuring that project design features do not create safety hazards.

In summary, the 2023 HESE FEIR concludes that development of housing sites identified in the Housing Element Update would be reviewed during standard entitlement processes for conformance with applicable design standards and regulations, ensuring that developments would not substantially increase transportation hazards. The 2023 HESE FEIR concludes, therefore, that the Housing Element Update would not substantially increase hazards due to a geometric design feature, and this impact would be less than significant.

As described under topic a, above, vehicular access to the Howard Johnson's Master Plan area, where the 150 Shoreline Affordable Housing Project site is located, is via an existing driveway from Shoreline Highway. An existing two-way left-turn lane (TWLTL) is provided in the center of Shoreline Highway for vehicles turning into and out of the site from and to the eastbound (i.e., southbound) direction. The driveway has two lanes, a right-turn lane and a left-turn lane, for vehicles exiting the site, and a third lane for vehicles entering the site.

A traffic study for a previously proposed project at the Project site (W-Trans, 2019) noted observations of heavy PM peak hour congestion in both the eastbound and westbound direction

on Shoreline Highway in the vicinity of the Project site. Drivers entering and existing the driveway to the Project site were observed waiting for long periods before there was an acceptable gap in traffic. The traffic study states that the speed limit on the section of Shoreline Highway fronting the Project site is 35 miles per hour, which requires a driveway sight distance of 250 feet for drivers leaving the driveway, per the Caltrans Highway Design Manual. The traffic study measured the available site distance to be more than 300 feet, thus satisfying this requirement.

The traffic study also included a queuing analysis for cars turning into and out of the driveway, noting that the TWLTL is 400 feet long, including 150 feet of capacity for eastbound drivers turning left into the Project site, or a length adequate for approximately six passenger cars. The TWLTL was assessed for potential queuing impacts from additional project traffic accessing the site, as was the left turn driveway lane for vehicles leaving the Project site. The traffic study found that, when considering the addition of project traffic to existing traffic,[36] the TWLTL was sufficient to accommodate traffic turning into the site from eastbound Shoreline Highway, without exceeding available storage. The traffic study also found that vehicles exiting the Project site and turning left onto eastbound Shoreline Highway already exceeded the available storage capacity of two vehicles; the traffic study estimated that the project then being proposed would add one vehicle to the queue during the PM peak hour.

Based on the 2019 traffic study, which examined traffic effects of a project estimated to generate nearly identical traffic volumes as the current Project, the current Project would not result in additional traffic that would exceed the queueing capacity of the TWLTL for vehicles turning into the Project site, and so would not result in a substantial increased hazard due to a geometric design feature. Vehicles existing the Howard Johnson's Master Plan area and turning left onto Shoreline Highway may already experience delays and queueing issues at the exit driveway. Because vehicles within the area travel slowly as they maneuver through its parking lots and narrow lanes, however, an incremental increase in the already-congested internal circulation traffic would not be expected to result in a substantially increased hazard.

The new, emergency vehicle access driveway proposed by the Project would have a locked gate and would be used only by Fire Department vehicles for emergency access. This driveway would require an encroachment permit from CalTrans, so it will be subject to additional review and analysis. It would not, however, be expected to cause a substantial traffic hazard.

Project construction would involve the movement of large trucks and heavy equipment in and out of the driveway and between the driveway and the Project site. This would, however, be temporary, and construction traffic would be subject to standard Conditions of Approval for traffic control included in the Project's building permit. Future residential use of the proposed building would not be expected to involve incompatible uses, such as farm equipment. Therefore, the Project would not be expected to substantially increase hazards due to a geometric design feature or incompatible uses, and the impact would be less than significant. The same conclusion

[36] The 2019 traffic study estimated that the project then being considered would generate 165 daily trips, including 13 PM peak hour trips. A traffic study performed for the current Project (W-Trans, 2025) estimated that the Project would generate 154 daily trips, including 15 PM peak hour trips.

of a less-than-significant impact was reached in the 2023 HESE FEIR when considering the development of all potential housing sites identified in the Housing Element Update.

d) Would the Project result in inadequate emergency access?

The 2023 HESE FEIR identifies Impact 18-6: Emergency Access. The discussion of this impact states that individual development projects facilitated by the then-proposed Housing Element Update would be subject to established procedures for reviewing project-level emergency access needs and compliance with State and local law as part of the entitlement process, and therefore impacts related to emergency access would be less than significant.

The Project site is within the Southern Marin Fire Protection District (SMFPD) and the application for the Project has been reviewed and commented on by the Fire Marshall. In response to review comments, Project plans were modified to include increased setbacks, a hammerhead turnaround, and a second, emergency access-only driveway to ensure adequate site access and the ability for aerial fire apparatus to operate effectively. With these alterations to the Project plans, which will require final approval by the SMFPD prior to issuance of a building permit, the Project would have adequate emergency access, and the impact would be less than significant. This is the same conclusion reached in the 2023 HESE FEIR for the Housing Element Update.

Mitigation Measures

The 2023 HESE FEIR identifies one significant transportation impact associated with adoption of the then-proposed Housing Element Update: Impact 18-4 is found to be significant, as VMT associated with development of new housing facilitated by the Housing Element Update would exceed the significance threshold of 15% below the regional per capita average. The 2023 HESE identifies Mitigation Measure 18-4, which requires that new housing development projects implement traffic demand management measures to reduce VMT. Because the 150 Shoreline Affordable Housing Project would not have a significant impact with respect to VMT, Mitigation Measure 18-4 is not necessary for this Project.

Conclusion

The 2023 HESE identifies one significant and unavoidable transportation impact of the Housing Element Update. The 150 Shoreline Affordable Housing Project, however, would have only less-than-significant transportation impacts: the Project would not result in a new significant impact, nor in a substantial increase in the severity of a previously identified significant impact related to transportation. A traffic study prepared for a previously proposed project at the Project site, and updated for the current Project, provided new information of substantial importance pertinent to the analysis of traffic impacts for the Project. There are no changed circumstances affecting this analysis.

References

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2.18. Utilities and Service Systems

Environmental Issue Area	Where Was this Issue Analyzed in the Previous Environmental Document?	Do Proposed Project Changes Affect this Issue?	Are There Any Changed Circumstances that Affect this Issue?	Is There Any New Information of Substantial Importance Pertaining to this Issue?	If Any of the Previous Three Questions Was Answered "Yes," Would Changes or New Information Result in a New or Substantially More Severe Significant Impact?	Are there any New or Reconsidered Mitigation Measures or Alternatives that Would Substantially Reduce Significant Impacts?
18. Utilities and Service Systems. Would the Project:						
a) Require or result in the relocation or construction of new or expanded water, wastewater or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	HESE DEIR Chapter 19, Utilities and Service Systems, Impacts 19-1b (water supply systems), 19-1e (wastewater systems), 19-1g (storm water drainage infrastructure, and 19-5 (electricity, natural gas, and telecommuni-cations infrastructure).	Yes	No	No	No	N/A
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	HESE DEIR Chapter 19, Utilities and Service Systems, Impact 19-2b.	Yes	No	Yes	No	N/A
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	HESE DEIR Chapter 19, Utilities and Service Systems, Impact 19-3b.	Yes	No	No	No	N/A
d) 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?	HESE DEIR Chapter 19, Utilities and Service Systems, Impact 19-4.	Yes	No	No	No	N/A

Environmental Issue Area	Where Was this Issue Analyzed in the Previous Environmental Document?	Do Proposed Project Changes Affect this Issue?	Are There Any Changed Circumstances that Affect this Issue?	Is There Any New Information of Substantial Importance Pertaining to this Issue?	If Any of the Previous Three Questions Was Answered "Yes," Would Changes or New Information Result in a New or Substantially More Severe Significant Impact?	Are there any New or Reconsidered Mitigation Measures or Alternatives that Would Substantially Reduce Significant Impacts?
18. Utilities and Service Systems. Would the Project:						
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	HESE DEIR Chapter 19, Utilities and Service Systems, Impact 19-4.	Yes	No	No	No	N/A

Discussion

The 2023 HESE FEIR, Chapter 19, Utilities and Service Systems, provides a comprehensive review of existing and planned water, wastewater, power, telecommunications, and solid waste infrastructure and capacity throughout Marin County. This chapter of the 2023 HESE FEIR also analyzes the impact of providing these utilities and services systems to the new housing developments that would be facilitated by the then-proposed Housing Element Update, both in isolation and cumulatively with other housing targets and projected population growth for the entire county, including incorporated cities. The impact analysis includes multiple impacts for topics a, b, and c, each focusing on service providers or utilities grouped regionally or functionally.

Since certification of the 2023 HESE FEIR, Marin Municipal Water District (MMWD), which would supply water to the proposed 150 Shoreline Affordable Housing Project, has made progress in identifying and planning development of new water conveyance and storage capacity, and is now planning to construct a 13-mile, 36-inch pipeline and a pump station to redirect some of the water already received from the Sonoma County Water Agency into the existing Nicasio Reservoir for storage. The pipeline could increase available supply by 3,800 to 4,750 acre-feet of water a year, with possible future phases of this project potentially increasing replenishment of stored water to up to 8,100 acre-feet per year. This would increase the District's water storage by approximately five percent initially and ten percent if later phases are implemented. The District plans to complete the initial phase of the Project by 2029, and is also considering a related project to modify the dam spillway gates at the Nicasio Reservoir to add 3,000 acre-feet of water storage (Marin Independent Journal, 2025). These efforts to increase water storage capacity and water supply resilience, currently being considered or already undertaken by MMWD constitute new information of substantial importance pertinent to the analysis of the 150 Shoreline Affordable Housing Project's impact on water supply and infrastructure, considered under topics a and b, below.

The Project site is within the service district of MMWD for water supply and the Sausalito-Marin City Sanitary District for sewer service and wastewater treatment.

a) Would the Project require or result in the relocation or construction of new or expanded water, wastewater or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

The 2023 HESE FEIR considers this topic as it relates to the utilities and service system that would serve the 150 Shoreline Affordable Housing Project site under Impact 19-1b: Project and Cumulative Need for Water System Infrastructure: Marin Municipal Water District and North Marin Water District – Novato Service Area; Impact 19-1e: Project and Cumulative Need for Wastewater System Infrastructure: Sanitary Districts; Impact 19-1g: Project and Cumulative Need for Storm Water Drainage Infrastructure; and Impact 19-5: Electricity, Natural Gas, and Telecommunications Infrastructure Impacts.

In the discussion of Impact 19-1b, the 2023 HESE states that MMWD has identified the need for facilities and expansion upgrades for increased storage and conveyance, as described in detail in the setting section of Chapter 19. The impact discussion concludes, however, that while there are potential environmental impacts that may be associated with MMWD's infrastructure and facility improvement projects either individually, cumulatively, or in parallel with development projects in jurisdictions outside of unincorporated Marin County, compliance with District, County, State and federal regulations, and adopted standards applicable to development and construction of water system infrastructure and facilities, would ensure that potential impacts are less than significant.

In the discussion of Impact 19-1e, the 2023 HESE states that, while parts of the unincorporated County are served by sanitary districts that are in need of system infrastructure upgrades and expansion in order to collect and treat wastewater from new development, and that there are potential environmental impacts that may be associated with the infrastructure and facility improvements, compliance with District, County, State, and Federal regulations and adopted standards for development and construction of sanitary sewer system infrastructure and facilities would ensure that potential impacts are less than significant. The 2023 HESE FEIR's discussion of existing wastewater infrastructure and facilities Section 19.1.2, Wastewater, Table 19-10 however, identifies the Sausalito-Marin Sanitary District as having sufficient capacity to meet anticipated future demand, which would include all projected increased population from fulfilling the RHNAs for the jurisdictions served by the District. Furthermore, the discussion does not identify any infrastructure upgrades necessary to serve the Project site in Table 19-11.

In the discussion of Impact 19-1g, the 2023 HESE FEIR states that there are identified needs for improvements to storm water drainage systems to serve some of the potential housing sites identified in the Housing Element Update. However, the 2023 HESE concludes that, while there are potential environmental impacts that may be associated with storm drainage infrastructure projects, compliance with County, State and federal regulations and standards for development and construction of storm water drainage infrastructure would ensure that potential impacts are less than significant.

The 2023 HESE FEIR also considers potential impacts from construction activities for water, wastewater, and storm water infrastructure improvements, and finds that implementation of the uniformly applied Marin County construction standards and regulations and the mitigation measures identified elsewhere in the 2023 HESE FEIR would ensure that construction period impacts would be less than significant.

In the discussion of Impact 19.5, the 2023 HESE FEIR states that new housing facilitated by the adoption of the Housing Element Update would not require or result in the relocation or construction of new or expanded electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.

A letter from the Sausalito-Marin City Sanitary District (SMCSD) to Marin County Community Development Agency regarding the 150 Shoreline Affordable Housing Project confirms that the District has sufficient capacity to accommodate the 32 housing units proposed by the Project (SMCSD, 2024). The District states, however, that the Project may require the installation of a private sewer pump station to connect to the SMCSD collection system, because of the relatively shallow depth of the sewer pipe beneath Shoreline Highway. The Project applicant has not yet determined the need for a private pump station, but if one is required, it would be located in the proposed sewer line on the southwest side of the proposed building. This would be within the construction area for the Project and would not be expected to cause any additional construction- or operations-related impacts.

The Project applicant has not received confirmation of availability of other utilities, but the 2023 HESE FEIR does not identify any constraints on service infrastructure affecting the Project site for water supply, power, or telecommunications. While the Project would add incrementally to the demand for water, and thus would contribute to the need for MMWD to construct new infrastructure to meet future demand and increase the resiliency of supply for all MMWD customers, those infrastructure improvements are already planned or being considered, and all such projects will be subject to separate environmental review.

As stated in Section 2-10, Hydrology and Water Quality, the Project's stormwater management plan demonstrates that the Project would not increase stormwater runoff, and existing stormwater facilities would be sufficient to meet Project needs.

In summary, the Project is not expected to require or result in the relocation or construction of new or expanded water, wastewater, storm water, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects. The 2023 HESE FEIR concluded that the Housing Element Update would result in only less-than-significant impacts of this kind; the same conclusion applies to the 150 Shoreline Affordable Housing Project.

b) Would the Project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

The 2023 HESE FEIR, identifies Impact 19-2b: Project and Cumulative Water Supply Impacts: North Marin Water District and Marin Municipal Water District. The impact discussion states that the MMWD is heavily dependent upon water stored in its seven Marin County reservoirs. The discussion states that, when MMWD has full reservoir capacity, water supplies are sufficient, but that in recent drought years, new connections have been curtailed. The 2023 HESE FEIR concludes that, because there is uncertainty about the amount of water that would be available during future droughts to supply new connections for housing potentially facilitated by the Housing Element Update, as well as for existing customers and other cumulative future projects, and because both water districts were then in the early stages of developing alternate or additional water supplies, demand may be in excess of available supply during dry and multiple dry years, which would be a potentially significant impact. While the 2023 HESE FEIR cites Government Code Section 65589.7, which requires that water districts prioritize water allocation for new affordable housing development, it nevertheless concludes that mitigation measures are not available to reliably and timely relieve potential shortages in water supply in these two water districts, and so this impact would be significant and unavoidable.

As described above, MMWD is currently developing additional water storage capacity, which will increase water supply and resiliency during future droughts. This new capacity is scheduled to come on-line in 2029, and so will, in the near future, contribute to the adequacy and dependability of water supply for the 150 Shoreline Affordable Housing Project. In addition, the Government Code section cited above requires MMWD to prioritize water allocation for new affordable housing developments, such as the Project. For these reasons, it is likely that there will be sufficient water supply available to serve both the Project and reasonably foreseeable future development within MMWD during normal, dry and multiple dry years, and this impact would therefore be less than significant; the Project would not result in or contribute to a new significant impact of this kind, and would not cause a substantial increase in the severity of the significant and unavoidable impact identified in the 2023 HESE FEIR.

c) Would the Project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

The 2023 HESE FEIR identifies Impact 19-3b: Wastewater Treatment Capacity Impacts: Sanitary Districts, which states that parts of the unincorporated County are served by large sewer districts that have unknown treatment capacity, and which may need infrastructure upgrades and expansion to collect and treat wastewater from new housing developments facilitated by the then-proposed Housing Element Update. The 2023 HESE FEIR concludes that multiple new connections could exceed system capacity for conveyance and treatment in some locations, and concludes that, because no feasible mitigation is available within the planning horizon of the Housing Element Update, the impact would be significant and unavoidable.

As discussed above under topic a, the 150 Shoreline Affordable Housing Project site is within the SMCSD. SMCSD is not identified in the 2023 HESE FEIR as one of the districts with unknown capacity; on the contrary, Table 19-10 indicates that SMCSD has ample capacity for treatment of current and anticipated future wastewater flows. Also as stated above in the discussion of topic a, SMCSD has confirmed that the District has sufficient capacity to accommodate the 32 housing units proposed by the Project (SMCSD, 2024). The Project, therefore, would not result in a determination by the wastewater treatment provider which would serve the Project that it has inadequate capacity to serve the Project's projected demand in addition to the provider's existing commitments, and, unlike the finding in the 2023 HESE for the Housing Element Update as a whole, this impact would be less than significant.

d) Would the Project 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?

e) Would the Project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

The 2023 HESE FEIR identifies Impact 19-4: Solid Waste Generation Impacts and Compliance with Solid Waste Statutes and Regulations, which addresses both topics d and e. The impact discussion recounts the statements made in the setting section of Chapter 19, including that Redwood Landfill, the only operating landfill in the County, and the repository for most of the County's solid waste (including from the area where the 150 Shoreline Affordable Housing Project site is located) has remaining capacity sufficient to continue to accommodate the County's waste disposal needs until at least 2036. The 2023 HESE FEIR calculates that solid waste generated by new housing facilitated by the then-proposed Housing Element Update would increase current disposal rates by about 1.7 percent. Therefore, the 2023 HESE FEIR concludes that Redwood Landfill would have adequate capacity to accommodate the additional waste potentially generated as a result of adoption of the Housing Element Update.

The 2023 HESE FEIR also states that the County is in compliance with State laws and regulations mandating solid waste minimization, recycling, and composting, and that the Marin County Code requires State-mandated reduction of construction waste and provision of adequate storage space for recyclable materials in new developments.

The 2023 HESE FEIR therefore concludes that impacts related to landfill capacity and solid waste generation, and also impacts related to compliance with federal, State, and local solid waste management and reduction statutes and regulations, would be less-than significant.

For the same reasons as stated in the 2023 HESE FEIR, impacts of the 150 Shoreline Affordable Housing Project related to solid waste generation, disposal, and compliance with applicable laws and regulations, would also be less than significant.

Mitigation Measures

Though the 2023 HESE FEIR identifies two impacts related to utilities and service systems that pertain to the Project as significant, it finds that no feasible mitigation measures are available to address these impacts, and states that they would both be significant and unavoidable. The 150 Shoreline Affordable Housing Project, however, would not cause or contribute to these or any other significant impacts related to utilities and service systems, and so no mitigation measures are necessary.

Conclusion

While the 2023 HESE FEIR identifies significant and unavoidable impacts because of potential insufficiency of water supply and wastewater treatment capacity that may affect new housing developments in some unincorporated areas of the County, the sanitary district serving the Project site does not lack capacity to meet current or projected demand, and, according to new information regarding MMWD's progress in developing additional storage capacity, current and future water supply appears adequate to serve the Project and other existing and projected demand. The Project therefore would not contribute to any significant impact related to utilities and service systems: the Project would not result in a new significant impact, nor in a substantial increase in the severity of a previously identified significant impact related to utilities and service systems. New information of substantial importance regarding new developments in water supply and a commitment by the wastewater service provider to serve the site were considered in this analysis. There are no changed circumstances pertaining to this issue area.

References

Marin Independent Journal, 2025. MMWD Approves $9.7M to Advance Sonoma-to-Marin Water Pipeline. By Adrian Rodriguez. April 16, 2025.

Sausalito-Marin City Sanitary District (SMCSD), 2024. Sanitary Sewer Connection Fees, Connection Requirements and Associated Sewer Service Charges. Letter from Kevin Rahman, District Engineer, to Immanual Bereket, Marin County Community Development Agency. December 6, 2024.

2.19. Wildfire

Environmental Issue Area	Where Was this Issue Analyzed in the Previous Environmental Document?	Do Proposed Project Changes Affect this Issue?	Are There Any Changed Circumstances that Affect this Issue?	Is There Any New Information of Substantial Importance Pertaining to this Issue?	If Any of the Previous Three Questions Was Answered "Yes," Would Changes or New Information Result in a New or Substantially More Severe Significant Impact?	Are there any New or Reconsidered Mitigation Measures or Alternatives that Would Substantially Reduce Significant Impacts?
19. Wildfire. If located in or near State Responsibility Areas or lands classified as Very High Fire Hazard Severity Zones, would the Project:						
a) 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?	HESE DEIR Chapter 20, Wildfire, Impact 20-2.	Yes	No	Yes	No	N/A
b) 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?	HESE DEIR Chapter 20, Wildfire, Impact 20-3.	Yes	No	Yes	No	N/A
c) 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 changes?	HESE DEIR Chapter 20, Wildfire, Impact 20-4.	Yes	No	Yes	No	N/A
d) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	HESE DEIR Chapter 20, Wildfire, Impact 20-5.	Yes	No	Yes	No	N/A

Discussion

The 2023 HESE FEIR addresses the four topics related to wildfire in Chapter 20, Wildfire, in the DEIR. A fifth topic examining potential impacts to emergency response and emergency evacuation plans is examined in this Supplemental Environmental Review in Section 2.9, Hazards and Hazardous Materials, topic f. The 2023 HESE FEIR provides a program-level analysis and defers more detailed consideration of these topics to site-specific reviews, as applications for

housing developments are submitted. The analysis relies on the matrix of State and local policies, programs, and regulations governing development in Very High Fire Hazard Severity Zones (VHFHSZs), as mapped by the State Fire Marshall,[37] to restrict and condition new housing. Furthermore, the 2023 HESE FEIR states that sites selected for inclusion in the then-proposed Housing Element Update's Sites Inventory were outside VHFHSZs. The 2023 HESE FEIR therefore concludes that all impacts related to wildfire would be less than significant.

The 150 Shoreline Affordable Housing Project is not located in the State Responsibility Area (SRA),[38] though it is close to the SRA; the area to the south of Shoreline Highway and Tennessee Valley Road and west of US 101 is within the SRA (Board of Forestry, 2025). The Project site itself is within a Local Responsibility Area (LRA): fire protection is provided by the Southern Marin Fire Protection District. The Project site is not within the mapped Wildland-Urban Interface (WUI; MarinMap, 2025).

New maps showing Fire Hazard Severity Zones in LRAs within Marin County, as recommended by the State Fire Marshall, were published in February 2025. These maps constitute new information of substantial importance pertinent to the analysis of wildfire-related impacts of the Project. In the previous edition of the map (the previous series of FHSZ maps were published between 2007 and 2011), the Project site was within the VHFHSZ. In the new map, the Project site is not within a Moderate, High, or Very High FHSZ (CalFire, 2025).

a) Would the Project, 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?

The 2023 HESE FEIR identifies Impact 20-2: Wildfire-Related Pollutant Concentration Exposure Impacts. The discussion of this impact states that compliance with existing Countywide Plan Safety Element Update policies and implementing programs, existing Marin County Code sections pertaining to fire safety, and State regulatory requirements, as well as the applicable fire department development review process for new development, would minimize the potential for pollutant impacts related to wildfires. Therefore, new housing facilitated by the then-proposed Housing Element Update would not result in substantial adverse impacts due to slope, prevailing winds, and other factors exacerbating wildfire risks, and thereby exposing project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. The 2023 HESE FEIR concludes that this impact would therefore be less than significant.

The 150 Shoreline Affordable Housing Project is not in a location where slope, prevailing winds, or other factors would exacerbate direct or indirect wildfire risks. The Project site is nearly flat, not heavily vegetated, and is bordered by a wetland, all factors that tend to decrease fire hazard severity. The Southern Marin Fire Protection District has reviewed the application for the Project and has requested changes to the Project plans to ensure compliance with the Fire Code and District Regulations, which will reduce fire hazards associated with the construction and future residential use of the proposed new building. The building itself would be Type III-A

[37] https://osfm.fire.ca.gov/what-we-do/community-wildfire-preparedness-and-mitigation/fire-hazard-severity-zones
[38] CalFire, the State fire agency, has legal responsibility to provide fire protection within the SRA.

construction and would be equipped with automatic sprinklers. Landscaping around the proposed new building would be for the most part low-lying. The Project site would be accessible for aerial fire apparatus necessary for use for the proposed five-story structure. As stated above, the Project site is not within the mapped WUI and is not within a VHSFHZ. The Project therefore does not pose a heightened fire risk and would not exacerbate existing fire risk. As was also concluded for the 2023 HESE FEIR for Impact 20-2, impacts of this kind would be less than significant.

b) Would the Project 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?

The 2023 HESE FEIR identifies Impact 20-3: Impact from Needed Infrastructure Improvements. The 2023 HESE FEIR states that new housing facilitated by the then-proposed Housing Element Update would be regulated in terms of location, design, building materials, and fuel modification/protection and would be subject to existing and then-proposed Countywide Plan Safety Element Update policies and programs. Based on these considerations, this impact was found to be less than significant.

The 150 Shoreline Affordable Housing Project does not propose to construct, and would not require installation or maintenance of roads, fuel breaks, emergency water sources, power lines or other utilities; it would be served by existing roadways and utilities, as discussed in Section 2-18, Utilities and Service Systems. All utilities to the proposed building would be undergrounded. The Project therefore would not require new infrastructure that could exacerbate fire risk or that may result in temporary or ongoing impacts to the environment. As was concluded in the 2023 HESE for Impact 20-3, this impact would be less than significant for the Project.

c) Would the Project 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 changes?

The 2023 HESE FEIR identifies Impact 20-4: Potential Post-Fire Impacts. The discussion of this impact states that landslides and erosion are often associated with wildfires. However, most of the soils of Marin County are not prone to massive soil movement in post-fire conditions. The 2023 HESE FEIR states that individual housing project compliance with policies and programs in the then-proposed Safety Element Update, as well as compliance with Marin County Code sections for protecting new development from flooding and landslides, would reduce the potential for exposure of people or structures to post-fire impacts, and that this impact would therefore be less than significant.

The Project site is not located on or adjacent to a slope, and so is not subject to significant risks from post-wildfire landslides or slope instability. Wildfire could result in altered drainage patterns on slopes and waterways in the area, but the Project proposes to elevate the proposed new building above base flood elevation, and it is unlikely that it would be adversely affected by any such changes. The Project therefore would not expose people or structures to significant risks as a

result of runoff, post-fire slope instability, or drainage changes, and this impact would be less than significant. The same conclusion was reached for Impact 20-4 in the 2023 HESE FEIR.

d) Would the Project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

The 2023 HESE FEIR identifies Impact 20-5: Risk to People and/or Structures from Exposure to Wildfire. The discussion of this impact states that potential housing sites selected for inclusion in the Sites Inventory in the Housing Element Update were selected to avoid VHFHSZs. In addition, all new development must comply with fire safety standards. The discussion of this impact also states that then-proposed Safety Element Update policies and implementing programs would help reduce the potential for wildfire ignition and spread and reduce risks to people and structures from wildfire. These policies and implementing programs, which have since been adopted, include improvements to evacuation and emergency response planning, reduction of the potential for wildfire ignitions and uncontrolled spread of wildfire, and reduction in the potential for post-fire impacts to harm people or damage structures. Therefore, the 2023 HESE FEIR finds that Impact 20-5 would be less than significant.

As noted in the introductory discussion for this section, the Project site is not located in a VHFHSZ. As described under topic a, above, the proposed structure would be constructed to high fire safety standards in accordance with applicable fire codes, and with adequate access for firefighting equipment necessary for fighting a fire in a five-story building. The Project site is not within the mapped WUI or adjacent to wildland areas or other large areas of dense vegetation. The Project therefore would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires, and this impact would therefore be less than significant. The same conclusion was reached for Impact 20-5 in the HESE FEIR.

Mitigation Measures

Because the 2023 HESE FEIR identifies only less-than-significant impacts related to wildfire, it includes no mitigation measures to address wildfire issues. The 150 Shoreline Affordable Housing Project would likewise have only less-than-significant impacts of this kind, and so no mitigation is required.

Conclusion

New information pertinent to the Project (new State FHSV maps) has informed the analysis of potential wildfire impacts. Considering this new information, the Project would not result in a new significant impact related to wildfire, nor in a substantial increase in any previously identified significant impact.

References

California Department of Forestry and Fire Protection (CalFire), 2025. Fire Hazard Severity Zones. https://osfm.fire.ca.gov/what-we-do/community-wildfire-preparedness-and-mitigation/fire-hazard-severity-zones Interactive map accessed April 25, 2025.

California Board of Forestry, 2025. SRA 5-Year Review. https://experience.arcgis.com/experience/bd8234bfe71548b087b11210a0d7d45e?id=468717e399fa4238ad86861638765ce1 Interactive map accessed April 25, 2025.

MarinMap, 2025. Urban Wildland Interface & Evacuation Routes. https://marincounty.maps.arcgis.com/apps/webappviewer/index.html?id=688f506cfb144067826bb35a062b0f0a Interactive map accessed April 25, 2025.

2.20. Mandatory Findings of Significance

Environmental Issue Area	Where Was this Issue Analyzed in the Previous Environmental Document?	Do Proposed Project Changes Affect this Issue?	Are There Any Changed Circumstances that Affect this Issue?	Is There Any New Information of Substantial Importance Pertaining to this Issue?	If Any of the Previous Three Questions Was Answered "Yes," Would Changes or New Information Result in a New or Substantially More Severe Significant Impact?	Are there any New or Reconsidered Mitigation Measures or Alternatives that Would Substantially Reduce Significant Impacts?
20. Mandatory Findings of Significance.						
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	HESE DEIR Chapter 7, Biological Resources, and Chapter 8, Cultural, Tribal Cultural, and Historical Resources	Yes	No	Yes	No	N/A
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	HESE DEIR Chapters 4 through 20 (and summarized in Chapter 21)	Yes	No	No	No	N/A
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	HESE DEIR Chapter 6 Air Quality, Chapter 9, Geology and Soils, Chapter 11, Hazards and Hazardous Materials, and Chapter 20, Wildfire.	Yes	No	No	No	N/A

Environmental Issue Area	Where Was this Issue Analyzed in the Previous Environmental Document?	Do Proposed Project Changes Affect this Issue?	Are There Any Changed Circumstances that Affect this Issue?	Is There Any New Information of Substantial Importance Pertaining to this Issue?	If Any of the Previous Three Questions Was Answered "Yes," Would Changes or New Information Result in a New or Substantially More Severe Significant Impact?	Are there any New or Reconsidered Mitigation Measures or Alternatives that Would Substantially Reduce Significant Impacts?
20. Mandatory Findings of Significance.						
d) Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals?	This topic not examined in the 2023 HESE FEIR	Yes	No	No	No	N/A

Discussion

a) Does the Project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

As discussed above in Sections 2.4, Biological Resources, the 2023 HESE FEIR concludes that the then-proposed Housing Element Update would have only less-than-significant impacts related to biological resources. As discussed in Section 2.5, Cultural and Tribal Resources, topic a, however, future housing development could cause substantial adverse changes in the significance of a historical resource, which would be a significant impact. The 2023 HESE FEIR therefore identifies Mitigation Measure 8-1, which requires that, for any project facilitated by the Housing Element Update that the County determines may involve a potentially significant historical resource, the resource must be assessed to determine whether it is a significant historic resource and whether the project may have a potentially significant adverse effect on the resource. If the County determines that a project may have a potentially significant effect, the mitigation measure details the steps that a project applicant must take to protect or document the resource. The 2023 HESE FEIR concludes, however, that while implementation of these measures would reduce significant impacts on historic resources, they may not be sufficient in all cases to reduce the impact to a less-than-significant level. Consequently, the 2023 HESE FEIR finds that this impact would be significant and unavoidable. Therefore, implementation of the Housing Element Update could potentially eliminate an important example of the major periods of California history or prehistory.

The Shoreline Affordable Housing Project, however, would not have a significant impact on biological resources, cultural resources (including historical resources), or tribal cultural

resources, as discussed in Section 2.4, Biological Resources and Section 2.5, Cultural Resources and Tribal Cultural Resources. The Project site is a vacant lot that was previously occupied by a gas station. No sensitive biological or cultural resources have been found and there is no evidence suggesting that they might occur on the Project site. Therefore, the Project does not have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory. There would be no new significant effect, nor a substantial increase in the severity of the previously identified significant effect of this kind.

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

The 2023 HESE identifies several cumulative impacts that would result from development of new housing facilitated by the then-proposed Housing Element Update. These include the following:

Aesthetics: The Housing Element Update would make a cumulatively considerable contribution to significant cumulative impacts with respect to Impact 4-1: "effects on scenic vistas," and Impact 4-2, "impacts on existing visual character and quality." These impacts would be significant and unavoidable;

Air Quality: The Housing Element Update would make a cumulatively considerable contribution to significant cumulative impacts with respect to Impact 6-1, "conflicts with the local air quality plan and result in a cumulatively considerable net increase in criteria pollutants for which the region is nonattainment" and Impact 6-2, "result in a cumulatively considerable net increase in criteria pollutants for which the region is non-attainment." These impacts would be significant and unavoidable.

Cultural, Tribal Cultural, and Historic Resources: The Housing Element Update would make a cumulatively considerable contribution to a significant cumulative impact with respect to Impact 8-1, "destruction/degradation of historic resources." This impact would be significant and unavoidable.

Greenhouse Gas Emissions and Energy: The Housing Element Update would make a cumulatively considerable contribution to a significant cumulative impact with respect to Impact 10-1, "generate significant greenhouse gas emissions and conflict with an applicable plan, policy, or regulation adopted for the purposes of reducing greenhouse gas emissions." This impact would be significant and unavoidable.

Noise and Vibration: The Housing Element Update would make a cumulatively considerable contribution to a significant cumulative impact with respect to Impact 15-1, "substantial permanent increases in traffic noise levels." This impact would be significant and unavoidable.

Transportation: The Housing Element Update would make a cumulatively considerable contribution to a significant cumulative impact with respect to Impact 18-4, "impacts related to vehicle miles traveled." This impact would be significant and unavoidable.

Utilities and Service Systems: The Housing Element Update would make a cumulatively considerable contribution to significant cumulative impacts with respect to Impacts 19-2a, 19-2b, and 19-2c, "project and cumulative water supply impacts," Impacts 19-3a and 19-3b, "wastewater treatment capacity impacts," and Impact 19-3c, "wastewater treatment capacity impacts outside of sanitary districts and community service districts providing sewage treatment." These impacts would be significant and unavoidable.

The 150 Shoreline Affordable Housing Project would make a cumulatively considerable contribution to the aesthetics impacts summarized above, as discussed in Section 2.1, Aesthetics, and to the greenhouse gas emissions impact, as discussed in Section 2.8, Greenhouse Gas Emissions. These are, however, the same impacts that were already identified in the 2023 HESE FEIR. They do not constitute new significant impacts, nor a substantial increase in the severity of the significant and unavoidable impacts already identified in the 2023 HESE FEIR. The Project would not contribute to the other cumulative impacts identified in the 2023 HESE FEIR, as discussed throughout this Supplemental Environmental Review.

With respect to the potential for impacts of the Project to combine with impacts of other, nearby past, current, and foreseeable future projects, other than housing projects facilitated by the Housing Element Update, the Marin County Community Development Agency lists four projects currently under review in the Almonte and Tamalpais Valley areas (Marin County CDA, 2025):

Littoral Development Company Mixed Use Project (P5012), 260 Redwood Highway Frontage Road, Unincorporated Mill Valley (approximately 1,500 feet from the Project site). The applicant proposes to demolish the existing uses on the site and to construct 43 residential apartments units and a residential care facility at 260 Redwood Highway Frontage Road, Mill Valley. The proposed building would consist of five building levels above a basement (parking garage and storage), with a height less than 64 feet above grade. The building would contain approximately 93,322 square feet of floor area, consisting of 44 total units and common areas. The project also includes a public café located on a parcel adjacent to the bicycle path at the intersection of Pohono Street and Bolinas Street just southwest of the main development. The application is currently under preliminary review.

Fleishmann Living Trust Residential Addition/Accessory Structure (P5066). 820 Marin Drive, Unincorporated Mill Valley (approximately 1.4 miles from the Project site). The applicant requests Variance and Design Review approvals to construct a 2,172-square-foot, multistory addition with a 137-sqaure-foot covered porch to a primary residential structure (single-family residence) on a developed lot. The application is currently under review.

Tamalpais Community Services District Corporation and Maintenance Yard Use Permit Amendment (P5015). 305 Bell Lane, Unincorporated Mill Valley (approximately 3,400 feet from the Project site). The Tamalpais CSD requests Use Permit Amendment approval to clarify

the allowed uses at the approximately 31,938-square-foot corporation and maintenance yard of a public utility facility. The allowed uses requiring clarification include: (1) the operation of solid waste services (i.e., refuse vehicles) without onsite collection, with certain exceptions (e.g., e-waste, cardboard, etc.); (2) the operation of a public service facility, including a corporation and maintenance yard for Solid Waste, Wastewater, and Parks and Recreation services; and (3) the hosting of two annual events ("Debris Days") on a Saturday in May and October from 8:00 a.m. to 1:00 p.m.; (4) hosting of one annual event ("Household Hazardous Waste Day") on a Saturday in May from 9:00 a.m. to 1:00 p.m.; and (5) authorize specific ancillary uses of the corporation and maintenance yard that take place at the neighboring community center (Tamalpais Valley Community Center). These ancillary uses include utilizing the community center parking lot for two events ("Debris Day" and "Household Hazardous Waste Day") associated with the corporation and maintenance yard, as well as for the ingress, egress, and parking of commercial vehicles. The application is currently under review.

Tamalpais Community Services District Community Center Use Permit Amendment (P5014), 203 Marin Avenue, Unincorporated Mill Valley (approximately 3,000 feet from the Project site). The Tamalpais CSD requests Use Permit Amendment approval to allow outdoor amplified music for specific events at the approximately 64,776-square-foot site of the Tamalpais Valley Community Center, located in the unincorporated community of Tamalpais. The events for which outdoor amplified music is being requested include: (1) five events ("Creekside Friday" or similar) on Fridays during June, July, and August, with outdoor amplified music from 5:30 p.m. to 8:00 p.m.; (2) one event ("Oktoberfest") on a Saturday in September or October, with outdoor amplified music from 2:30 p.m. to 8:00 p.m.; and (3) one event ("Earth Day" or similar) on a Saturday or Sunday in April, with outdoor amplified music from 11:00 a.m. to 4:00 p.m. Additionally, the request for Use Permit Amendment approval includes allowing certain ancillary uses of the neighboring corporation and maintenance yard (Tamalpais CSD) at the Community Center. These uses include utilizing the community center parking lot for two events ("Debris Day" and "Household Hazardous Waste Day") associated with the corporation and maintenance yard, as well as for the ingress, egress, and parking of commercial vehicles. The application is currently under review.

In addition, the Sites Inventory of the Housing Element Update currently lists four parcels within the Howard Johnson's Master Plan area, including the Project site, for potential development of up to ten units of above-moderate income housing, and the Holiday Inn parcel for development of up to 72 units of lower-income housing. The redevelopment of these four other parcels within the Howard Johnson Master Plan area, which are currently occupied with commercial buildings, is reasonably foreseeable.

Of the four projects listed by the Community Development Agency, the one that is closely related to the 150 Shoreline Affordable Housing project is the Littoral Development Company Mixed Use Project. This project also proposes to construct a multi-story multi-family building in a commercial area. Both projects would contribute to meeting Marin County's RHNA. Because of its distance from the 150 Shoreline Affordable Housing Project site (over one-quarter mile away), construction impacts such as noise would not be expected to combine in a cumulative manner, even if the two projects were constructed simultaneously. Following construction, the minor,

typically less-than-significant impacts of residential uses (and the relatively minor commercial use proposed in the Littoral Development Company project) would not be expected to combine in a cumulative manner. No cumulative impacts are therefore anticipated from this proposed development.

Simultaneous development of the four other parcels within the Howard Johnson's Master Plan area could combine with the less-than-significant construction impacts of the 150 Shoreline Affordable Housing Project. There are not, however, any applications for redevelopment of these parcels, so simultaneous construction is unlikely. Following buildout and residential occupation, the residential uses would not be expected to combine to cause significant cumulative impacts.

In conclusion, the 150 Shoreline Affordable Housing Project would not be expected to result in or contribute to any cumulative impact that was not previously identified in the 2023 HESE FEIR.

c) Does the Project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

The 2023 HESE FEIR considers environmental effects which could cause substantial adverse direct and indirect effects on human beings in DEIR Chapter 6, Air Quality; Chapter 9, Geology and Soils; Chapter 11, Hazards and Hazardous Materials; and Chapter 20, Wildfire. The 2023 HESE FEIR finds that three air quality impacts, Impact 6-1: Conflict with the Local Air Quality Plan and Result in a Cumulatively Considerable Net Increase in Criteria Air Pollutants for which the Region is Non-Attainment (Operational); Impact 6-2: Result in a Cumulatively Considerable Net Increase in Criteria Pollutants for which the Region is Non- Attainment (Construction); and Impact 6-3: Generate Toxic Air Contaminant Emissions that Expose Sensitive Receptors to Substantial Pollutant Concentrations During Construction, would all be significant and unavoidable. These impacts, which would result from buildout and occupation of housing sites identified in the Housing Element Update, would all cause substantial adverse effects on human beings.

The analysis of air quality emissions, geologic hazards, hazards and hazardous materials, and wildfire impacts of the 150 Affordable Housing Project, however, found in all instances only less than significant impacts, as detailed in Section 2.3, Air Quality; Section 2.7, Geology and Soils; Section 2.9, Hazards and Hazardous Materials; and Section 2.19, Wildfire. The Project would not have environmental effects which would cause substantial adverse effects on human beings, either directly or indirectly. There would be no new significant effect, nor a substantial increase in the severity of the previously identified significant effects of this kind.

d) Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals?

This topic was not examined in the 2023 HESE FEIR.

The 150 Shoreline Affordable Housing Project is an urban infill project that would construct affordable housing on a currently vacant lot. It would contribute substantially to meeting Marin County's obligation to facilitate the development of affordable housing, and thus help alleviate

the state-wide housing crisis. While the Project may cause significant aesthetic impacts by obstructing some scenic views and, because of the height of the proposed building, by altering the character of the area in which it is located (as detailed in Section 2.1, Aesthetics), and would result in a significant increase in greenhouse gas emissions, impacts of this nature and significance were identified in the 2023 HESE FEIR. No other significant impacts of the Project have been identified. Future residents of the Project would be exposed to increased risk of tidal and riverine flooding as a consequence of climate change and sea level rise, but this effect of the environment on the Project will be a common one experienced by many residents and businesses near the Bayshore and coast. This is a major issue that will require coordinated, regional response, and it would not be substantially altered or exacerbated by the Project. The Project therefore does not have the potential to achieve short-term, to the disadvantage of long-term, environmental goals.

Mitigation Measures

Mitigation measures to address the impacts identified in the 2023 HESE FEIR and discussed above do not apply to the Project. No additional mitigation measures are identified for the 150 Shoreline Affordable Housing Project.

Conclusion

The 2023 HESE FEIR identifies several impacts of the then-proposed Housing Element Update that could eliminate important examples of the major periods of California history or prehistory, contribute to cumulative impacts, and cause substantial adverse effects on human beings. The 150 Shoreline Affordable Housing Project would not have a new significant impact of any of these kinds, nor a substantial increase in the severity of a significant impact previously identified in the 2023 HESE FEIR. Neither would the Project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals. There are no Mandatory Findings of Significance that apply to the 150 Shoreline Affordable Housing Project.

References

Marin County Community Development Agency (CDA), 2025. Projects Under Review: Almonte and Mill Valley-Tamalpais Valley. https://www.marincounty.gov/departments/cda/planning/projects Accessed April 26, 2025.

CHAPTER 3
Summary and Conclusion

1. Summary Findings of Checklist

Table 3-1 provides a summary of the conclusions for each environmental topic reached in Chapter 2, Checklist for Supplemental Environmental Review. The table indicates for each topic whether the Project would result in a new significant impact or a substantially more severe significant impact than identified in the 2023 Housing Element and Safety Element Final Environmental Impact Report (2023 HESE FEIR), and if so, whether existing or revised mitigation measures would reduce the impact to less than significant. Those topical issue areas for which there is the potential for a significant impact that cannot be mitigated should be further evaluated in a subsequent EIR pursuant to State CEQA *Guidelines* Section 15162, or a supplement to the 2023 HESE FEIR pursuant to State CEQA *Guidelines* Section 15163. As shown in the table, the Project would not result in a new or substantially more severe significant impact, and an addendum to the 2023 HESE FEIR may be prepared pursuant to State CEQA *Guidelines* Section 15164.

Table 3-1
Conclusions Regarding New or Substantially More Severe Significant Impacts

Topical Issue	No New or Substantially More Severe Significant Impact	New or Substantially More Severe Significant Impact, Can Be Mitigated to Less than Significant	New or Substantially More Severe Significant Impact, Cannot Be Mitigated to Less than Significant
2.1 Aesthetics	X		
2.2 Agriculture and Forestry Resources	X		
2.3 Air Quality	X		
2.4 Biological Resources	X		
2.5 Cultural Resources and Tribal Cultural Resources	X		
2.6 Energy	X		
2.7 Geology and Soils	X		
2.8 Greenhouse Gas Emissions	X		
2.9 Hazards and Hazardous Materials	X		
2.10 Hydrology and Water Quality	X		

Topical Issue	No New or Substantially More Severe Significant Impact	New or Substantially More Severe Significant Impact, Can Be Mitigated to Less than Significant	New or Substantially More Severe Significant Impact, Cannot Be Mitigated to Less than Significant
2.11 Land Use and Planning	X		
2,12 Mineral Resources	X		
2.13 Noise	X		
2.14 Population and Housing	X		
2.15 Public Services	X		
2.16 Recreation	X		
2.17 Transportation and Traffic	X		
2.18 Utilities and Service Systems	X		
2.19 Wildfire	X		
Mandatory Findings of Significance	X		

2. Revisions to Mitigation Measures

There are no proposed revisions to mitigation measures identified in the 2023 HESE FEIR.

APPENDICES

A. Mitigation Monitoring and Reporting Program

B. Air Emissions Modeling

Appendix A:
Mitigation Monitoring and Reporting Program

Mitigation Monitoring and Reporting Program

150 Shoreline Affordable Housing Project

May 2025

MITIGATION MONITORING AND REPORTING PROGRAM

CEQA Statute Section 21081.6 and State CEQA Guidelines Section 15097 require a public agency to adopt a reporting or monitoring program (MMRP) to ensure compliance with the mitigation measures adopted by the agency at the time of project approval. A mitigation monitoring program would therefore be required for the 150 Shoreline Affordable Housing Project Addendum to the 2023 Final Environmental Impact Report for the Housing & Safety Element Update to the 2007 Marin Countywide Plan (2023 HESE FEIR) to ensure compliance with the mitigation measures that are adopted and incorporated into the Project. Adoption of the MMRP would occur at the time of project approval.

The Supplemental Environmental Review supporting the Addendum to the 2023 HESE FEIR for the 150 Shoreline Affordable Housing Project identifies no new or revised mitigation measures required for the Project. Several mitigation measures from the 2023 HESE FEIR are, however, applicable to the Project and necessary to reduce Project impacts.

The following table lists all significant impacts and mitigation measures identified in the 2023 HESE, and indicates those that are applicable to the Project: many of the mitigation measures are not applicable to the Project, for the reasons stated in the "Applicability to the 150 Shoreline Affordable Housing Project" column. The "Impact" column lists each significant impact, by resource topic, that is identified in the EIR and for which mitigation measures are required. Only the number and short name of the impact is given; for the full text of the measure, see the 2023 HESE FEIR. The "Mitigation Measure" column provides the full text of each mitigation measure that applies to the 150 Shoreline Affordable Housing Project; only the number and short name of the mitigation measure is given for those that do not apply to the current Project. For those mitigation measures applicable to the Project, the three columns under the "Monitoring" heading describe (1) the "implementation entity" responsible for carrying out each mitigation measure; (2) mitigation implementation timing requirements (e.g., at the completion of a particular future individual project development review or construction phase, prior to occupancy, or when some other specific threshold is reached); and (3) the entity responsible for performing the monitoring of each mitigation measure, e.g., a County department or agency.

According to CEQA Guidelines Section 15126.4(a)(2), "Mitigation measures must be fully enforceable through permit conditions, agreements, or other legally-binding instruments. In the case of the adoption of a plan, policy, regulation, or other public project, mitigation measures can be incorporated into the plan, policy, regulation, or project design." Therefore, all mitigation measures as listed in this MMRP will be adopted by the County when the 150 Shoreline Affordable Housing Project is approved, unless they have already been fully implemented during review of the Project application.

Mitigation Monitoring and Reporting Program

Impact	Mitigation Measure	Applicable to 150 Shoreline Affordable Housing Project?	MONITORING		
			Implementation Entity	Timing Requirements	Monitoring and Verification Entity
AIR QUALITY					
Impact 6-1: Conflict with the Local Air Quality Plan and Result in a Cumulatively Considerable Net Increase in Criteria Air Pollutants for which the Region is Non-Attainment (Operational).	**Mitigation Measure 6-1: Reduce VMT from New Residential Development. Implement Mitigation Measure 18-4 (Transportation).**	Not applicable. The Supplemental Environmental Review determined that the Project would not generate significant VMT.	NA	NA	NA
Impact 6-2: Result in a Cumulatively Considerable Net Increase in Criteria Pollutants for which the Region is Non-Attainment (Construction).	**Mitigation Measure 6-2: Evaluate Air Quality Impacts of Proposed Projects and Plans.** The County shall require future projects and plans to evaluate and mitigate, as necessary, potential air quality impacts through Countywide Plan Program AIR-1.b	Applicable. The Supplemental Environmental Review has already fulfilled this requirement.	Marin County CDA, as CEQA Lead Agency	Prior to discretionary Project approval Initials: _____ Date: _____	Marin County CDA
Impact 6-3: Generate Toxic Air Contaminant Emissions that Expose Sensitive Receptors to Substantial Pollutant Concentrations During Construction.	**Mitigation Measure 6-3: Evaluate Air Quality Impacts of Proposed Projects and Plans.** Implement Mitigation Measure 6-2.	Applicable. The Supplemental Environmental Review has already fulfilled this requirement.	Marin County CDA, as CEQA Lead Agency	Prior to discretionary Project approval Initials: _____ Date: _____	Marin County CDA
BIOLOGICAL RESOURCES					
Impact 7-1: Impacts to Special-Status Species.	**Mitigation Measure 7-1: Protect Special-Status Species During Implementation of Safety Element Activities.**	Not applicable; applies only to Safety Element Activities.	NA	NA	NA

Impact	Mitigation Measure	Applicable to 150 Shoreline Affordable Housing Project?	MONITORING		
			Implementation Entity	Timing Requirements	Monitoring and Verification Entity
Impact 7-2: Impacts on Riparian Habitat, Sensitive Natural Communities, and Wetlands.	**Mitigation Measure 7-2.1: Best Management Practices for vegetation management in riparian areas, wetlands, and sensitive natural communities.** **Mitigation Measure 7-2.2: Application Requirements for Ministerial Road Improvement Projects.** **Mitigation Measure 7-2.3: Adopt and Implement a Standard Review Procedure.**	Not applicable; these measures apply only to Safety Element Activities.	NA	NA	NA
Impact 7-3: Impacts on Wildlife Movement Corridors and Wildlife Nursery Sites.	**Mitigation Measure 7-3.1. Revise Definition of the Nesting Season**	Not Applicable. Marin County Code Section Marin County Code section 22.20.040.G, which requires pre-construction nesting bird surveys, defines the nesting period as February 1 through August 15, and effectively implements this mitigation measure. This code section is enforced through a standard, uniformly-applied condition of approval for development projects such as the Project.	NA	NA	NA
	Mitigation Measure 7-3.2 Bird-Safe Design.	Not applicable. The SER determined that the Project does not pose a significant risk of bird collisions.	NA	NA	NA

Impact	Mitigation Measure	Applicable to 150 Shoreline Affordable Housing Project?	MONITORING		
			Implementation Entity	Timing Requirements	Monitoring and Verification Entity
	Mitigation Measure 7-3.3. Implement Protective Buffers During Vegetation Management.	Not applicable. this applies only to Safety Element Update policies and programs, not to the Housing Element Update.	NA	NA	NA
CULTURAL, TRIBAL CULTURAL, AND HISTORICAL RESOURCES					
Impact 8-1: Destruction/Degradation of Historical Resources	**Mitigation Measure 8-1. Assess and protect historical resources**	Not applicable. The SER determined that the Project site does not contain historical resources.	NA	NA	NA
GREENHOUSE GAS EMISSIONS AND ENERGY					
Impact 10-1: Generate Significant Greenhouse Gas Emissions and Conflict with an Applicable Plan, Policy, or Regulation Adopted for the Purposes of Reducing Greenhouse Gas Emissions.	**Mitigation Measure 10-1A: Prohibit Natural Gas Plumbing and Appliances in New Housing Sites.** .	Not applicable. Enforcement of the provision of the Marin Green Building Code requiring this measure has been suspended	NA	NA	NA
	Mitigation Measure 10-1B: Residential Bicycle Parking Requirements. The County shall require new residential housing sites to comply with the Tier II bicycle parking requirements contained in the latest editions of the California Green Building Standards Code (CalGreen) in effect at the time the building permit application is submitted to the County. Currently, the 2019 CalGreen Code Section A4.106.9, Bicycle Parking, requires new multi-family buildings provide on-site bicycle parking for at least one bicycle per every two dwelling units, with acceptable parking facilities conveniently reached from the street.	Applicable	Marin County CDA	Prior to issuance of a Building Permit Initials: _____ Date: _____	Marin County CDA

Impact	Mitigation Measure	Applicable to 150 Shoreline Affordable Housing Project?	MONITORING		
			Implementation Entity	Timing Requirements	Monitoring and Verification Entity
	Mitigation Measure 10-1C: Reduce VMT from New Residential Development. Implement Mitigation Measure 18-4 (Transportation).	Not applicable. The Supplemental Environmental Review determined that the Project would not generate significant VMT.	NA	NA	NA
NOISE					
Impact 15-1: Substantial Permanent Increases in Traffic Noise Levels.	**Mitigation Measure 15-1: Reduce VMT from New Residential Development. Implement Mitigation Measure 18-4 (Transportation).**	Not applicable. The Supplemental Environmental Review determined that the Project would not generate significant VMT.	NA	NA	NA
TRANSPORTATION					
Impact 18-4: Impacts Related to Vehicle Miles Traveled.	**Mitigation Measure 18-4: Reduce VMT from New Residential Development.**	Not applicable. The Supplemental Environmental Review determined that the Project would not generate significant VMT.	NA	NA	NA

Appendix B:
Air Emissions Modeling

150 Shoreline Affordable Housing Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	150 Shoreline Affordable Housing
Construction Start Date	7/1/2025
Operational Year	2026
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.90
Precipitation (days)	34.8
Location	37.881216091066975, -122.5186509799461
County	Marin
City	Unincorporated
Air District	Bay Area AQMD
Air Basin	San Francisco Bay Area
TAZ	931
EDFZ	2
Electric Utility	Pacific Gas & Electric Company
Gas Utility	—
App Version	2022.1.1.29

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	32.0	Dwelling Unit	0.59	32,378	7,159	—	77.0	Manager's unit and office on first floor

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-2*	Limit Heavy-Duty Diesel Vehicle Idling
Construction	C-10-C	Water Unpaved Construction Roads
Construction	C-11	Limit Vehicle Speeds on Unpaved Roads
Construction	C-12	Sweep Paved Roads
Construction	C-13	Use Low-VOC Paints for Construction
Transportation	T-1	Increase Residential Density
Transportation	T-4	Integrate A ordable and Below Market Rate Housing
Transportation	T-14*	Provide Electric Vehicle Charging Infrastructure
Transportation	T-15	Limit Residential Parking Supply
Transportation	T-31-A*	Locate Project in Area with High Destination Accessibility
Transportation	T-32*	Orient Project Toward Transit, Bicycle, or Pedestrian Facility
Transportation	T-33*	Locate Project near Bike Path/Bike Lane
Transportation	T-34*	Provide Bike Parking
Transportation	T-55*	Infill Development

* Qualitative or supporting measure. Emission reductions not included in the mitigated emissions results.

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.	2.10	1.76	15.8	18.4	0.03	0.68	2.44	3.13	0.63	1.09	1.72	—	3,562	3,562	0.16	0.16	2.43	3,591
Mit.	2.10	1.76	15.8	18.4	0.03	0.68	2.44	3.13	0.63	1.09	1.72	—	3,562	3,562	0.16	0.16	2.43	3,591

% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	91.4	91.3	4.80	6.92	0.01	0.20	0.23	0.43	0.18	0.05	0.24	—	1,446	1,446	0.06	0.03	0.03	1,456
Mit.	61.0	60.9	4.80	6.92	0.01	0.20	0.23	0.43	0.18	0.05	0.24	—	1,446	1,446	0.06	0.03	0.03	1,456
% Reduced	33%	33%	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.53	1.49	2.07	2.71	< 0.005	0.09	0.20	0.29	0.08	0.08	0.16	—	550	550	0.02	0.01	0.16	555
Mit.	1.11	1.07	2.07	2.71	< 0.005	0.09	0.20	0.29	0.08	0.08	0.16	—	550	550	0.02	0.01	0.16	555
% Reduced	27%	28%	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.28	0.27	0.38	0.49	< 0.005	0.02	0.04	0.05	0.01	0.01	0.03	—	91.1	91.1	< 0.005	< 0.005	0.03	91.8
Mit.	0.20	0.20	0.38	0.49	< 0.005	0.02	0.04	0.05	0.01	0.01	0.03	—	91.1	91.1	< 0.005	< 0.005	0.03	91.8
% Reduced	27%	28%	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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	2.10	1.76	15.8	18.4	0.03	0.68	2.44	3.13	0.63	1.09	1.72	—	3,562	3,562	0.16	0.16	2.43	3,591
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2025	91.4	91.3	4.80	6.92	0.01	0.20	0.23	0.43	0.18	0.05	0.24	—	1,446	1,446	0.06	0.03	0.03	1,456
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	1.53	1.49	2.07	2.71	< 0.005	0.09	0.20	0.29	0.08	0.08	0.16	—	550	550	0.02	0.01	0.16	555
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.28	0.27	0.38	0.49	< 0.005	0.02	0.04	0.05	0.01	0.01	0.03	—	91.1	91.1	< 0.005	< 0.005	0.03	91.8

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	2.10	1.76	15.8	18.4	0.03	0.68	2.44	3.13	0.63	1.09	1.72	—	3,562	3,562	0.16	0.16	2.43	3,591
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	61.0	60.9	4.80	6.92	0.01	0.20	0.23	0.43	0.18	0.05	0.24	—	1,446	1,446	0.06	0.03	0.03	1,456
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	1.11	1.07	2.07	2.71	< 0.005	0.09	0.20	0.29	0.08	0.08	0.16	—	550	550	0.02	0.01	0.16	555
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.20	0.20	0.38	0.49	< 0.005	0.02	0.04	0.05	0.01	0.01	0.03	—	91.1	91.1	< 0.005	< 0.005	0.03	91.8

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.	1.69	1.62	0.56	6.99	0.01	0.02	1.16	1.17	0.02	0.29	0.31	14.6	1,431	1,446	2.09	0.05	4.76	1,518

Mit.	1.30	1.26	0.31	4.10	0.01	0.01	0.51	0.52	0.01	0.13	0.14	14.6	726	741	2.06	0.03	2.21	802
% Reduced	23%	22%	45%	41%	53%	28%	56%	56%	27%	56%	55%	—	49%	49%	1%	50%	54%	47%
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.50	1.44	0.63	4.99	0.01	0.02	1.16	1.17	0.01	0.29	0.31	14.6	1,358	1,372	2.09	0.06	0.35	1,442
Mit.	1.12	1.09	0.33	2.20	0.01	0.01	0.51	0.52	0.01	0.13	0.14	14.6	691	706	2.06	0.03	0.28	766
% Reduced	25%	24%	48%	56%	54%	30%	56%	56%	29%	56%	55%	—	49%	49%	2%	50%	19%	47%
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.54	1.48	0.58	5.46	0.01	0.02	1.07	1.09	0.01	0.27	0.29	14.6	1,305	1,320	2.09	0.05	2.09	1,390
Mit.	1.19	1.15	0.31	2.91	0.01	0.01	0.47	0.48	0.01	0.12	0.13	14.6	669	684	2.06	0.03	1.05	744
% Reduced	23%	22%	47%	47%	53%	28%	56%	56%	27%	56%	55%	—	49%	48%	1%	50%	50%	46%
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.28	0.27	0.11	1.00	< 0.005	< 0.005	0.20	0.20	< 0.005	0.05	0.05	2.42	216	219	0.35	0.01	0.35	230
Mit.	0.22	0.21	0.06	0.53	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.02	2.42	111	113	0.34	< 0.005	0.17	123
% Reduced	23%	22%	47%	47%	53%	28%	56%	56%	27%	56%	55%	—	49%	48%	1%	50%	50%	46%

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	0.69	0.64	0.45	5.14	0.01	0.01	1.16	1.16	0.01	0.29	0.30	—	1,253	1,253	0.05	0.04	4.53	1,273
Area	0.99	0.98	0.02	1.81	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	4.85	4.85	< 0.005	< 0.005	—	4.87

Energy	0.01	0.01	0.09	0.04	< 0.005	0.01	—	0.01	0.01	—	0.01	—	172	172	0.02	< 0.005	—	173
Water	—	—	—	—	—	—	—	—	—	—	—	1.85	3.70	5.55	0.19	< 0.005	—	11.7
Waste	—	—	—	—	—	—	—	—	—	—	—	12.8	-2.97	9.81	1.83	> -0.005	—	55.4
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.23	0.23
Total	1.69	1.62	0.56	6.99	0.01	0.02	1.16	1.17	0.02	0.29	0.31	14.6	1,431	1,446	2.09	0.05	4.76	1,518
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.67	0.61	0.54	4.95	0.01	0.01	1.16	1.16	0.01	0.29	0.30	—	1,185	1,185	0.06	0.05	0.12	1,201
Area	0.82	0.82	0.00	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	0.09	0.04	< 0.005	0.01	—	0.01	0.01	—	0.01	—	172	172	0.02	< 0.005	—	173
Water	—	—	—	—	—	—	—	—	—	—	—	1.85	3.70	5.55	0.19	< 0.005	—	11.7
Waste	—	—	—	—	—	—	—	—	—	—	—	12.8	-2.97	9.81	1.83	> -0.005	—	55.4
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.23	0.23
Total	1.50	1.44	0.63	4.99	0.01	0.02	1.16	1.17	0.01	0.29	0.31	14.6	1,358	1,372	2.09	0.06	0.35	1,442
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.63	0.58	0.48	4.53	0.01	0.01	1.07	1.08	0.01	0.27	0.28	—	1,130	1,130	0.05	0.05	1.86	1,147
Area	0.90	0.90	0.01	0.89	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	2.39	2.39	< 0.005	< 0.005	—	2.40
Energy	0.01	0.01	0.09	0.04	< 0.005	0.01	—	0.01	0.01	—	0.01	—	172	172	0.02	< 0.005	—	173
Water	—	—	—	—	—	—	—	—	—	—	—	1.85	3.70	5.55	0.19	< 0.005	—	11.7
Waste	—	—	—	—	—	—	—	—	—	—	—	12.8	-2.97	9.81	1.83	> -0.005	—	55.4
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.23	0.23
Total	1.54	1.48	0.58	5.46	0.01	0.02	1.07	1.09	0.01	0.27	0.29	14.6	1,305	1,320	2.09	0.05	2.09	1,390
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.11	0.11	0.09	0.83	< 0.005	< 0.005	0.20	0.20	< 0.005	0.05	0.05	—	187	187	0.01	0.01	0.31	190
Area	0.16	0.16	< 0.005	0.16	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	0.40	0.40	< 0.005	< 0.005	—	0.40
Energy	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	28.5	28.5	< 0.005	< 0.005	—	28.7
Water	—	—	—	—	—	—	—	—	—	—	—	0.31	0.61	0.92	0.03	< 0.005	—	1.93

Waste	—	—	—	—	—	—	—	—	—	—	—	2.12	-0.49	1.62	0.30	> -0.005	—	9.18
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04
Total	0.28	0.27	0.11	1.00	< 0.005	< 0.005	0.20	0.20	< 0.005	0.05	0.05	2.42	216	219	0.35	0.01	0.35	230

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	0.30	0.28	0.20	2.25	0.01	< 0.005	0.51	0.51	< 0.005	0.13	0.13	—	548	548	0.02	0.02	1.98	556
Area	0.99	0.98	0.02	1.81	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	4.85	4.85	< 0.005	< 0.005	—	4.87
Energy	0.01	0.01	0.09	0.04	< 0.005	0.01	—	0.01	0.01	—	0.01	—	172	172	0.02	< 0.005	—	173
Water	—	—	—	—	—	—	—	—	—	—	—	1.85	3.70	5.55	0.19	< 0.005	—	11.7
Waste	—	—	—	—	—	—	—	—	—	—	—	12.8	-2.97	9.81	1.83	> -0.005	—	55.4
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.23	0.23
Total	1.30	1.26	0.31	4.10	0.01	0.01	0.51	0.52	0.01	0.13	0.14	14.6	726	741	2.06	0.03	2.21	802
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.29	0.27	0.23	2.16	0.01	< 0.005	0.51	0.51	< 0.005	0.13	0.13	—	518	518	0.03	0.02	0.05	525
Area	0.82	0.82	0.00	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	0.09	0.04	< 0.005	0.01	—	0.01	0.01	—	0.01	—	172	172	0.02	< 0.005	—	173
Water	—	—	—	—	—	—	—	—	—	—	—	1.85	3.70	5.55	0.19	< 0.005	—	11.7
Waste	—	—	—	—	—	—	—	—	—	—	—	12.8	-2.97	9.81	1.83	> -0.005	—	55.4
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.23	0.23
Total	1.12	1.09	0.33	2.20	0.01	0.01	0.51	0.52	0.01	0.13	0.14	14.6	691	706	2.06	0.03	0.28	766
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.27	0.25	0.21	1.98	< 0.005	< 0.005	0.47	0.47	< 0.005	0.12	0.12	—	494	494	0.02	0.02	0.81	501

Area	0.90	0.90	0.01	0.89	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	2.39	2.39	< 0.005	< 0.005	—	2.40
Energy	0.01	0.01	0.09	0.04	< 0.005	0.01	—	0.01	0.01	—	0.01	—	172	172	0.02	< 0.005	—	173
Water	—	—	—	—	—	—	—	—	—	—	—	1.85	3.70	5.55	0.19	< 0.005	—	11.7
Waste	—	—	—	—	—	—	—	—	—	—	—	12.8	-2.97	9.81	1.83	> -0.005	—	55.4
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.23	0.23
Total	1.19	1.15	0.31	2.91	0.01	0.01	0.47	0.48	0.01	0.12	0.13	14.6	669	684	2.06	0.03	1.05	744
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.05	0.05	0.04	0.36	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.02	—	81.8	81.8	< 0.005	< 0.005	0.13	83.0
Area	0.16	0.16	< 0.005	0.16	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	0.40	0.40	< 0.005	< 0.005	—	0.40
Energy	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	28.5	28.5	< 0.005	< 0.005	—	28.7
Water	—	—	—	—	—	—	—	—	—	—	—	0.31	0.61	0.92	0.03	< 0.005	—	1.93
Waste	—	—	—	—	—	—	—	—	—	—	—	2.12	-0.49	1.62	0.30	> -0.005	—	9.18
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04
Total	0.22	0.21	0.06	0.53	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.02	2.42	111	113	0.34	< 0.005	0.17	123

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.51	0.42	3.98	5.23	0.01	0.15	—	0.15	0.14	—	0.14	—	801	801	0.03	0.01	—	804
Demolition	—	—	—	—	—	—	0.72	0.72	—	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.39	4.39	< 0.005	< 0.005	—	4.40
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
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
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.53	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	118	118	< 0.005	< 0.005	0.48	120
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	0.15	0.02	1.36	0.79	0.01	0.02	0.24	0.25	0.01	0.06	0.07	—	927	927	0.12	0.15	1.95	976
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	—	0.61	0.61	< 0.005	< 0.005	< 0.005	0.61
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	—	5.08	5.08	< 0.005	< 0.005	< 0.005	5.34
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.10	0.10	< 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	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.84	0.84	< 0.005	< 0.005	< 0.005	0.88

3.2. Demolition (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	0.51	0.42	3.98	5.23	0.01	0.15	—	0.15	0.14	—	0.14	—	801	801	0.03	0.01	—	804
Demolition	—	—	—	—	—	—	0.72	0.72	—	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.39	4.39	< 0.005	< 0.005	—	4.40
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
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
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.53	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	118	118	< 0.005	< 0.005	0.48	120
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	0.15	0.02	1.36	0.79	0.01	0.02	0.24	0.25	0.01	0.06	0.07	—	927	927	0.12	0.15	1.95	976
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	—	0.61	0.61	< 0.005	< 0.005	< 0.005	0.61
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	—	5.08	5.08	< 0.005	< 0.005	< 0.005	5.34
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.10	0.10	< 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	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.84	0.84	< 0.005	< 0.005	< 0.005	0.88

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.56	0.47	4.16	5.57	0.01	0.21	—	0.21	0.20	—	0.20	—	859	859	0.03	0.01	—	862
Dust From Material Movement	—	—	—	—	—	—	0.21	0.21	—	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.71	4.71	< 0.005	< 0.005	—	4.72
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

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.78	0.78	< 0.005	< 0.005	—	0.78
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.21	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	47.2	47.2	< 0.005	< 0.005	0.19	48.0
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	0.08	0.01	0.70	0.41	< 0.005	0.01	0.12	0.13	0.01	0.03	0.04	—	482	482	0.06	0.08	1.02	508
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	—	0.24	0.24	< 0.005	< 0.005	< 0.005	0.25
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	—	2.64	2.64	< 0.005	< 0.005	< 0.005	2.78
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	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.44	0.44	< 0.005	< 0.005	< 0.005	0.46

3.4. 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.56	0.47	4.16	5.57	0.01	0.21	—	0.21	0.20	—	0.20	—	859	859	0.03	0.01	—	862
Dust From Material Movement	—	—	—	—	—	—	0.21	0.21	—	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.71	4.71	< 0.005	< 0.005	—	4.72
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.78	0.78	< 0.005	< 0.005	—	0.78

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.21	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	47.2	47.2	< 0.005	< 0.005	0.19	48.0
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	0.08	0.01	0.70	0.41	< 0.005	0.01	0.12	0.13	0.01	0.03	0.04	—	482	482	0.06	0.08	1.02	508
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	—	0.24	0.24	< 0.005	< 0.005	< 0.005	0.25
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	—	2.64	2.64	< 0.005	< 0.005	< 0.005	2.78
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	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.44	0.44	< 0.005	< 0.005	< 0.005	0.46

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.38	1.16	10.7	10.8	0.02	0.48	—	0.48	0.44	—	0.44	—	1,820	1,820	0.07	0.01	—	1,826
Dust From Material Movement	—	—	—	—	—	—	2.07	2.07	—	1.00	1.00	—	—	—	—	—	—	—
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	0.08	0.07	0.62	0.62	< 0.005	0.03	—	0.03	0.03	—	0.03	—	105	105	< 0.005	< 0.005	—	105
Dust From Material Movement	—	—	—	—	—	—	0.12	0.12	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	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	0.01	—	0.01	< 0.005	—	< 0.005	—	17.3	17.3	< 0.005	< 0.005	—	17.4
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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.42	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	94.5	94.5	< 0.005	< 0.005	0.38	95.9
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	0.03	< 0.005	0.27	0.16	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	187	187	0.02	0.03	0.39	197
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	—	5.09	5.09	< 0.005	< 0.005	0.01	5.16
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	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	10.8	10.8	< 0.005	< 0.005	0.01	11.3
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.84	0.84	< 0.005	< 0.005	< 0.005	0.85
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	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.78	1.78	< 0.005	< 0.005	< 0.005	1.88

3.6. 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.38	1.16	10.7	10.8	0.02	0.48	—	0.48	0.44	—	0.44	—	1,820	1,820	0.07	0.01	—	1,826
Dust From Material Movement	—	—	—	—	—	—	2.07	2.07	—	1.00	1.00	—	—	—	—	—	—	—
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	0.08	0.07	0.62	0.62	< 0.005	0.03	—	0.03	0.03	—	0.03	—	105	105	< 0.005	< 0.005	—	105
Dust From Material Movement	—	—	—	—	—	—	0.12	0.12	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	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	0.01	—	0.01	< 0.005	—	< 0.005	—	17.3	17.3	< 0.005	< 0.005	—	17.4
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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.42	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	94.5	94.5	< 0.005	< 0.005	0.38	95.9
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	0.03	< 0.005	0.27	0.16	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	187	187	0.02	0.03	0.39	197
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	—	5.09	5.09	< 0.005	< 0.005	0.01	5.16
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	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	10.8	10.8	< 0.005	< 0.005	0.01	11.3
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.84	0.84	< 0.005	< 0.005	< 0.005	0.85
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	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.78	1.78	< 0.005	< 0.005	< 0.005	1.88

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	0.56	0.47	4.59	5.98	0.01	0.20	—	0.20	0.18	—	0.18	—	1,160	1,160	0.05	0.01	—	1,164
Onsite truck	0.00	0.00	0.00	0.00	0.00	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	0.56	0.47	4.59	5.98	0.01	0.20	—	0.20	0.18	—	0.18	—	1,160	1,160	0.05	0.01	—	1,164
Onsite truck	0.00	0.00	0.00	0.00	0.00	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	0.15	0.13	1.26	1.64	< 0.005	0.05	—	0.05	0.05	—	0.05	—	318	318	0.01	< 0.005	—	319
Onsite truck	0.00	0.00	0.00	0.00	0.00	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	0.02	0.23	0.30	< 0.005	0.01	—	0.01	0.01	—	0.01	—	52.6	52.6	< 0.005	< 0.005	—	52.8
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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.06	0.97	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	218	218	< 0.005	0.01	0.88	221
Vendor	0.01	< 0.005	0.12	0.07	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	83.1	83.1	0.01	0.01	0.21	86.9
Hauling	0.00	0.00	0.00	0.00	0.00	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	0.08	0.08	0.86	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	203	203	0.01	0.01	0.02	206

Vendor	0.01	< 0.005	0.13	0.07	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	83.1	83.1	0.01	0.01	0.01	86.7
Hauling	0.00	0.00	0.00	0.00	0.00	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	—	55.8	55.8	< 0.005	< 0.005	0.10	56.7
Vendor	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	22.8	22.8	< 0.005	< 0.005	0.02	23.8
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	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.24	9.24	< 0.005	< 0.005	0.02	9.38
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.77	3.77	< 0.005	< 0.005	< 0.005	3.94
Hauling	0.00	0.00	0.00	0.00	0.00	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 (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	0.56	0.47	4.59	5.98	0.01	0.20	—	0.20	0.18	—	0.18	—	1,160	1,160	0.05	0.01	—	1,164
Onsite truck	0.00	0.00	0.00	0.00	0.00	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	0.56	0.47	4.59	5.98	0.01	0.20	—	0.20	0.18	—	0.18	—	1,160	1,160	0.05	0.01	—	1,164

Onsite truck	0.00	0.00	0.00	0.00	0.00	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	0.15	0.13	1.26	1.64	< 0.005	0.05	—	0.05	0.05	—	0.05	—	318	318	0.01	< 0.005	—	319
Onsite truck	0.00	0.00	0.00	0.00	0.00	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	0.02	0.23	0.30	< 0.005	0.01	—	0.01	0.01	—	0.01	—	52.6	52.6	< 0.005	< 0.005	—	52.8
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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.06	0.97	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	218	218	< 0.005	0.01	0.88	221
Vendor	0.01	< 0.005	0.12	0.07	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	83.1	83.1	0.01	0.01	0.21	86.9
Hauling	0.00	0.00	0.00	0.00	0.00	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	0.08	0.08	0.86	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	203	203	0.01	0.01	0.02	206
Vendor	0.01	< 0.005	0.13	0.07	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	83.1	83.1	0.01	0.01	0.01	86.7
Hauling	0.00	0.00	0.00	0.00	0.00	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	—	55.8	55.8	< 0.005	< 0.005	0.10	56.7
Vendor	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	22.8	22.8	< 0.005	< 0.005	0.02	23.8

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	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.24	9.24	< 0.005	< 0.005	0.02	9.38
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.77	3.77	< 0.005	< 0.005	< 0.005	3.94
Hauling	0.00	0.00	0.00	0.00	0.00	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	0.61	0.51	4.37	5.31	0.01	0.19	—	0.19	0.18	—	0.18	—	823	823	0.03	0.01	—	826
Paving	0.10	0.10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	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	0.06	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	11.3	11.3	< 0.005	< 0.005	—	11.3
Paving	< 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-Roa Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.87	1.87	< 0.005	< 0.005	—	1.87
Paving	< 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	0.66	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	154	154	< 0.005	0.01	0.02	156
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	—	2.12	2.12	< 0.005	< 0.005	< 0.005	2.15
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.35	0.35	< 0.005	< 0.005	< 0.005	0.36
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 (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	0.61	0.51	4.37	5.31	0.01	0.19	—	0.19	0.18	—	0.18	—	823	823	0.03	0.01	—	826
Paving	0.10	0.10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	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	0.06	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	11.3	11.3	< 0.005	< 0.005	—	11.3
Paving	< 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	—	1.87	1.87	< 0.005	< 0.005	—	1.87
Paving	< 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	0.66	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	154	154	< 0.005	0.01	0.02	156
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	—	2.12	2.12	< 0.005	< 0.005	< 0.005	2.15
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.35	0.35	< 0.005	< 0.005	< 0.005	0.36
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 Coating	91.2	91.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
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	1.25	1.25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	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	0.23	0.23	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.02	0.02	0.02	0.17	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	40.6	40.6	< 0.005	< 0.005	< 0.005	41.1
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
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	—	0.56	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
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	0.09
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

3.12. Architectural Coating (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	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	60.8	60.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa 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	0.83	0.83	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	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	0.15	0.15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	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	0.02	0.02	0.02	0.17	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	40.6	40.6	< 0.005	< 0.005	< 0.005	41.1
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
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	—	0.56	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
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	0.09
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

4.1. 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	0.69	0.64	0.45	5.14	0.01	0.01	1.16	1.16	0.01	0.29	0.30	—	1,253	1,253	0.05	0.04	4.53	1,273
Total	0.69	0.64	0.45	5.14	0.01	0.01	1.16	1.16	0.01	0.29	0.30	—	1,253	1,253	0.05	0.04	4.53	1,273
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.67	0.61	0.54	4.95	0.01	0.01	1.16	1.16	0.01	0.29	0.30	—	1,185	1,185	0.06	0.05	0.12	1,201
Total	0.67	0.61	0.54	4.95	0.01	0.01	1.16	1.16	0.01	0.29	0.30	—	1,185	1,185	0.06	0.05	0.12	1,201
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.11	0.11	0.09	0.83	< 0.005	< 0.005	0.20	0.20	< 0.005	0.05	0.05	—	187	187	0.01	0.01	0.31	190
Total	0.11	0.11	0.09	0.83	< 0.005	< 0.005	0.20	0.20	< 0.005	0.05	0.05	—	187	187	0.01	0.01	0.31	190

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	0.30	0.28	0.20	2.25	0.01	< 0.005	0.51	0.51	< 0.005	0.13	0.13	—	548	548	0.02	0.02	1.98	556
Total	0.30	0.28	0.20	2.25	0.01	< 0.005	0.51	0.51	< 0.005	0.13	0.13	—	548	548	0.02	0.02	1.98	556
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.29	0.27	0.23	2.16	0.01	< 0.005	0.51	0.51	< 0.005	0.13	0.13	—	518	518	0.03	0.02	0.05	525
Total	0.29	0.27	0.23	2.16	0.01	< 0.005	0.51	0.51	< 0.005	0.13	0.13	—	518	518	0.03	0.02	0.05	525
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.05	0.05	0.04	0.36	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.02	—	81.8	81.8	< 0.005	< 0.005	0.13	83.0
Total	0.05	0.05	0.04	0.36	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.02	—	81.8	81.8	< 0.005	< 0.005	0.13	83.0

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Apartme Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	57.1	57.1	0.01	< 0.005	—	57.7
Total	—	—	—	—	—	—	—	—	—	—	—	—	57.1	57.1	0.01	< 0.005	—	57.7
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartme nts Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	57.1	57.1	0.01	< 0.005	—	57.7
Total	—	—	—	—	—	—	—	—	—	—	—	—	57.1	57.1	0.01	< 0.005	—	57.7
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartme nts Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	9.45	9.45	< 0.005	< 0.005	—	9.55
Total	—	—	—	—	—	—	—	—	—	—	—	—	9.45	9.45	< 0.005	< 0.005	—	9.55

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartme nts Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	57.1	57.1	0.01	< 0.005	—	57.7
Total	—	—	—	—	—	—	—	—	—	—	—	—	57.1	57.1	0.01	< 0.005	—	57.7
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartme nts Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	57.1	57.1	0.01	< 0.005	—	57.7
Total	—	—	—	—	—	—	—	—	—	—	—	—	57.1	57.1	0.01	< 0.005	—	57.7

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	9.45	9.45	< 0.005	< 0.005	—	9.55
Total	—	—	—	—	—	—	—	—	—	—	—	—	9.45	9.45	< 0.005	< 0.005	—	9.55

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 Mid Rise	0.01	0.01	0.09	0.04	< 0.005	0.01	—	0.01	0.01	—	0.01	—	115	115	0.01	< 0.005	—	116
Total	0.01	0.01	0.09	0.04	< 0.005	0.01	—	0.01	0.01	—	0.01	—	115	115	0.01	< 0.005	—	116
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.01	0.01	0.09	0.04	< 0.005	0.01	—	0.01	0.01	—	0.01	—	115	115	0.01	< 0.005	—	116
Total	0.01	0.01	0.09	0.04	< 0.005	0.01	—	0.01	0.01	—	0.01	—	115	115	0.01	< 0.005	—	116
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	19.1	19.1	< 0.005	< 0.005	—	19.1
Total	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	19.1	19.1	< 0.005	< 0.005	—	19.1

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	0.01	0.01	0.09	0.04	< 0.005	0.01	—	0.01	0.01	—	0.01	—	115	115	0.01	< 0.005	—	116
Total	0.01	0.01	0.09	0.04	< 0.005	0.01	—	0.01	0.01	—	0.01	—	115	115	0.01	< 0.005	—	116
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.01	0.01	0.09	0.04	< 0.005	0.01	—	0.01	0.01	—	0.01	—	115	115	0.01	< 0.005	—	116
Total	0.01	0.01	0.09	0.04	< 0.005	0.01	—	0.01	0.01	—	0.01	—	115	115	0.01	< 0.005	—	116
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	19.1	19.1	< 0.005	< 0.005	—	19.1
Total	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	19.1	19.1	< 0.005	< 0.005	—	19.1

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	0.69	0.69	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.12	0.12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.17	0.16	0.02	1.81	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.85	4.85	< 0.005	< 0.005	—	4.87
Total	0.99	0.98	0.02	1.81	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	4.85	4.85	< 0.005	< 0.005	—	4.87
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	0.69	0.69	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.12	0.12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.82	0.82	0.00	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	0.13	0.13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.02	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Landscape	0.02	0.01	< 0.005	0.16	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.40	0.40	< 0.005	< 0.005	—	0.40
Total	0.16	0.16	< 0.005	0.16	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	0.40	0.40	< 0.005	< 0.005	—	0.40

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	0.69	0.69	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.12	0.12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.17	0.16	0.02	1.81	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.85	4.85	< 0.005	< 0.005	—	4.87
Total	0.99	0.98	0.02	1.81	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	4.85	4.85	< 0.005	< 0.005	—	4.87
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	0.69	0.69	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.12	0.12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	0.82	0.82	0.00	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	0.13	0.13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.02	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.02	0.01	< 0.005	0.16	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.40	0.40	< 0.005	< 0.005	—	0.40
Total	0.16	0.16	< 0.005	0.16	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	0.40	0.40	< 0.005	< 0.005	—	0.40

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	—	—	—	—	—	—	—	—	—	—	—	1.85	3.70	5.55	0.19	< 0.005	—	11.7
Total	—	—	—	—	—	—	—	—	—	—	—	1.85	3.70	5.55	0.19	< 0.005	—	11.7
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	1.85	3.70	5.55	0.19	< 0.005	—	11.7
Total	—	—	—	—	—	—	—	—	—	—	—	1.85	3.70	5.55	0.19	< 0.005	—	11.7
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	0.31	0.61	0.92	0.03	< 0.005	—	1.93
Total	—	—	—	—	—	—	—	—	—	—	—	0.31	0.61	0.92	0.03	< 0.005	—	1.93

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	—	—	—	—	—	—	—	—	—	—	—	1.85	3.70	5.55	0.19	< 0.005	—	11.7
Total	—	—	—	—	—	—	—	—	—	—	—	1.85	3.70	5.55	0.19	< 0.005	—	11.7
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	1.85	3.70	5.55	0.19	< 0.005	—	11.7
Total	—	—	—	—	—	—	—	—	—	—	—	1.85	3.70	5.55	0.19	< 0.005	—	11.7
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	0.31	0.61	0.92	0.03	< 0.005	—	1.93
Total	—	—	—	—	—	—	—	—	—	—	—	0.31	0.61	0.92	0.03	< 0.005	—	1.93

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	—	—	—	—	—	—	—	—	—	—	—	12.8	-2.97	9.81	1.83	> -0.005	—	55.4
Total	—	—	—	—	—	—	—	—	—	—	—	12.8	-2.97	9.81	1.83	> -0.005	—	55.4
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	12.8	-2.97	9.81	1.83	> -0.005	—	55.4
Total	—	—	—	—	—	—	—	—	—	—	—	12.8	-2.97	9.81	1.83	> -0.005	—	55.4
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	2.12	-0.49	1.62	0.30	> -0.005	—	9.18
Total	—	—	—	—	—	—	—	—	—	—	—	2.12	-0.49	1.62	0.30	> -0.005	—	9.18

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Apartme Mid Rise	—	—	—	—	—	—	—	—	—	—	—	12.8	-2.97	9.81	1.83	> -0.005	—	55.4
Total	—	—	—	—	—	—	—	—	—	—	—	12.8	-2.97	9.81	1.83	> -0.005	—	55.4
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartme nts Mid Rise	—	—	—	—	—	—	—	—	—	—	—	12.8	-2.97	9.81	1.83	> -0.005	—	55.4
Total	—	—	—	—	—	—	—	—	—	—	—	12.8	-2.97	9.81	1.83	> -0.005	—	55.4
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartme nts Mid Rise	—	—	—	—	—	—	—	—	—	—	—	2.12	-0.49	1.62	0.30	> -0.005	—	9.18
Total	—	—	—	—	—	—	—	—	—	—	—	2.12	-0.49	1.62	0.30	> -0.005	—	9.18

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartme nts Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.23	0.23
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.23	0.23
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.23	0.23
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.23	0.23
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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.23	0.23
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.23	0.23
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.23	0.23
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.23	0.23
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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Demolition	Demolition	7/1/2025	7/2/2025	5.00	2.00	—
Site Preparation	Site Preparation	7/3/2025	7/4/2025	5.00	2.00	—
Grading	Grading	7/18/2025	8/16/2025	5.00	21.0	—
Building Construction	Building Construction	7/21/2025	12/8/2025	5.00	100	—
Paving	Paving	12/9/2025	12/16/2025	5.00	5.00	—
Architectural Coating	Architectural Coating	12/17/2025	12/24/2025	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
Demolition	Tractors/Loaders/Backhoes	Diesel	Average	2.00	6.00	84.0	0.37
Demolition	Rubber Tired Dozers	Diesel	Average	1.00	1.00	367	0.40
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	4.00	33.0	0.73
Demolition	Excavators	Diesel	Average	1.00	4.00	36.0	0.38
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
Grading	Graders	Diesel	Average	1.00	6.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	6.00	367	0.40
Grading	Tractors/Loaders/Backhoes	Diesel	Average	1.00	7.00	84.0	0.37
Grading	Excavators	Diesel	Average	1.00	6.00	36.0	0.38
Building Construction	Cranes	Diesel	Average	1.00	4.00	367	0.29
Building Construction	Forklifts	Diesel	Average	2.00	6.00	82.0	0.20
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	2.00	6.00	84.0	0.37
Paving	Tractors/Loaders/Backhoes	Diesel	Average	1.00	7.00	84.0	0.37
Paving	Cement and Mortar Mixers	Diesel	Average	4.00	6.00	10.0	0.56
Paving	Pavers	Diesel	Average	1.00	7.00	81.0	0.42
Paving	Rollers	Diesel	Average	1.00	7.00	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
Demolition	Tractors/Loaders/Backhoes	Diesel	Average	2.00	6.00	84.0	0.37
Demolition	Rubber Tired Dozers	Diesel	Average	1.00	1.00	367	0.40
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	4.00	33.0	0.73
Demolition	Excavators	Diesel	Average	1.00	4.00	36.0	0.38
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
Grading	Graders	Diesel	Average	1.00	6.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	6.00	367	0.40
Grading	Tractors/Loaders/Backhoes	Diesel	Average	1.00	7.00	84.0	0.37
Grading	Excavators	Diesel	Average	1.00	6.00	36.0	0.38
Building Construction	Cranes	Diesel	Average	1.00	4.00	367	0.29
Building Construction	Forklifts	Diesel	Average	2.00	6.00	82.0	0.20
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	2.00	6.00	84.0	0.37
Paving	Tractors/Loaders/Backhoes	Diesel	Average	1.00	7.00	84.0	0.37
Paving	Cement and Mortar Mixers	Diesel	Average	4.00	6.00	10.0	0.56
Paving	Pavers	Diesel	Average	1.00	7.00	81.0	0.42
Paving	Rollers	Diesel	Average	1.00	7.00	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	12.5	12.8	LDA,LDT1,LDT2
Demolition	Vendor	—	7.20	HHDT,MHDT
Demolition	Hauling	12.5	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	5.00	12.8	LDA,LDT1,LDT2
Site Preparation	Vendor	—	7.20	HHDT,MHDT
Site Preparation	Hauling	6.50	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	10.0	12.8	LDA,LDT1,LDT2
Grading	Vendor	—	7.20	HHDT,MHDT
Grading	Hauling	2.52	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	23.0	12.8	LDA,LDT1,LDT2
Building Construction	Vendor	3.42	7.20	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	17.5	12.8	LDA,LDT1,LDT2
Paving	Vendor	—	7.20	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—

Architectural Coating	Worker	4.61	12.8	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	7.20	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
Demolition	—	—	—	—
Demolition	Worker	12.5	12.8	LDA,LDT1,LDT2
Demolition	Vendor	—	7.20	HHDT,MHDT
Demolition	Hauling	12.5	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	5.00	12.8	LDA,LDT1,LDT2
Site Preparation	Vendor	—	7.20	HHDT,MHDT
Site Preparation	Hauling	6.50	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	10.0	12.8	LDA,LDT1,LDT2
Grading	Vendor	—	7.20	HHDT,MHDT
Grading	Hauling	2.52	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	23.0	12.8	LDA,LDT1,LDT2
Building Construction	Vendor	3.42	7.20	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—

Paving	Worker	17.5	12.8	LDA,LDT1,LDT2
Paving	Vendor	—	7.20	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	4.61	12.8	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	7.20	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	65,565	21,855	0.00	0.00	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (Ton of Debris)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	100	—
Site Preparation	0.00	100	1.00	0.00	—
Grading	—	420	15.8	0.00	—
Paving	0.00	0.00	0.00	0.00	0.25

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	0.25	80%

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	204	0.03	< 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	174	157	131	60,402	1,644	1,483	1,236	570,276

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	76.1	68.7	57.2	26,410	719	649	540	249,345

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	32
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	32
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)
65565.45	21,855	0.00	0.00	—

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

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	102,170	204	0.0330	0.0040	359,395

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	102,170	204	0.0330	0.0040	359,395

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Apartments Mid Rise	967,104	72,037

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Apartments Mid Rise	967,104	72,037

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Apartments Mid Rise	23.7	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Apartments Mid Rise	23.7	—

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	10.3	annual days of extreme heat
Extreme Precipitation	13.1	annual days with precipitation above 20 mm
Sea Level Rise	0.12	meters of inundation depth
Wildfire	6.15	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	N/A	N/A	N/A	N/A
Extreme Precipitation	4	0	0	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A

Flooding	0	0	0	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	2	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	N/A	N/A	N/A	N/A
Extreme Precipitation	4	1	1	4
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	2	1	3

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	6.38
AQ-PM	18.2
AQ-DPM	16.2
Drinking Water	7.43
Lead Risk Housing	47.8
Pesticides	0.00
Toxic Releases	47.9
Traffic	45.4
Effect Indicators	—
CleanUp Sites	0.00
Groundwater	35.0
Haz Waste Facilities/Generators	0.00
Impaired Water Bodies	83.0
Solid Waste	63.7
Sensitive Population	—
Asthma	2.95
Cardio-vascular	2.34
Low Birth Weights	43.5
Socioeconomic Factor Indicators	—
Education	10.3
Housing	11.6
Linguistic	12.3
Poverty	9.27
Unemployment	15.8

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	97.60041062
Employed	73.95098165
Median HI	95.27781342
Education	—
Bachelor's or higher	98.04953163
High school enrollment	100
Preschool enrollment	95.7141024
Transportation	—
Auto Access	68.11240857
Active commuting	76.82535609
Social	—
2-parent households	55.79366098
Voting	99.71769537
Neighborhood	—
Alcohol availability	48.31258822
Park access	81.35506224
Retail density	29.74464263
Supermarket access	44.52713974
Tree canopy	99.17875016
Housing	—
Homeownership	77.53111767
Housing habitability	73.10406775
Low-inc homeowner severe housing cost burden	37.86731682
Low-inc renter severe housing cost burden	53.0347748

Uncrowded housing	91.95431798
Health Outcomes	—
Insured adults	95.29064545
Arthritis	0.0
Asthma ER Admissions	90.2
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	94.8
Cognitively Disabled	78.9
Physically Disabled	73.0
Heart Attack ER Admissions	90.2
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	52.5
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	55.6
SLR Inundation Area	75.0

Children	59.5
Elderly	26.2
English Speaking	87.8
Foreign-born	9.7
Outdoor Workers	80.5
Climate Change Adaptive Capacity	—
Impervious Surface Cover	90.3
Traffic Density	28.9
Traffic Access	57.1
Other Indices	—
Hardship	3.7
Other Decision Support	—
2016 Voting	99.7

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	3.00
Healthy Places Index Score for Project Location (b)	99.0
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	Changes per project description
Construction: Construction Phases	Per project description
Construction: Off-Road Equipment	Grading described as "intermittent" in Construction Management Plan
Construction: Paving	Per project plans
Operations: Hearths	Per project description
Operations: Solid Waste	Redwood landfill has gas energy recovery system in place.