Ontario International Airport Connector Project

ONTCONNECTOR



Draft Environmental Impact Report

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sbeta

Prepared for:

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EXECUTIVE SUMMARY

This section of the Draft Environmental Impact Report (EIR) summarizes the characteristics of the proposed Ontario International Airport (ONT) Connector Project (Project), environmental impacts, mitigation measures, and residual impacts with the proposed Project.

INTRODUCTION

This Draft EIR is intended to provide decision-makers and the public with information that enables them to comprehensively consider the environmental consequences of the proposed action. This Draft EIR identifies significant or potentially significant environmental impacts, as well as ways in which those impacts can be reduced to less than significant levels, through the implementation of mitigation measures (MMs), or through the implementation of alternatives to the proposed Project.

SUMMARY OF PROPOSED PROJECT

San Bernardino County Transportation Authority (SBCTA) and the Federal Transit Administration (FTA) are sponsoring the proposed Project to provide a direct airport connection between ONT and the Cucamonga Metrolink Station. SBCTA is the Lead Agency under the California Environmental Quality Act (CEQA), and the FTA is the Lead Agency under the National Environmental Policy Act (NEPA). Partner agencies include Ontario International Airport Authority (OIAA), Omnitrans, the City of Rancho Cucamonga, and the City of Ontario.

The proposed Project is located in the City of Rancho Cucamonga and in the City of Ontario within San Bernardino County. The proposed Project alignment is a reversed L-shaped alignment consisting of the Cucamonga Metrolink Station, Milliken Avenue, East Airport Drive, and ONT in the Project area. Figure ES-1 illustrates the proposed Project area, which is described in Chapter 2.

The proposed Project would construct an underground 4.2-mile-long single tunnel (24-foot inner-diameter, bidirectional tunnel) to provide a direct connection between Cucamonga Metrolink Station and ONT. As shown in Figure ES-1, the northern segment of the proposed Project site is located within the Cucamonga Metrolink Station and its parking lots. From the Cucamonga Metrolink Station parking lots, the tunnel alignment will connect to Milliken Avenue and travel south under the existing roadway. At Ontario Mills Parkway, the tunnel alignment will shift to the western side of Milliken Avenue to avoid the Interstate 10 (I-10) overcrossing. The alignment will continue west of the I-10 overcrossing structure and travel south under I-10. The tunnel alignment will continue to run south; at Guasti Road, the alignment will curve southwest to connect to East Airport Drive. At East Airport Drive, the tunnel alignment will continue to travel west toward the proposed at-grade station at ONT Terminal 4 before reaching the proposed at-grade ONT Terminal 2 station in the City of Ontario.

Three stations would be constructed to serve the Cucamonga Station, ONT Terminal 2, and ONT Terminal 4. One maintenance and storage facility (MSF) would be located adjacent to the Cucamonga Metrolink Station to store, clean and maintain vehicles. One access vent shaft would be constructed to provide a means of emergency passenger egress and first responder access and as ventilation to support tunnel operations. During operation, the proposed Project would utilize autonomous electric vehicles that would transport passengers from each station on-demand. The autonomous electric vehicles would be grouped and queued at their origin station and depart toward the destination station once boarded with passengers.

CLASSIFICATION OF ENVIRONMENTAL IMPACTS

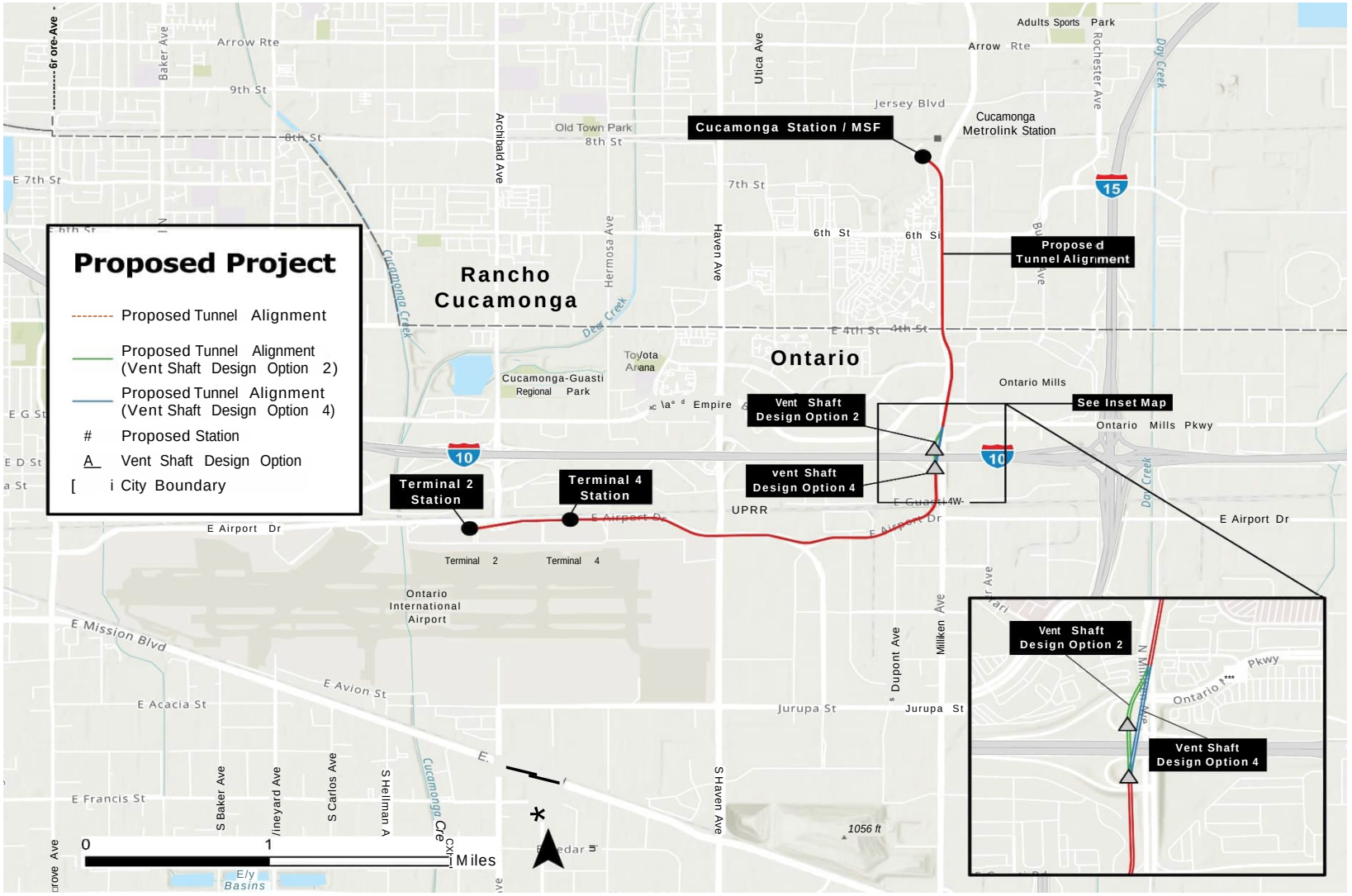
Under CEQA, a "significant impact" represents a substantial or potentially substantial adverse physical change to the environment. In evaluating specific effects, this Draft EIR identifies thresholds of significance for each effect, evaluates the potential environmental change associated with each effect, and then characterizes the effects as impacts in the following categories:

- Less Than Significant—Results in no substantial adverse change to existing environmental conditions.
- Potentially Significant—Constitutes a substantial adverse change to existing environmental conditions that can be mitigated to less than significant levels by implementation of proposed potentially feasible mitigation measures or by the selection of an environmentally superior project alternative.
- Significant and Unavoidable—Constitutes a substantial adverse change to existing environmental conditions that cannot be fully mitigated by implementation of all feasible mitigation measures.

SIGNIFICANT AND UNAVOIDABLE IMPACTS

The following significant, unavoidable adverse impacts would result from project implementation. A detailed discussion of these impacts can be found in Section 4 (Environmental Impact Analysis) of this document.

Figure ES-1 Proposed Project Site



Source: AECOM 2024

- Air Quality
    - Cumulative—MM-AQ-1 would be implemented during construction to address potential impacts for particulate matter with diameter of 10 microns or less (PM_{10}) and particulate matter with diameter of 2.5 microns or less ($PM_{2.5}$) fugitive emissions and implement dust control measures to reduce impacts. However, the construction of the proposed Project would include PM_{10} and $PM_{2.5}$ emissions, and development of the cumulative projects would, in combination with the proposed Project, exceed the same significance thresholds. Therefore, the proposed Project's contribution would be cumulatively considerable, and the cumulative impact would be significant and unavoidable.
- Paleontological Resources
    - Project Specific and Cumulative—Although implementation of MM-PAL-1, MM-PAL-2, MM-PAL-3 and MM-PAL-4 may allow for some recovery of small fossils and some fossil material, if safe access to spoils is available, the tunnel boring machine (TBM) used to excavate the tunnel prevents access to the rock face, and produces fragmented material, which precludes the recovery of larger fossils, and limits the amount of contextual information that may be collected for scientific purposes. Additionally, because the locations of potential paleontological resources are unknown, movement of the Project to avoid paleontologically sensitive geologic units, and thus avoid impacts on paleontological resources, is not a viable approach for mitigation. Because mitigation or avoidance is not feasible and the impact must occur for enhancement to take place, impacts to scientifically significant, non-renewable paleontological resources during boring of the tunnel would remain significant and unavoidable.

ALTERNATIVES

As required by CEQA Guidelines Section 15126.6(a) and recent court cases, an EIR must:

> *Describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives.*

Further, CEQA Guidelines Section 15126.6(b) states:

> *The discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives or would be more costly.*

Alternatives evaluated in this Draft EIR include the following:

- No Project Alternative: No Project/No Action Alternative

- Proposed Project: Project/Action Alternative

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Pursuant to CEQA Guidelines Section 15123(b)(1), Table ES-1 contains a summary of environmental impacts associated with the proposed Project, mitigation measures that would reduce or avoid those effects, and the level of significance of the impacts following the implementation of mitigation measures.

Table ES-1: Summary of Environmental Effects and Proposed Mitigation Measures

Environmental Topic	Impact(s)	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
Aesthetics and Visual Quality	Have a substantial adverse effect on a scenic vista?	LTS	No mitigation is required.	LTS
Aesthetics and Visual Quality	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	NI	No mitigation is required.	NI
Aesthetics and Visual Quality	If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	LTS	No mitigation is required.	LTS
Aesthetics and Visual Quality	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	LTS	No mitigation is required.	LTS
Agricultural and Forestry Resources	Would the project 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?	NI	No mitigation is required.	NI
Agricultural and Forestry Resources	Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?	NI	No mitigation is required.	NI
Agricultural and Forestry Resources	Would the project 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	NI	No mitigation is required.	NI

Environmental Topic	Impact(s)	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
	zoned Timberland Production (as defined by Government Code Section 51104[g])?			
Agricultural and Forestry Resources	Would the project result in the loss of forest land or conversion of forest land to non-forest use?	NI	No mitigation is required.	NI
Agricultural and Forestry Resources	Would the project 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?	NI	No mitigation is required.	NI
Air Quality	Conflict with or obstruct implementation of the applicable air quality plan?	LTS	No mitigation is required.	LTS
Air Quality	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under and applicable federal or state ambient air quality standard?	PS	MM-AQ-1 Implement Basic Construction Emission Control Practices. The following construction measures to limit and reduce air emissions from the construction sites will be implemented: A. Control fugitive dust as required by District Rule 403 and enforced by District staff. B. Water all exposed surfaces two times daily. Exposed surfaces include, but are not limited to, soil piles, graded areas, unpaved parking areas, staging areas, and access roads. C. All haul trucks transporting soil, sand, or other loose material off site shall be covered. D. Cover or maintain at least two feet of free board space on haul trucks transporting soil, sand, or other loose material on the site. Any haul trucks that would be traveling along freeways or major roadways should be covered. E. Use wet power vacuum street sweepers to remove any visible trackout mud or dirt onto adjacent public roads at least once a day. Use of dry power sweeping is prohibited.	SU for construction. LTS for operation.

Environmental Topic	Impact(s)	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
			F. Limit vehicle speeds on unpaved roads to 15 miles per hour (mph). G. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. In addition, building pads shall be laid as soon as possible after grading, unless seeding or soil binders are used. H. Idling times shall be minimized either by shutting equipment off when not in use or by reducing the maximum idling time to 5 minutes (as required by California airborne toxics control measure Title 13, Section 2485 of the California Code of Regulations). Provide clear signage that posts this requirement for workers at the entrances to the site. I. Provide current certificate(s) of compliance for California Air Resources Board (CARB)'s In-Use Off-Road Diesel-Fueled Fleets Regulation [California Code of Regulations, Title 13, Sections 2449 and 2449.1]. J. Maintained all construction equipment in proper working condition according to manufacturer's specifications. The equipment must be checked by a certified mechanic and determined to be running in proper condition prior to operation.	
Air Quality	Expose sensitive receptors to substantial pollutant concentrations?	LTS	No mitigation is required.	LTS
Air Quality	Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	LTS	No mitigation is required.	LTS
Biological Resources	Have a substantial adverse effect either directly or through habitat modifications, on any species identified as a candidate, sensitive,	PS	MM-BIO-1 Nesting habitat for protected or sensitive avian species: 1. Vegetation removal and construction shall occur between September 1 and January 31 whenever feasible.	LTS

Environmental Topic	Impact(s)	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
	or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?		2. Prior to any construction or vegetation removal between February 15 and August 31, a nesting survey shall be conducted by a qualified biologist of all habitats within 500 feet of the construction area. Surveys shall be conducted no less than 3 days and no more than 7 days prior to commencement of construction activities and surveys will be conducted in accordance with California Department of Fish and Wildlife protocol as applicable. If no active nests are identified on or within 500 feet of the construction site, no further mitigation is necessary. A copy of the pre-construction survey shall be submitted to the lead agency San Bernardino Transportation Authority, as well as the California Department of Fish and Wildlife and the United States Fish and Wildlife Service. If an active nest of a Migratory Bird Treaty Act protected species is identified onsite (per established thresholds) the qualified biologist will establish the appropriate exclusionary buffer based on the species and the no-work buffer shall be maintained between the nest and construction activity. This buffer can be reduced in consultation with California Department of Fish and Wildlife and/or United States Fish and Wildlife Service, if applicable. 3. Completion of the nesting cycle shall be determined by qualified ornithologist or biologist. MM-BIO-2 Burrowing Owl Nesting Habitat: 1. Prior to construction activity, focused pre-construction surveys shall be conducted for burrowing owls where suitable habitat is present within the construction areas. Surveys shall be conducted no less than 14 days prior to commencement of construction activities and surveys shall be conducted in accordance with California Department of Fish and Wildlife burrowing owl survey protocol. 2. If no occupied burrows are found in the survey area, a letter report documenting survey methods and findings shall be submitted to the	

Environmental Topic	Impact(s)	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
			City of Rancho Cucamonga and/or City of Ontario, as well as the California Department of Fish and Wildlife for review and approval, and no further mitigation is necessary. 3. If occupied burrows are found, impacts on the burrows shall be avoided by providing a buffer of 165 feet during the non-breeding season (September 1 through February 14) or 250 feet during the breeding season (February 15 through August 15). The size of the buffer area may be adjusted if a qualified biologist and California Department of Fish and Wildlife determine it would not be likely to have adverse effects on the owls. No project activity shall commence within the buffer area until a qualified biologist confirms that the burrow is no longer occupied. If the burrow is occupied by a nesting pair, a minimum of 7.5 acres of foraging habitat contiguous to the burrow shall be maintained until the breeding season is over. 4. If disturbance of occupied burrows is unavoidable, on-site passive relocation techniques approved by California Department of Fish and Wildlife shall be used to encourage owls to move to alternative burrows outside of the impact area. However, no occupied burrows shall be disturbed during the nesting season unless a qualified biologist verifies through non-invasive methods that juveniles from the occupied burrows are foraging independently and are capable of independent survival. Mitigation for foraging habitat for relocated pairs shall follow guidelines provided in the California Burrowing Owl Consortium's Burrowing Owl Survey Protocol and Mitigation Guidelines, which ranges from 7.5 to 19.5 acres per pair. MM-BIO-3 Bat Nesting Habitat: 1. During the bat maternity season (April 1–August 31), a qualified biologist shall perform a nighttime acoustic and emergence survey at the Union Pacific Railroad bridge over Milliken Avenue to	

Environmental Topic	Impact(s)	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
			conclusively determine whether a maternity colony is present and identify any bat species present. This survey shall be performed at least one full calendar year before the start of construction to allow adequate time for mitigation planning if a maternity colony is found. If a maternity colony is found at the Union Pacific Railroad bridge over Milliken Avenue, a California Department of Fish and Wildlife approved bat biologist will coordinate with the project team and California Department of Fish and Wildlife to determine appropriate species-specific minimization measures because different species respond differently to various construction activities. Upon approval by California Department of Fish and Wildlife, the species-specific minimization measures shall be implemented and developed in consultation with California Department of Fish and Wildlife. 2. To the greatest extent feasible, tree trimming/removal activities shall be performed outside the bat maternity season (April 1–August 31) to avoid direct impacts to nonvolant (flightless) young that may roost in trees within the study area. This period also coincides with the bird nesting season of March 15–September 15. 3. If night work (i.e., between dusk and dawn) is anticipated within 100 feet of structures where bat roosting is confirmed, night lighting shall be used only in areas of active work and focused on the direct area(s) of work and away from any roost features to the greatest extent practicable.	
Biological Resources	Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	LTS	No mitigation is required.	LTS

Environmental Topic	Impact(s)	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
Biological Resources	Would the project have a substantially 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?	LTS	No mitigation is required.	LTS
Biological Resources	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?	PS	MM-BIO-1 also applies to this impact.	LTS
Biological Resources	Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	LTS	No mitigation is required.	LTS
Biological Resources	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?	NI	No mitigation is required.	NI
Cultural Resources	Would the project cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	LTS during construction. NI during operation.	No mitigation is required.	LTS during construction. NI during operation.
Cultural Resources	Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	PS	MM-CLT-1 During project construction, limited archaeological monitoring (periodic spot-checks) of excavation activities between the east and west ends of East Terminal Way shall be conducted by a	LTS

Environmental Topic	Impact(s)	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
			Registered Archaeologist/Registered Professional Archaeologist. In the event previously undocumented archaeological resources are identified during earthmoving activities, all work in the immediate vicinity of the find (within a 60-foot buffer) shall cease until the nature and significance of the find can be assessed by the consulting tribes and/or by a Registered Archaeologist/ Registered Professional Archaeologist meeting Secretary of Interior standards. Work on the other portions of the project outside of the buffered area may continue during this assessment period. Additionally, the Yuhaaviatam of San Manuel Nation Cultural Resources Department shall be contacted regarding any pre-contact and/or historic era finds and be provided information after the archaeologist makes his/her initial assessment of the nature of the find, so as to provide Tribal input with regards to significance and treatment. If significant pre-contact and/or historic-era cultural resources, as defined by CEQA (as amended, 2015), are discovered and avoidance cannot be ensured, the archaeologist shall develop a Monitoring and Treatment Plan, the drafts of which shall be provided to Yuhaaviatam of San Manuel Nation Cultural Resources Department for review and comment. The archaeologist shall monitor the remainder of the Project and implement the Plan accordingly.	
Cultural Resources	Would the project disturb any human remains, including those interred outside of formal cemeteries?	LTS during construction. NI during operation.	MM-CLT-2 If human remains or funerary objects are encountered during any activities associated with the project, work in the immediate vicinity (within a 100-foot buffer of the find) shall cease and the County Coroner shall be contacted pursuant to State Health and Safety Code §7050.5 and that code enforced for the duration of the project. No further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to California Public Resources Code Section 5097.98. The County Coroner shall be notified of the find immediately. If the remains are determined to be Native American, the County Coroner shall notify the Native American Heritage	LTS during construction. NI during operation.

Environmental Topic	Impact(s)	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
			Commission, which will determine and notify a Most Likely Descendant. With the permission of the landowner or his/her authorized representative, the Most Likely Descendant may inspect the site of the discovery. The Most Likely Descendant shall complete the inspection and make recommendations or preferences for treatment within 48 hours of being granted access to the site.	
Energy	Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	LTS	No mitigation is required.	LTS
Energy	Conflict with obstruct a state or local plan for renewable energy or energy efficiency?	LTS	No mitigation is required.	LTS
Geology, Soils, Seismicity, and Paleontological Resources	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? Refer to Division of Mines and Geology Special Publication 42.	NI	No mitigation is required.	NI
Geology, Soils, Seismicity, and Paleontological Resources	Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking and/or seismic-related ground failure, including liquefaction?	PS	MM-GEO-1 San Bernardino County Transportation Authority shall demonstrate to the City of Rancho Cucamonga and the City of Ontario that the design of the Project complies with all applicable provisions of the California Building Code with respect to seismic design for Zone 4. Compliance would include the following: • The use of California Building Code Seismic Zone 4 Standards as the minimum seismic-resistant design for all proposed facilities.	LTS

Environmental Topic	Impact(s)	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
			• Additional seismic-resistant earthwork and construction design criteria (i.e., for the construction of the tunnel approximately up to 70 feet underground and etc.), based on the site-specific recommendations of a California Certified Engineering Geologist in cooperation with the Project's California-registered geotechnical and structural engineers. • An engineering analysis that demonstrates satisfactory performance of alluvium or fill where either forms part or all of the support. • An analysis of soil conditions and appropriate remediation (compaction, removal/replacement, etc.) prior to using any expansive soils for foundation support.	
Geology, Soils, Seismicity, and Paleontological Resources	Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?	PS	MM-GEO-2 Where excavations are made for the construction of the 4.2-mile tunnel approximately up to 70 feet underground, the construction contractor shall either shore excavation walls, with shoring designed to withstand additional loads, or flatten or "lay back" the excavation walls to a shallower gradient. Excavation spoils shall not be placed immediately adjacent to excavation walls unless the excavation is shored to support the added load.	LTS
Geology, Soils, Seismicity, and Paleontological Resources	Project result in substantial soil erosion or the loss of topsoil?	LTS	No mitigation required.	LTS
Geology, Soils, Seismicity, and Paleontological Resources	Be located on a 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?	PS	MM-GEO-3 A California-licensed Civil Engineer (Geotechnical) shall prepare and submit to the San Bernardino Transportation Authority a detailed soils and geotechnical analysis. This evaluation may require subsurface exploration.	LTS

Environmental Topic	Impact(s)	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
			MM-GEO-4 A registered soil professional shall submit to and have approval by the San Bernardino Transportation Authority a site-specific evaluation of unstable soil conditions, including recommendations for ground preparation and earthwork activities specific to the site and in conformance to City of Rancho Cucamonga and City of Ontario Building Codes. MM-GEO-5 The proposed Project shall comply with the recommendations of the final soils and geotechnical report. These recommendations shall be implemented in the design of the Project including, but not limited to, measures associated with site preparation, fill placement, temporary shoring and permanent dewatering, groundwater seismic design features, excavation stability, foundations, soil stabilization, establishment of deep foundations, concrete slabs and pavements, surface drainage, cement type and corrosion measures, erosion control, shoring and internal bracing, and plan review.	
Geology, Soils, Seismicity, and Paleontological Resources	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial director or indirect risks to life or property?	PS	MM-GEO-6 San Bernardino County Transportation Authority shall demonstrate that the design of the Project complies with all applicable provisions of the City of Rancho Cucamonga and City of Ontario's Building Codes.	LTS
Geology, Soils, Seismicity, and Paleontological Resources	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?	NI	No mitigation is required.	NI
Geology, Soils, Seismicity, and Paleontological Resources	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	PS	MM-PAL-1 Engage a qualified paleontological resources specialist. Prior to construction (any ground-disturbing activities), the contractor shall designate a qualified Paleontological Resources Specialist for the Project (approved by San Bernardino County Transportation Authority). The	SU

Environmental Topic	Impact(s)	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
			Paleontological Resources Specialist will be responsible for developing a detailed Paleontological Resources Impact Mitigation Plan as well as implementing the Paleontological Resources Impact Mitigation Plan, including development and delivery of Worker Environmental Awareness Program training, evaluation and treatment of finds, if any, and preparation of a final paleontological mitigation report, per the Paleontological Resources Impact Mitigation Plan. Paleontological Resources Monitors will be selected by the Paleontological Resources Specialist based on their qualifications, and the scope and nature of their monitoring will be determined and directed by the Paleontological Resources Specialist based on the Paleontological Resources Impact Mitigation Plan. The Paleontological Resources Specialist will document, evaluate, and assess any discoveries, as needed. MM-PAL-2 Prepare and implement a Paleontological Resources Impact Mitigation Plan. The Paleontological Resources Impact Mitigation Plan would be consistent with the Society of Vertebrate Paleontology. Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources, the Society of Vertebrate Paleontology Conditions of Receivership for Paleontological Salvage Collections, and relevant guidance from Chapter 8 of the current California Department of Transportation (Caltrans) Standard Environmental Reference. As such, the Paleontological Resources Impact Mitigation Plan would provide for at least the following: • Implementation of the Paleontological Resources Impact Mitigation Plan by qualified personnel, including the following positions: ○ Paleontological Resources Specialist – The paleontological resources specialist will be required to meet or exceed	

Environmental Topic	Impact(s)	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
			Principal Paleontologist qualifications per Chapter 8 of the current Caltrans Standard Environmental Reference. ○ Paleontological Resources Monitors – The Paleontological Resources Monitors would be required to meet or exceed Paleontological Monitor qualifications per Chapter 8 of the current Caltrans Standard Environmental Reference. • Requirements for paleontological monitoring by qualified Paleontological Resources Monitors of all ground-disturbing activities known to affect, or potentially affect, paleontologically sensitive geologic units. Based on more detailed information on the methods, equipment, and procedures involved in ground disturbance, including the Tunnel Boring Machine, available at the time of preparation, the Paleontological Resources Monitors would provide details of the corresponding levels of paleontological monitoring. The Paleontological Resources Monitors would allow for monitoring frequency in any given location to be increased or decreased as appropriate based on the Paleontological Resources Specialist's professional judgment in consideration of actual site conditions, geologic units encountered, and fossil discoveries made. • Provisions for the content development and delivery of paleontological resources Worker Environmental Awareness Program training. • Provisions for in-progress documentation of monitoring (and, if applicable, salvage/recovery operations) via "daily logs" or a similar approved means. • Provisions for a "stop work, evaluate, and treat appropriately" response in the event of a known or potential paleontological discovery, including finds in highly sensitive geologic units as well as finds, if any, in geologic units identified as less sensitive, or non-sensitive, for paleontological resources.	

Environmental Topic	Impact(s)	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
			• Provisions for sampling and recovery of unearthed fossils consistent with Society of Vertebrate Paleontology Standard Procedures and the Society of Vertebrate Paleontology Conditions of Receivership. Recovery procedures would provide for recovery of both macrofossils and microfossils. • Provisions for acquiring a repository agreement from an approved regional repository for curation, care, and storage of recovered materials, consistent with the Society of Vertebrate Paleontology Conditions of Receivership. If more than one repository institution is designated, separate repository agreements must be provided. • Provisions for preparation of a final monitoring and mitigation report that meets the requirements of the Caltrans Standard Environmental Reference Chapter 8 provisions for the Paleontological Monitoring Report and Paleontological Stewardship Summary. • Provisions for the preparation, identification, analysis, and curation of fossil specimens and data recovered, consistent with the Society of Vertebrate Paleontology Conditions of Receivership and any specific requirements of the designated repository institution(s). MM-PAL-3 Provide Worker Environmental Awareness Program Training for Paleontological Resources. Prior to groundbreaking within the Project, the contractor would provide paleontological resources Worker Environmental Awareness Program training delivered by the Paleontological Resources Specialist. All management and supervisory personnel and construction workers involved with ground-disturbing activities would be required to take this training before beginning work on the Project. Refresher training would also be made available to management and supervisory personnel and workers as needed, based on the judgment of the Paleontological Resources Specialist. At a	

Environmental Topic	Impact(s)	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
			minimum, paleontological resources Worker Environmental Awareness Program training would include information on: • The coordination between construction staff and paleontological staff; • The construction and paleontological staff roles and responsibilities in implementing the Paleontological Resources Impact Mitigation Plan; • The possibility of encountering fossils during construction; • The types of fossils that may be seen and how to recognize them; and • The proper procedures in the event fossils are encountered, including the requirement to halt work in the vicinity of the find and procedures for notifying responsible parties in the event of a find. Training materials and formats may include, but are not necessarily limited to, in-person training, prerecorded videos, posters, and informational brochures that provide contacts and summarize procedures in the event paleontological resources are encountered. Worker Environmental Awareness Program training contents would be subject to review and approval by San Bernardino County Transportation Authority. Paleontological resources Worker Environmental Awareness Program training may be provided concurrently with cultural resources Worker Environmental Awareness Program training. Upon completion of any Worker Environmental Awareness Program training, the contractor would require workers to sign a form stating that they attended the training and understand and would comply with the information presented. Verification of paleontological resources	

Environmental Topic	Impact(s)	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
			Worker Environmental Awareness Program training will be provided to San Bernardino County Transportation Authority by the contractor. MM-PAL-4 Requires to halt construction, evaluate, and treat if Paleontological Resources are found. Consistent with the Paleontological Resources Impact Mitigation Plan, if fossil materials are discovered during construction, regardless of the individual making the discovery, all activity within 50 feet of the discovery would halt and the find would be protected from further disturbance. If the discovery is made by someone other than the Paleontological Resources Specialist or Paleontological Resources Monitors, the person who made the discovery would immediately notify construction supervisory personnel, who would in turn notify the Paleontological Resources Specialist. Notification to the paleontological resources specialist would take place promptly (prior to the close of work the same day as the find), and the paleontological resources specialist would evaluate the find and prescribe appropriate treatment as soon as feasible. Work may continue on other portions of the Project while evaluation (and, if needed, treatment) takes place, as long as the find can be adequately protected in the judgment of the paleontological resources specialist. If the Paleontological Resources Specialist determines that treatment (i.e., recovery and documentation of unearthed fossil[s]) is warranted, such treatment, and any required reporting, would proceed consistent with the Paleontological Resources Impact Mitigation Plan. The contractor would be responsible for ensuring prompt and accurate implementation, subject to verification by San Bernardino County Transportation Authority. The stop work requirement does not apply to drilling or boring since these operations typically cannot be suspended in mid-course. However,	

Environmental Topic	Impact(s)	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
			if finds are made during drilling or boring, the same notification and other follow-up requirements would apply. The paleontological resources specialist would coordinate with construction supervisory and drilling/boring staff regarding the handling of recovered fossils. The requirements of this mitigation measure would be detailed in the Paleontological Resources Impact Mitigation Plan and presented as part of the paleontological resources Worker Environmental Awareness Program training.	
Greenhouse Gas Emissions	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	LTS	No mitigation is required.	LTS
Greenhouse Gas Emissions	Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	LTS	No mitigation is required.	LTS
Growth Inducing	Would the Project have a significant impact related to growth inducement if it is expected to foster economic or population growth that exceeds planned capacities or is reasonably foreseen to diminish environmental quality?	LTS	No mitigation is required.	LTS
Hazards and Hazardous Materials	Create significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	LTS	No mitigation is required.	LTS
Hazards and Hazardous Materials	Create as significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	PS	MM-HAZ-1 In the event that previously unknown or unidentified soil and/or groundwater contamination that could present a threat to human health or the environment is encountered during construction in the project area, construction activities in the immediate vicinity of the contamination shall cease immediately. If contamination is	LTS

Environmental Topic	Impact(s)	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
			encountered, a Risk Management Plan shall be prepared and implemented that (1) identifies the contaminants of concern and the potential risk each contaminant would pose to human health and the environment during construction and post-development and (2) describes measures to be taken to protect workers and the public from exposure to potential site hazards. Such measures could include a range of options including, but not limited to, physical site controls during construction, remediation, long-term monitoring, post-development maintenance or access limitations, or some combination thereof. Depending on the nature of contamination, if any, appropriate agencies shall be notified (e.g., City of Ontario Fire Department, City of Rancho Cucamonga Fire Department). If needed, a Site Health and Safety Plan that meets Occupational Safety and Health Administration requirements shall be prepared and in place prior to commencement of work in any contaminated area. MM-HWQ-1 would also apply to this impact.	
Hazards and Hazardous Materials	Emit hazardous materials or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	NI	No mitigation is required.	NI
Hazards and Hazardous Materials	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?	PS	MM-HAZ-1 would also apply to this impact.	LTS
Hazards and Hazardous Materials	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	LTS	No mitigation is required.	LTS

Environmental Topic	Impact(s)	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
	use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?			
Hazards and Hazardous Materials	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	PS	MM-HAZ-2 To ensure adequate access for emergency vehicles when construction activities would result in temporary lane or roadway closures, the developer shall consult with the City Police Departments and Fire Departments to disclose temporary lane or roadway closures and alternative travel routes. The developer shall be required to keep a minimum of one lane in each direction free from encumbrances at all times on perimeter streets accessing the Project site. At any time only a single lane is available, the developer shall provide a temporary traffic signal, signal carriers (i.e., flagpersons), or other appropriate traffic controls to allow travel in both directions. If construction activities require the complete closure of a roadway segment, the developer shall coordinate with the Police Departments and Fire Departments to designate proper detour routes and signage indicating alternative routes.	LTS
Hazards and Hazardous Materials	Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	NI	No mitigation is required.	NI
Hydrology and Water Quality	Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	PS	MM-HWQ-1 If temporary construction dewatering on the project site is required, San Bernardino County Transportation Authority shall obtain a dewatering permit prior to the issuance of a grading permit. Ponded water in excavations shall be tested prior to discharge to the storm drain system. If installation of foundation piles has the potential to intercept groundwater and the water would be discharged to the excavation floor, groundwater testing to a minimum depth of 50 feet, or as otherwise determined by the City of Ontario or City of Rancho Cucamonga, shall be conducted to the satisfaction of the Water	LTS

Environmental Topic	Impact(s)	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
			Resources Protection Program staff. If contaminated groundwater is determined to be present, treatment and discharge of the contaminated groundwater shall be conducted in compliance with applicable regulatory requirements including the Santa Ana Regional Water Quality Control Board standards.	
Hydrology and Water Quality	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that the project may impeded sustainable groundwater management of the basin?	PS	MM-HWQ-1 also applies to this impact.	LTS
Hydrology and Water Quality	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 result in substantial erosion or siltation on- or off- site; substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; 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; and/or impede or redirect flood flows?	LTS	No mitigation is required.	LTS
Hydrology and Water Quality	In flood hazard, tsunami, or seiche zones, risk release of pollutant due to project inundation?	PS	MM-HWQ-2 SBCTA shall submit the Project design plans to the City of Ontario Building Department and the San Bernardino County Building Department to obtain approval that the design, construction, and operation meets all safety standards for the portion of the project within the Federal Emergency Management Agency designated 100-year	LTS

Environmental Topic	Impact(s)	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
			floodplain. MM-HWQ-3 SBCTA shall prepare an Emergency Operations Plan. The Emergency Operations Plan shall include provisions for an evacuation action plan to respond to a notification of San Antonio Dam failure. The evacuation plan in the Emergency Operations Plan shall include action plans to evacuate all the people within the project area during a San Antonio Dam failure.	
Hydrology and Water Quality	Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	NI	No mitigation is required.	NI
Land Use and Planning	Physically divide an established community?	PS	MM-TRA-1 also applies to this impact, as listed in Transportation and Traffic below.	LTS
Land Use and Planning	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?	NI	No mitigation is required.	NI
Mineral Resources	Would the project result in the loss of availability of a known mineral resource that would be a value to the region and the residents of the state?	NI	No mitigation is required.	NI
Mineral Resources	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?	NI	No mitigation is required.	NI
Noise and Vibration	Generation of a substantial temporary or permanent increase in ambient noise levels in	LTS	No mitigation is required.	LTS

Environmental Topic	Impact(s)	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
	the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			
Noise and Vibration	Generation of excessive groundborne vibration or groundborne noise levels?	LTS	No mitigation is required.	LTS
Noise and Vibration	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?	LTS	No mitigation is required.	LTS
Population and Housing	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)?	LTS	No mitigation is required.	LTS
Population and Housing	Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	NI	No mitigation is required.	NI
Public Services and Recreation	Result in substantial adverse physical impacts associated with the provision of, or need for, new or physically altered fire protection and emergency response facilities, the construction of which could cause significant environmental impacts, in order to maintain	LTS	No mitigation is required.	LTS

Environmental Topic	Impact(s)	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
	acceptable service ratios, response times, or other performance objectives for fire protection and emergency response?			
Public Services and Recreation	Result in substantial adverse physical impacts associated with the provision of, or need for, new or physically altered police protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for police protection?	LTS	No mitigation is required.	LTS
Public Services and Recreation	Result in substantial adverse physical impacts associated with the provision of, or need for, new or physically altered school facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for schools and/or result in substantial adverse physical impacts associated with the provision of, or need for, new or physically altered other public facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for other public facilities?	LTS	No mitigation is required.	LTS
Public Services and Recreation	Would the proposed project increase the use of existing neighborhood and regional parks or other recreational facilities such that	LTS	No mitigation is required.	LTS

Environmental Topic	Impact(s)	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
	substantial physical deterioration of the facility would occur or be accelerated?			
Public Services and Recreation	Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment and/or result in substantial adverse physical impacts associated with the provision of, or need for, new or physically altered recreational facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for parks?	LTS	No mitigation is required.	LTS
Transportation and Traffic	Conflict with a program, plan, or ordinance or policy addressing the circulation systems, including transit, roadway, bicycle and pedestrian facilities?	PS	MM-TRA-1 San Bernardino County Transportation Authority and the contractor shall prepare a Transportation Management Plan as needed to facilitate the flow of traffic and transit service in and around construction zones. The Transportation Management Plan shall include, at minimum, the following measures: • Schedule a majority of construction-related travel (i.e., deliveries, hauling, and worker trips) during off-peak hours, and, where feasible, maintain two-way traffic circulation along affected roadways during peak hours. Avoid the closure of two major adjacent streets where feasible. • Designated routes for project haul trucks primarily utilize the Interstate 10 corridor. These routes shall be consistent with land use and mobility plans and situated to minimize noise, vibration, and other possible impacts.	LTS

Environmental Topic	Impact(s)	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
			• Develop detour routes to facilitate traffic movement through construction zones without significantly increasing cut-through-traffic in adjacent residential areas. • Develop and implement an outreach program and public awareness campaign in coordination with the California Department of Transportation, the City of Rancho Cucamonga, the City of Ontario and the San Bernardino County to inform the general public about the construction process and planned roadway closures, potential impacts, and mitigation measures. • Provide wayfinding signage, lighting, and access to specify pedestrian safety amenities (such as handrails, fences, and alternative walkways) during construction. • Where construction encroaches on sidewalks, walkways and crosswalks, special pedestrian safety measures shall be used, such as detour routes and temporary pedestrian barricades. • Coordinate with first responders and emergency service providers to minimize impacts on emergency response. • Maintain customer and delivery access to all operating businesses near construction work areas. • The Project contractor shall encourage construction workers to participate in vanpool and carpool opportunities to reduce congestion and Vehicle Miles Travelled on the regional transportation network. • The Project contractor shall be encouraged to hire local construction workers who would have lower commute distance to the construction site.	
Transportation and Traffic	Conflict or be inconsistent with CEQA Guidelines §15064.3 subdivision (b)?	PS	MM-TRA-1 also applies to this impact.	LTS

Environmental Topic	Impact(s)	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
Transportation and Traffic	Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	LTS	No mitigation is required.	LTS
Transportation and Traffic	Result in inadequate emergency access?	PS	MM-TRA-1 also applies to this impact.	LTS
Tribal Cultural Resources	Would the Project 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 listed or eligible for listing in the California Register of Historical Resources, a in the local register of historical resources as defined in Public Resources Code Section 5020.1 (k).	PS	MM-TCR-1 Areas found during construction to contain significant tribal cultural resources shall be examined by a qualified consulting archaeologist or historian for appropriate protection and preservation. If evidence of potential tribal cultural resources is observed, construction near the resources shall cease, the appropriate Native American tribal groups shall be consulted, and, in coordination with the appropriate Native American tribal groups, a qualified archaeologist or historian shall determine whether the resource uncovered during construction is a tribal cultural resource as defined under Public resources Code Section 21074. The appropriate Native American tribal groups shall be contacted in the event of any pre-contact and/or historic-era cultural resources discovered during project implementation; and will be provided information regarding the nature of the find, so as to provide Tribal input with regards to significance and treatment. Should the find be deemed significant, as defined by CEQA (as amended, 2015), a cultural resource Monitoring and Treatment Plan shall be created by the archaeologist, in coordination with the appropriate Native American tribal groups, and all subsequent finds shall be subject to this Plan. This Plan shall allow for a monitor to be present that represents the appropriate Native American tribal groups for the remainder of the project's construction activities, should the appropriate Native American tribal groups elect to place a monitor on-site.	LTS

Environmental Topic	Impact(s)	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
			Any and all archaeological/cultural documents created as a part of the project (isolate records, site records, survey reports, testing reports, etc.) shall be supplied to San Bernardino County Transportation Authority for dissemination to the appropriate Native American tribal groups. San Bernardino County Transportation Authority shall, in good faith, consult with the appropriate Native American tribal groups.	
Tribal Cultural Resources	Would the Project 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 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 Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	PS	MM-TCR-1 would also apply to this impact.	LTS
Utilities and Service Systems	Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or	LTS NI for Natural Gas	No mitigation is required.	LTS NI for Natural Gas

Environmental Topic	Impact(s)	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
	telecommunications facilities, the construction or relocation of which could cause significant environmental effects?			
Utilities and Service Systems	Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	LTS	No mitigation is required.	LTS
Utilities and Service Systems	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?	LTS	No mitigation is required.	LTS
Utilities and Service Systems	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?	LTS	No mitigation is required.	LTS
Utilities and Service Systems	Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	NI	No mitigation is required.	NI
Wildfire	If located in or near SRAs or lands classified as very high fire hazard severity zones, would the Project substantially impair an adopted emergency response plan or emergency evacuation?	NI	No mitigation is required.	NI

Environmental Topic	Impact(s)	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
Wildfire	If located in or near SRAs or lands classified as very high fire hazard severity zones, 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 wildfire?	NI	No mitigation is required.	NI
Wildfire	If located in or near SRAs or lands classified as very high fire hazard severity zones, 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?	NI	No mitigation is required.	NI
Wildfire	If located in or near SRAs or lands classified as very high fire hazard severity zones, 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?	NI	No mitigation is required.	NI

NOTE: LTS – Less Than Significant; NI- No Impact; PS- Potentially Significant; SU- Significant and Unavoidable.

1 INTRODUCTION

San Bernardino County Transportation Authority (SBCTA), in cooperation with the Federal Transit Administration (FTA), proposes to construct a 4.2-mile-long transit service tunnel directly connecting the Southern California Regional Rail Authority (SCRRA) Cucamonga Metrolink Station to Ontario International Airport (ONT). The proposed ONT Connector Project (Project) is to expand access options to ONT by providing a direct transportation connection from Cucamonga Metrolink Station to ONT. The proposed Project is subject to federal and state environmental review requirements pursuant to National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA). FTA is the lead agency for NEPA, while SBCTA is the lead agency under CEQA. Partner agencies include Ontario International Airport Authority (OIAA), Omnitrans, the City of Ontario, and the City of Rancho Cucamonga.

ONT is located approximately 2 miles east of downtown Ontario in San Bernardino County. The airport services more than 25 major cities via 10 commercial carriers. ONT is owned and operated under a joint powers agreement between the City of Ontario and San Bernardino County. OIAA provides overall direction, management, operations, and marketing for ONT.

This Draft Environmental Impact Report (EIR) examines the potential environmental effects of the proposed Project. The proposed Project's background and the legal basis for preparing this Draft EIR are described below.

1.1 BACKGROUND

Several transit concepts that could connect to ONT have been evaluated, screened, and refined since 2008 (SBCTA, 2023a). Previous studies and efforts have assessed the feasibility of such a connection and evaluated the performance of several transit concepts, with distinct alignments and configurations.

- 2008 - Strategic Planning Report for Metro Gold Line Foothill Extension to LA/Ontario International Airport: This effort first studied a direct connection to ONT via a light rail transit extension of the Los Angeles County Metropolitan Transportation Authority (LACMTA) system (MGLFECA, 2008). The need for a public transit connection to ONT had first been expressed by San Gabriel Valley residents and businesses during the public comment period of the Gold Line Foothill Extension to Montclair project (Final EIR released in 2007). Comments received during scoping meetings in four cities along the corridor, as well as via email, fax, and US mail, revealed a desire by the public to extend Gold Line service to ONT.
- 2014 - San Bernardino Associated Governments (SANBAG), now SBCTA, Ontario Airport Rail Access Study (SANBAG 2014): This study carried forward the recommended alternatives from the 2008 study, while studying new options for connecting nearby Metrolink stations to ONT - a total of 32 alternatives. This study identified the need for a direct rail-to-airport connection to ONT to support projected growth in air travel at ONT.

- 2018 - Southern California Association of Governments (SCAG) Inter-County Transit and Rail Connectivity Study: This study evaluated transit and rail service connecting the eastern San Gabriel Valley to the western San Bernardino Valley, including connections to ONT (SCAG 2018). Based on alternatives considered, SCAG noted that the previously studied diesel multiple unit shuttle between Cucamonga Metrolink Station and ONT, and a new conversion of Metrolink service on the San Bernardino Line to hybrid rail service with an additional spur to ONT, would result in the fastest travel times to the airport.
- 2018 - SBCTA Hybrid Rail Planning Study: SBCTA found that consistent bidirectional service along the San Bernardino Line was not feasible due to inconsistent Metrolink clock scheduling, and existing infrastructure that includes large segments of a single-track corridor, both of which would reduce reliable service to ONT (SBCTA 2018). The 2018 SCAG and SBCTA studies reaffirmed that service to ONT would need to be provided via a connecting shuttle-style rail service with a transfer at Cucamonga Metrolink Station, as represented by Alternative A-3, Alternative A-4, and Alternative A-7.

Additionally, in 2020, SBCTA received an unsolicited proposal for a tunnel system using electric vehicles to provide transit service from Cucamonga Station to ONT. SBCTA considered this alternative as viable because of the reduced cost and timeline. Alternatives recommendations from the planning studies resulted in the further evaluation of Alternatives A-3, A-4, B-2, and the tunnel alternative, which were further evaluated by SBCTA.

In 2022, Omnitrans and the OIAA began to provide temporary shuttle service between Cucamonga Metrolink Station and ONT terminals to increase awareness of the nearby transit connection, but it is not scheduled to coincide with train arrivals, which would facilitate timely service to accommodate Metrolink riders to ONT.

Building on the findings of previous studies and efforts, SBCTA initiated the environmental phase for the SBCTA Tunnel Loop Project, now known as the ONT Connector Project, in 2022. Additional information on the background of the ONT Connector Project is included in Section 2.3 and in Appendix F of this Draft EIR.

1.2 OVERVIEW OF THE PROPOSED PROJECT

The proposed Project is located in the City of Rancho Cucamonga and the City of Ontario within San Bernardino County. The proposed Project would provide a direct airport connection to ONT from Cucamonga Metrolink Station. The proposed Project site is a reversed L-shaped project site consisting of Cucamonga Metrolink Station, Milliken Avenue, East Airport Drive, and ONT. The proposed Project includes the following components: 4.2-mile tunnel alignment, three passenger stations, a maintenance and storage facility (MSF), and an access and ventilation shaft (vent shaft). The proposed Project would

include the operation of autonomous electric vehicles that would transport passengers to and from the stations, providing direct access from Cucamonga Metrolink Station to ONT.

The proposed Project would construct an underground 4.2-mile single tunnel (24-foot inner diameter bidirectional tunnel) alignment to provide a direct connection between Cucamonga Metrolink Station and ONT. The tunnel depth has been designed to be approximately 70 feet below the ground surface. The proposed tunnel alignment begins at the Cucamonga Metrolink Station and travels south along Milliken Avenue, crossing beneath 6th Street and 4th Street. At Ontario Mills Parkway, the tunnel alignment shifts to the western side of Milliken Avenue to avoid the Interstate 10 (I-10) overcrossing. The alignment continues south under I-10 and the Union Pacific Railroad, before traveling west beneath East Airport Drive to connect to Terminals 2 and 4 at ONT.

Three stations would be constructed to serve the Cucamonga Metrolink Station, ONT Terminal 2, and ONT Terminal 4. The MSF would be located at the northwestern corner of the existing Cucamonga Metrolink Station parking lot to support operations and provide autonomous electric vehicle storage, maintenance, and cleaning.

One vent shaft would be constructed to provide ventilation for the tunnel and as a means of emergency passenger egress and first responder access to and from the tunnel. The proposed Project would operate autonomous electric vehicles to transport passengers between the Cucamonga Metrolink Station and ONT. The autonomous electric vehicles would be grouped and queued at their origin station and depart toward the destination station once boarded with passengers. After the group of vehicles arrives at the destination station and passengers deboard, new passengers would board, and the group of vehicles would return to its origin station. If no new passengers are present, empty vehicles would be returned to the origin station to pick up new passengers. The proposed Project would provide a peak one-way passenger throughput of approximately 100 per hour. Operations would be managed by Omnitrans, with on-demand service provided daily from 4:00 a.m. to 11:30 p.m., including weekends and holidays.

1.3 PURPOSE AND LEGAL AUTHORITY

The proposed Project requires the discretionary approval of SBCTA. Therefore, it is subject to CEQA. In accordance with Section 15121 of the CEQA Guidelines, the purpose of an EIR is to serve as an informational document that:

> *…will inform public agency decision-makers and the public generally of the significant environmental effect of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project.*

The Draft EIR has been prepared as a Project EIR pursuant to Section 15161 of the CEQA Guidelines. A Project EIR is appropriate for a specific development project. As stated in the CEQA Guidelines:

> *…this type of EIR should focus on the changes in the environment that would result from the development project. The EIR shall examine all phases of the project, including planning, construction, and operation.*

This report is to serve as an informational document for the public and the SBCTA decision-makers. The process will culminate with a SBCTA hearing to consider certification of a Final EIR and a decision on whether or not to approve the proposed Project.

1.4 LEAD, RESPONSIBLE, AND TRUSTEE AGENCIES

Per the CEQA Guidelines, an EIR defines lead, responsible, and trustee agencies for a project. SBCTA is the lead agency for the proposed Project because it holds principal responsibility for approving the proposed Project. A responsible agency refers to a public agency other than the lead agency that has discretionary approval over a project. A trustee agency is a state agency having jurisdiction by law over natural resources affected by a project, which are held in trust for the people of the state. In addition to SBCTA (Lead Agency), there are federal, state, regional, and local agencies that have discretionary or appellate authority over a project and/or specific aspects of a project. The responsible agencies will also rely on the EIR when acting on such projects. Those federal, state, or local agencies that would rely upon the information contained in this EIR when considering approval include, but are not necessarily limited to, the following:

- Federal Transportation Authority,
- Federal Aviation Administration,
- Ontario International Airport Authority,
- California Regional Water Quality Control Board,
- State Water Resources Control Board,
- California Department of Transportation,
- State Historic Preservation Officer,
- South Coast Air Quality Management District,
- Omnitrans,
- San Bernardino County,
- City of Rancho Cucamonga, and
- City of Ontario.

1.5 ENVIRONMENTAL REVIEW PROCESS

SBCTA filed a Notice of Preparation (NOP) with the California Office of Planning and Research on July 5, 2022, indicating that an EIR would be prepared for this proposed Project. Subsequently, the NOP was distributed to involved public agencies, including the responsible and trustee agencies, and interested parties for a public review period of 30 days, beginning on July 5, 2022, and ending on August 5, 2022. SBCTA sent the NOP to 70 key stakeholders including municipal, county, regional, state, and federal agencies; community organizations; municipal, state, and federal elected officials; resource groups; and transportation agencies.

A virtual public scoping meeting was held on July 20, 2022, via online communication service Zoom with 126 people in attendance. The purpose of the scoping period, including the scoping meeting, was to solicit comments on the scope and content of the environmental analysis to be included in the EIR. During the scoping period, SBCTA received four verbal comments at the virtual public scoping meeting, 14 comments by email, and 22 comments through the proposed Project website comment forms. SBCTA reviewed and considered comments made by the public in the preparation of this Draft EIR. The NOP and the Scoping Report are included in Appendix A of this Draft EIR.

During the preparation of this Draft EIR, agencies, organizations, and persons who SBCTA believed may have an interest in this proposed Project were specifically contacted. Information, data, and observations from these contacts are included in this Draft EIR. Agencies or interested persons who did not respond during the public review period of the NOP will have an opportunity to comment during the 46-day public review period of the Draft EIR, as well as at a virtual public hearing for this proposed Project, which is scheduled for November 13, 2024.

This Draft EIR has been distributed to affected agencies, surrounding cities, and interested parties for a 46-day review period in accordance with Section 15087 of the CEQA Guidelines. During the 46-day public review period, this Draft EIR is available for general public review on SBCTA's website (http://www.goSBCTA.com/ONTLoop) and at the following locations:

- Law Library for San Bernardino County (Rancho Cucamonga), 8409 Utica Avenue, Rancho Cucamonga, California 91730
- Rancho Cucamonga Public Library, 12505 Cultural Center Drive, Rancho Cucamonga, California 91739
- Ovitt Family Community Library, 215 East C Street, Ontario, California 91764
- SBCTA, 1170 West 3rd Street, 2nd Floor, San Bernardino, California 92410-1715

Written comments on this Draft EIR should be mailed to:

Tim Watkins
Chief of Legislative and Public Affairs
SBCTA – ONT Connector
1170 W. 3rd Street, 2nd Floor
San Bernardino, CA 92410
Tel: (909) 884-8276

Email: ONTConnector@goSBCTA.comEmails regarding this Draft EIR should be sent to:

info@goSBCTA.com

Upon completion of the 46-day public review period, SBCTA will review all environmental comments received from the public agencies and the general public and provide written responses. These comments and their responses will be included in the Final EIR for consideration by SBCTA, as well as any other public decision-makers. Furthermore, written responses to comments received from the public agencies will be made available to those agencies at least 10 days prior to the public hearing, at which certification of the Final EIR would be considered.

It should be noted that environmental impacts may not always be mitigated to a less than significant level. When this situation occurs, the impacts are considered significant and unavoidable. If a public agency approves a proposed project that has significant and unavoidable impacts, the agency should state in writing the specific reasons for approving the proposed project, based on the Final EIR and any other information in the public record for the project. This documentation is termed a "statement of overriding considerations" and is used to explain the specific reasons why the benefits of a proposed project make its unavoidable environmental effects acceptable. The statement is prepared, if required, based upon substantial evidence in the record and in conjunction with the action to approve the proposed project, in accordance with Section 15093 of the CEQA Guidelines. Following project approval, a Notice of Determination (NOD) is filed with the State Clearinghouse.

1.6 EIR ADEQUACY

The level of detail contained throughout this Draft EIR is consistent with the CEQA Guidelines (Section 15151), which provide the standard of adequacy on which this document is based. The Guidelines state as follows:

> *An EIR should be prepared with a sufficient degree of analysis to provide decision-makers with information, which enables them to make a decision, which intelligently takes account of environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the*

EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection, but for adequacy, completeness, and a good faith effort at full disclosure.

1.7 INTENDED USE OF EIR

This Draft EIR has been prepared to analyze potentially significant environmental impacts associated with the construction and operation of the proposed Project. It also addresses appropriate and feasible mitigation measures or project alternatives that would minimize or eliminate these identified impacts. This Draft EIR is intended to serve as an informational document and, as such, would be the primary source of environmental information which the Lead Agency would consider when exercising any permitting authority or approval power directly related to implementation of the proposed Project.

This Draft EIR is intended to provide decision-makers and the public with information that enables them to consider the environmental consequences of the proposed Project. EIRs not only identify significant or potentially significant environmental effects, but also identify ways in which those impacts can be reduced to less than significant levels, whether through the implementation of mitigation measures or through the incorporation of specific alternatives to the project. In a practical sense, EIRs function as a technique for fact-finding, allowing an applicant, concerned citizens, and agency staff an opportunity to collectively review and evaluate baseline conditions and project impacts through a process of full disclosure.

To gain the most value from this report, certain key points should be kept in mind:

- This report should be used as a tool to give the reader an overview of the possible ramifications of the proposed Project.
- A specific environmental impact is not necessarily irreversible or permanent. Most impacts, particularly in urban, more developed areas, can be wholly or partially mitigated by incorporating conditions of approval and/or changes recommended in this report during the design and construction phases of project development.
- This report, while a summary of facts, reflects the professional judgment of the author. Therefore, the reader will have to individually weigh the facts that the report contains.

1.8 SCOPE OF EIR

This Draft EIR provides a project-specific analysis of the potential environmental effects of the proposed Project. The scope of the Draft EIR includes issues identified by SBCTA during the scoping process. Based on the potential impacts of the proposed Project, this Draft EIR evaluates the following environmental issues identified in Appendix G of the CEQA Guidelines:

- Aesthetics,

- Air quality,
- Biological resources,
- Cultural resources,
- Energy,
- Geology, soils, seismicity, and paleontological resources,
- Greenhouse gas emissions,
- Hazards and hazardous materials,
- Hydrology and water quality,
- Land use and planning,
- Noise and vibration,
- Population and housing,
- Public services and recreation,
- Transportation and traffic,
- Tribal cultural resources,
- Utilities and service systems,
- Growth-Inducing, and
- Other CEQA considerations (including mineral resources, wildfire, agricultural resources).

In preparing this Draft EIR, pertinent SBCTA policies and guidelines, existing EIRs, and background documents prepared by San Bernardino County, the City of Rancho Cucamonga, and the City of Ontario were all evaluated for their applicability to the proposed Project. A list of references is provided in Section 8 (References) of this Draft EIR.

1.9 AREAS OF CONTROVERSY AND ISSUES TO BE RESOLVED

During the scoping period, 40 comments were received from various parties that raised issues of concern. These comments were used to determine the areas of potential controversy and issues to be resolved and are included in Appendix A of this Draft EIR. These issues of concern from the public are discussed within the technical sections of this Draft EIR and are summarized below.

- Impacts to air quality,
- Impacts to hydrology and water quality,
- Impacts to land use,
- Impacts from noise and vibration,
- Impacts to safety and security,
- Impacts to transportation/traffic,
- Impacts to utilities,
- Operational and construction impacts,

- Funding source,
- Alternatives,
- Outreach, and
- General project information.

The discussion of environmental effects, mitigation measures, and project alternatives, as summarized in Table ES-1 in the Executive Summary of this Draft EIR, and evaluated in detail in this Draft EIR, constitutes the identification of issues to be resolved and areas of controversy, as required for compliance with CEQA Guidelines Section 15123(b)(2).

1.10 DOCUMENT ORGANIZATION

This Draft EIR has been designed for easy use and reference. To help the reader locate information of particular interest, a brief summary of the contents of each chapter of this Draft EIR is provided below:

- Executive Summary—This chapter contains a summary of the proposed Project, as well as a summary of environmental impacts, proposed mitigation, level of significance after mitigation, and significant, unavoidable impacts.
- Chapter 1: Introduction—This chapter describes the purpose, approach, intended use, and scope of the Draft EIR, a summary of the environmental and public review process, agencies relevant to the proposed Project, the availability of the Draft EIR, documents incorporated by reference, and a brief outline of this Draft EIR's organization.
- Chapter 2: Project Description—This chapter provides a detailed description of the proposed Project, including a description of the proposed Project location, objectives, and characteristics.
- Chapter 3: Environmental Analysis—This chapter describes and evaluates the environmental issue areas, applicable environmental thresholds, environmental impacts (both short-term and long-term), policy considerations related to the particular environmental issue area under analysis, feasible mitigation measures that could reduce or avoid impacts, and a discussion of cumulative impacts. Where additional actions must be taken to ensure consistency with environmental policies, recommendations are made, as appropriate.
- Chapter 4: Other CEQA Considerations—This chapter provides analysis, as required by CEQA, of impacts that would result from the proposed Project, including effects found not to be significant, growth-inducing impacts, significant irreversible change to the environment, and significant and unavoidable impacts.
- Chapter 5: Alternatives Considered—This chapter analyzes feasible alternatives to the proposed Project.

- Chapter 6: List of Preparers—This chapter identifies all individuals responsible for the preparation of this Draft EIR.
- Chapter 7: Acronyms-Abbreviations—This chapter identifies all acronyms and abbreviations used within this Draft EIR.
- Chapter 8: References—This chapter identifies all references used within this Draft EIR.

2 PROJECT DESCRIPTION

2.1 PROJECT PURPOSE AND OBJECTIVES

The purpose of the proposed Ontario International Airport (ONT) Connector Project (Project) is to expand access options to ONT by providing a direct transportation connection from Cucamonga Metrolink Station to ONT. This new connection would increase mobility and connectivity for transit patrons, improve access to existing transportation services, provide a connection to future Brightline West service to/from ONT, and use clean emerging technology for transit opportunities between Cucamonga Metrolink Station and ONT. More specifically, the proposed Project's objectives are as follows:

- Expand access options to ONT by providing a convenient and direct connection between ONT and the Metrolink network, and other transportation services at Cucamonga Metrolink Station.
- Reduce roadway congestion by encouraging a mode shift to transit from single-occupancy vehicles and provide reliable trips to and from ONT.
- Support autonomous electric vehicle technology usage for transit projects.

2.2 PROJECT NEED

The proposed Project need includes:

- Lack of direct transit connection coinciding with Metrolink trains and peak airport arrival and departure schedules. The lack of a direct transit connection between Cucamonga Metrolink Station and ONT creates mobility challenges for air passengers accessing ONT. In many cases, the lack of a last-mile connection between the Metrolink system and ONT forces airport passengers to use rideshare services or private single-occupancy vehicles, adding congestion to the local roads between Cucamonga Metrolink Station and ONT. This congestion results in delays for the public to reach their destination, community services, and facilities.
- Roadway congestion affecting trip reliability and causing traffic delays. ONT travelers using rideshare services or private single-occupancy vehicles adds traffic volumes and increasing congestion on the local roads between Cucamonga Metrolink Station and ONT. Increases in future traffic volumes and roadway congestion affects trip reliability for travelers and commuters to and from ONT.
- Increasing vehicle miles traveled (VMT) resulting from ONT travelers and lack of a direct transit connection.
- Increased greenhouse gas (GHG) emissions within communities surrounding ONT from single -occupancy vehicle travel to and from ONT.

2.2.1 Direct First/Last Mile Connections

Traveling on the area roadway network, Cucamonga Metrolink Station (San Bernardino Line) is located approximately 4.6 miles from ONT, and Ontario-East Metrolink Station (Riverside Line) is located approximately 3.2 miles away. However, direct access for ONT passengers is almost exclusively limited to single-occupancy vehicles using local roadways and nearby freeways (Interstate 10 [I-10] and Interstate 15 [I-15]). A direct transit connection that competes with automobile travel time is needed to improve mobility for travelers flying into and out of ONT (SBCTA 2014).

The San Bernardino Line is the busiest in the Metrolink commuter rail system, carrying approximately 4,700 passengers each weekday (Metrolink 2023). The San Bernardino Line provides service on both weekdays and weekends and stops at Cucamonga Metrolink Station, which makes it a logical choice for ONT passengers arriving via transit service. Metrolink's Riverside Line carries approximately 1,200 passengers per weekday but does not provide weekend service (Metrolink 2023). The lack of weekend service limits the Riverside Line's use for connecting to ONT.

The 2014 *Ontario Airport Rail Access Study* recommended in the near-term (per the study, near-term is "as soon as practicable") to provide a connection to Metrolink (SANBAG 2014). In 2022, Omnitrans and OIAA began to provide temporary shuttle service between Cucamonga Metrolink Station and ONT terminals to increase awareness of the nearby transit connection, but it is not scheduled to coincide with train arrivals, which would facilitate timely service to accommodate Metrolink riders to ONT.

Despite not meeting the need for a direct transit connection coinciding with Metrolink trains and peak airport arrival and departure schedules, ridership on the ONT Connect Route reached 260 monthly passengers in March 2023; ridership on the shuttle service has lagged behind expectations, reflecting national transit ridership trends following the Coronavirus Disease 2019 (COVID-19) pandemic. *Ontario Airport Rail Access Study* forecasted that a bus or shuttle connection from Rancho Cucamonga to ONT would carry 136 daily passengers at 5 million annual ONT air passengers (SANBAG 2014).

Other public transportation routes to ONT are limited to Omnitrans. Route 61 serves the cities of Fontana and Pomona with frequent service via the City of Ontario every 30 minutes but does not directly connect to either of the two nearby Metrolink stations. The route does connect to Metrolink stations more than 5 miles from ONT (Riverside Line Downtown Pomona Station and San Bernardino Line Fontana Station). Route 61 is Omnitrans' highest ridership route (SBCTA 2018), with a peak of 112,817 riders in October 2018 over the past five years and an average of 102,966 monthly riders (pre-COVID-19 from January 2018 through February 2020). The average monthly ridership for 2023 through June was 65,248 passengers.

Route 81, which serves the City of Rancho Cucamonga and the City of Ontario, directly connects to Ontario-East Metrolink Station. However, Route 81 runs once per hour during Monday through Saturday, with no service on Sundays, and does not enter the ONT terminal area. Passengers must walk or ride a shuttle after exiting the bus to reach the terminal area. Maximum ridership over the past 5 years on

Route 81 was 14,624 in October 2019 and an average of 12,455 monthly riders (pre-COVID-19 from January 2018 through February 2020). The average monthly ridership for 2023 through June was 4,046. However, in September 2020, Route 81 was restructured by eliminating almost half of its route miles and a connection to the City of Chino.

The West Valley Connector (WVC) Project is a planned bus rapid transit (BRT) service connecting the cities of Rancho Cucamonga, Ontario, Pomona, and Montclair. Between ONT and Cucamonga Metrolink Station, the bus service would operate in mixed traffic along Milliken Avenue, Inland Empire Boulevard, and Archibald Avenue. WVC ridership forecasts for 8,290 daily passengers in 2028, which would surpass Route 61 as Omnitrans' highest-ridership route. This illustrates an unmet transit demand in the area surrounding ONT (SBCTA 2020).

2.2.2 Roadway Congestion

Current and future congestion on roadways surrounding ONT establishes a need for alternative access modes for air passengers to arrive on time for their scheduled flights.

Transportation Technical Report of the Brightline West - Cajon Pass High-Speed Rail Environmental Assessment reported heavy roadway congestion in the immediate area surrounding ONT during peak hours (HNTB 2022a). The report found that in the p.m. peak hour under 2025 No Project Alternative conditions, intersections such as Milliken Avenue/4th Street and Milliken Avenue/I-10 westbound (WB) ramps, which provide direct access to ONT, would operate at levels of service (LOSs) F and D, respectively. The volume-to-capacity ratio (V/C ratio) to Milliken Avenue from 4th Street is 1.44, in which demand exceeds roadway capacity and traffic flow would be unstable with excessive delays and queuing. As traffic volumes increase in the future, LOS is anticipated to worsen in 2045 at Milliken Avenue/4th Street and Milliken Avenue/I-10 WB ramps, with both intersections operating at LOS F during the p.m. peak hour (HNTB 2022a).

In addition to worsening intersection delays, the growth of warehousing and logistic centers in San Bernardino County is resulting in an increase in truck traffic on local roadways including Milliken Avenue. ONT has experienced an increase in commercial freight since 2019, from 781,993 tons to 851,924 tons of cargo in 2022. This increase resulted in more freight trucks along surface streets within the City of Rancho Cucamonga and the City of Ontario. Truck percentages at Milliken Avenue/4th Street, Milliken Avenue/7th Street, and Milliken Avenue/I-10 WB ramps in the a.m. peak hour in 2022 consisted of 10 percent (%), 8%, and 18% of total vehicle traffic (HNTB 2022b), respectively. Given recent average daily traffic counts that indicate V/C ratios is already nearing 1.0 along segments of Milliken Avenue, demand will only continue to exceed capacity in the future, further impacting travel to and from ONT (City of Ontario 2019; HNTB 2022b).

Trip reliability refers to the dependability or consistency of travel times and exerts a strong influence over transportation network users. Commuters to and from ONT are dissuaded to use surface transit because

of several variables that could affect on-time arrivals and departures at ONT. Traffic congestion negatively affects trip reliability, and future increases in passenger and truck traffic volumes would further increase travel times to and from ONT. A transit alternative that can guarantee trip reliability would encourage a mode shift from single-occupancy vehicle travel to ONT.

2.2.3 Vehicle Miles Travelled

Shifting travel mode from passenger vehicles to transit is anticipated to reduce annual VMT by 18,230 miles in the proposed Project's opening year of late 2031 and approximately 40,000 miles in the horizon year of 2045 (SBCTA 2024a).

2.3 ALTERNATIVES EVALUATED

2.3.1 No Project Alternative

CEQA requires that existing conditions and the proposed Project Alternative be evaluated against a No Project Alternative in an Environmental Impact Report (EIR). The No Project Alternative represents the Project area if the proposed Project is not constructed, and additional municipal projects would still be developed in the area. The No Project Alternative is used for comparison purposes to assess the relative benefits and impacts of constructing a new transit project versus only constructing projects which are already funded and planned for in local and regional plans. A list of projects that would be operational under the No Project Alternative is included in Section 3.18 of this Draft EIR.

The No Project Alternative would result in no new direct electronically powered, on-demand fixed transit guideway connection from the Cucamonga Metrolink Station to ONT. Omnitrans currently operates a limited-service bus route to ONT, known as ONT Connect or Route 380, which would remain operational under the No Project Alternative. ONT Connect currently operates Monday through Sunday, with bi-directional (northbound and southbound) service frequencies ranging from 35-60 minutes. However, ONT Connect travels with general/mixed traffic on existing roadways. The No Project Alternative assumes that the existing roadway system near ONT (such as I-10 and I-15) will implement some planned expansion and improvement projects and undergo routine maintenance activities. The SBCTA and California Department of Transportation (Caltrans) propose to construct Express Lanes, including tolled facilities, in both directions of I-15. In addition, SBCTA is proposing to improve I-10 by constructing freeway lane(s) and other improvements through all or a portion of the 33-mile-long segment of I-10 from the Los Angeles/San Bernardino County line to Ford Street in San Bernardino County. The first phase of this project (County line to I-15) opened in summer of 2024 and the second phase (I-15 to Pepper Ave. in Colton) is expected to start construction in late 2024. A detailed list of the planned projects is found in Section 3.18 of this Draft EIR.

2.3.2 Proposed Project

The proposed Project, located in the cities of Rancho Cucamonga and Ontario within San Bernardino County, includes a 4.2-mile tunnel alignment, three passenger stations, a maintenance and storage facility (MSF), and an access and ventilation shaft [vent shaft]). The proposed Project would include the operation of autonomous electric vehicles that would be grouped and queued at their origin station and depart toward the destination station once boarded with passengers. The following sections provide additional details on the proposed Project location and land uses, and on the proposed design, construction, and operation, as applicable, for these project elements.

2.3.2.1 **Project Location**

The proposed Project is located in the City of Rancho Cucamonga and in the City of Ontario within San Bernardino County. Figure 2-1 illustrates the proposed Project site's regional location and vicinity. The proposed Project alignment is a reversed L-shaped alignment consisting of Cucamonga Metrolink Station, Milliken Avenue, East Airport Drive, and ONT in the proposed Project area. Figure 2-2 illustrates the proposed Project area. Cucamonga Metrolink Station is located at 11208 Azusa Court in the City of Rancho Cucamonga and serves the Metrolink San Bernardino Line commuter rail. ONT is located at 1923 East Avion Street in the City of Ontario and provides international airport service with over 10 different airline partners. Information related to the proposed Project Design is found in Section 2.3.2.3. Appendix S of this Draft EIR includes the project footprint map for the proposed Project.

The proposed Project would construct an underground 4.2-mile, single tunnel (24-foot-inner-diameter bidirectional tunnel) to provide a direct connection between the Cucamonga Metrolink Station and ONT. As shown in Figure 2-2, the northern segment of the proposed Project site is located within Cucamonga Metrolink Station and its parking lots. From the Cucamonga Metrolink Station parking lots, the tunnel alignment will connect to Milliken Avenue and travel south under the existing roadway. At Ontario Mills Parkway, the tunnel alignment will shift to the western side of Milliken Avenue to avoid the I-10 overcrossing. The alignment will continue west of the I-10 overcrossing structure and travel south under I-10. The tunnel alignment will continue to run south; at Guasti Road, the alignment will curve southwest to connect to East Airport Drive. At East Airport Drive, the tunnel alignment will continue to travel west and terminate at the proposed stations at ONT Terminal 4 located at 900 East Airport Drive, and ONT Terminal 2, located at 2500 East Airport Drive.

2.3.2.2 **Existing Land Uses**

The northwestern portion of the proposed Project alignment includes the Cucamonga Metrolink Station. There are 980 standard parking stalls and 24 Americans with Disabilities Act (ADA) compliant stalls at the Cucamonga Metrolink Station (Metrolink 2022).

From the northwestern portion of the proposed Project site, the tunnel alignment travels under Milliken Avenue, which is a major north-south arterial roadway. Milliken Avenue consists of three travel lanes north of Inland Empire Boulevard and four travel lanes south of Inland Empire Boulevard. From Milliken Avenue, the alignment travels south crossing under the existing I-10. I-10 is an east-west cross-country highway and has six lanes in each direction at the proposed Project site. The alignment eventually connects to East Airport Drive, which is an east-west arterial roadway with three travel lanes in each direction.

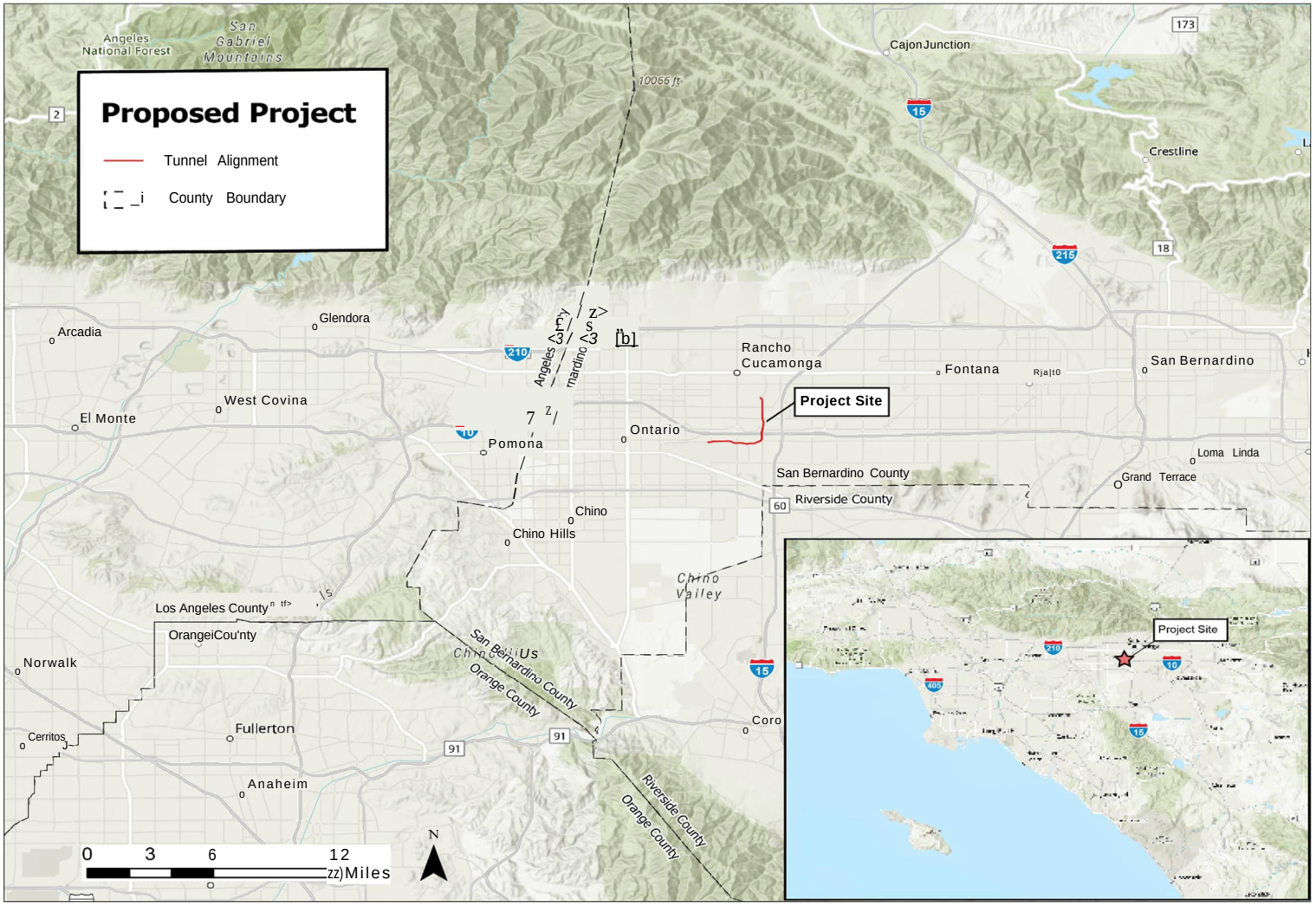
The southwestern portion of the proposed Project tunnel alignment terminates at ONT. Parking Lots 2 through 5 are located on the northern side of ONT. Parking Lots 2, 3, and 4 are surface lots that provide general parking and are a short walk away from the terminals at ONT. Parking Lot 5 is a surface economy lot at which a shuttle service is available.

2.3.2.3 Surrounding Land Uses

Development in the immediate vicinity of the proposed Project site includes a mix of industrial, commercial, manufacturing, transportation, office, multi-family residential, hotel, and airport related land uses (City of Rancho Cucamonga 2022a, 2022b; City of Ontario 2022, 2016). The proposed Project site's surrounding land uses are located within the City of Rancho Cucamonga and City of Ontario. Immediately adjacent uses include the following:

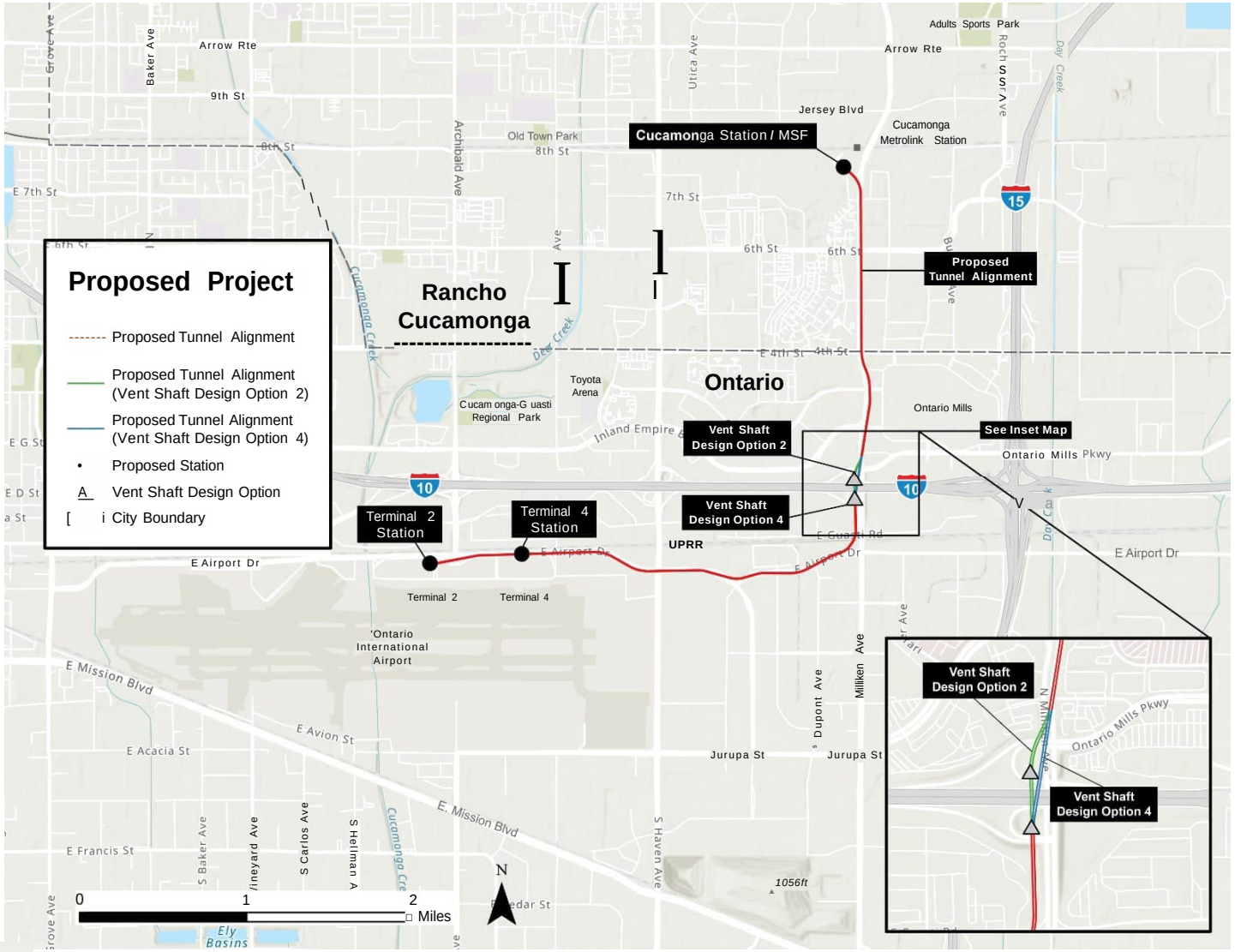
- North: Railroad tracks, industrial and manufacturing uses, trucking facilities, surface parking lots, Rancho Cucamonga Fire Station Number 174, and All Risk Training Center for the Rancho Cucamonga Fire Protection District.
- South: Industrial and manufacturing uses, along with trucking facilities, rental car facilities, parking lots, hotel uses, and airport related uses. ONT includes two passenger terminals, general aviation facilities, air freight buildings, parking lots, and numerous airport and aircraft maintenance and support services.
- East: The eastern side of Milliken Avenue from 5th Street south to 4th Street consists primarily of hotel uses. Concentrated areas of commercial uses and restaurants are located along Milliken Avenue from 4th Street south to I-10, including Ontario Mills, which is a regional shopping mall complex. Hotel uses are also located adjacent to the Ontario Mills shopping mall.
- West: The western side of Milliken Avenue from approximately 7th Street south to 4th Street consists primarily of multi-family residential uses. Concentrated areas of large retail, commercial uses, restaurants, hotels, and the Toyota Arena are located along Milliken Avenue from 4th Street south to I-10.

Figure 2-1 Regional Location Map



Source: AECOM 2024

Figure 2-2 Proposed Project Site



Source: AECOM 2024

2.3.2.4 Proposed Project Design

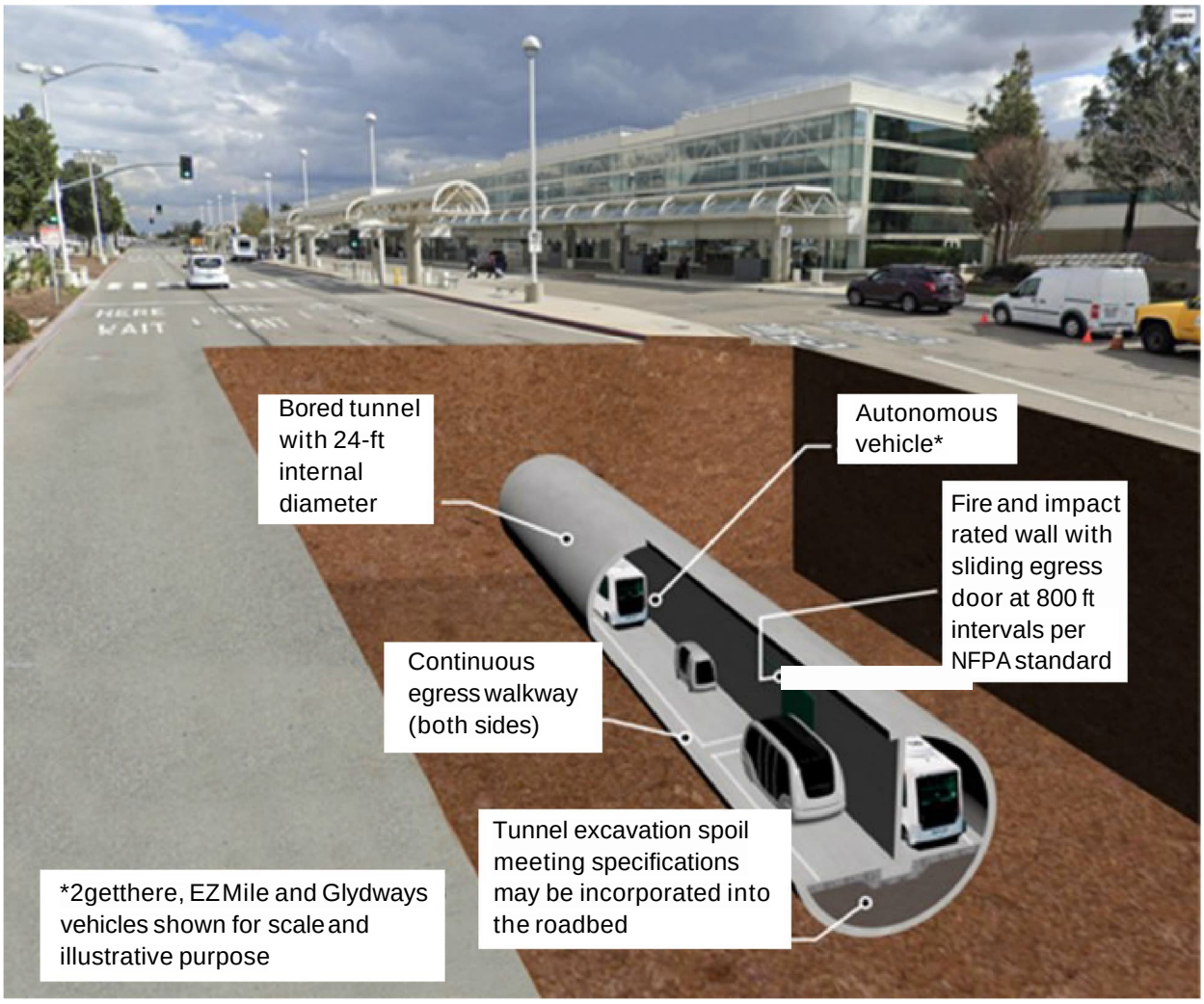
The proposed Project includes construction of transit facilities, including three at-grade passenger stations, one MSF, and one emergency access and vent shaft. The proposed alignment would run primarily within a 4.2-mile single underground tunnel (24-foot inner diameter bidirectional tunnel) that begins at the Cucamonga Metrolink Station and travels south along Milliken Avenue and crosses beneath 6th Street and 4th Street, I-10, and the Union Pacific Railroad, before traveling west beneath East Airport Drive to connect to Terminals 2 and 4 at ONT. A 24-foot-inner-diameter tunnel configuration with a middle fire and impact-rated wall with access doors at 800-foot intervals per National Fire Protection Association standards, has been identified as the proposed Project based on technical analysis, evaluation, and stakeholder input. Figure 2-3 depicts a typical transit tunnel section. Please see the Alternatives Considered Report for additional background on the development and refinement of the proposed Project design.

The tunnel portion of the alignment would include a fixed transit guideway for autonomous electric transit vehicles to transport passengers between Cucamonga Metrolink Station and ONT. The tunnel depth has been designed to be approximately 70 feet below the ground surface. The autonomous electric transit vehicles would run on rubber tires, and the vehicles are proposed to travel on a dedicated asphalt guideway within the tunnel. The tunnel will include access ramps for the transit vehicles to surface to grade and provide access to the three proposed at-grade stations (discussed further below) for passenger boarding and alighting.

Three stations would be constructed to serve the Cucamonga Metrolink Station, ONT Terminal 2, and ONT Terminal 4. All three stations would be connected to the bored tunnel via a cut-and-cover structure and an at-grade guideway. The guideway would be enclosed by fencing, and the walls would be buffered with landscaping. A pedestrian walkway would be provided bordering the outside of the guideway.

The MSF would be located adjacent to Cucamonga Metrolink Station and would support operations for the proposed Project by storing, maintaining, and cleaning autonomous electric transit vehicles, and it would also include employee amenities and parking. The access and vent shaft would be constructed to provide a means of emergency passenger egress and first responder access.

Figure 2-3 Typical Transit Tunnel Section View



Source: HNTB 2024

2.3.2.5 **Stations**

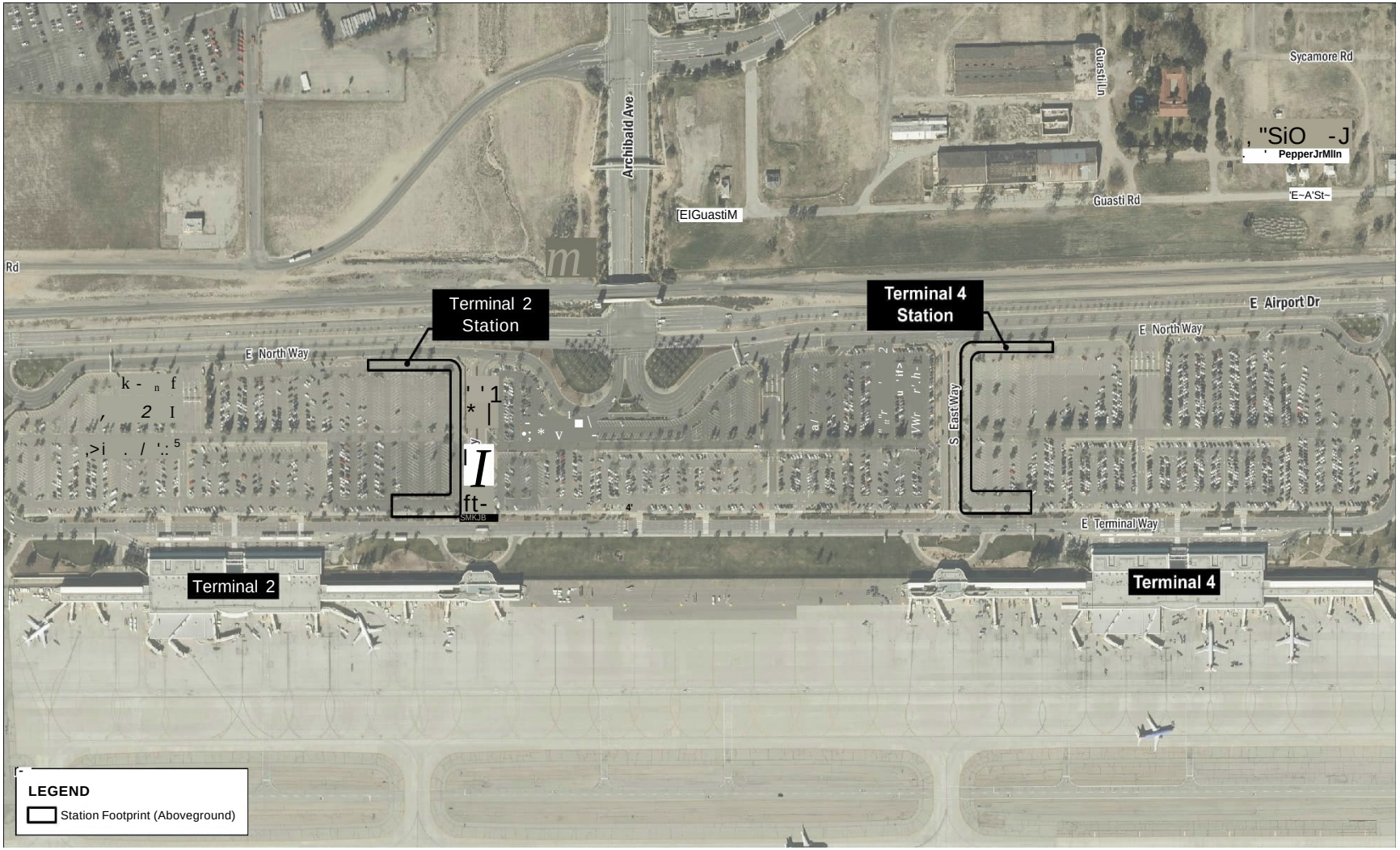
The proposed Project includes three passenger stations. One station would be located in the northwestern cor[illegible]sting Cucamonga Metrolink Station pa[illegible]ich is co-owned and maintained by the SBC[illegible]city of Rancho Cucamonga. The other two proposed stations would be located within two of the [illegible]parking lots at ONT, specifically Parking Lot 2 and P[illegible]hich are located across from Terminals 2 and 4. These proposed stations would be loca[illegible]nd would connect to their associated tunnel portals along Terminal Way at ONT. Stations [illegible]o be one to two stories and up to approximately 40 feet in height. Figure 2-4 and Figure 2[illegible] the overview of the proposed station footpri[illegible]

Figure 2-4 Cucamonga Station



Source: HNTB 2024

Figure 2-5 Ontario International Airport - Terminal 2 Station and Terminal 4 Station



Source: HNTB 2024

An approximately 8,000 square-foot, at-grade station would be located at the northwest corner of the existing Cucamonga Metrolink Station parking lot. Approximately 180 parking spaces would be permanently removed from the existing Cucamonga Metrolink Station parking lot to accommodate the proposed Cucamonga Station.

Two other airport-serving stations, each approximately 10,000 square-feet, would connect to their associated tunnel portals along Terminal Way via an at-grade connection. The proposed stations would be entirely located within the ONT right-of-way (ROW). Approximately 80 parking spaces would be permanently removed to accommodate the ONT Terminal 2 Station, and approximately 115 spaces would be permanently removed to accommodate the ONT Terminal 4 Station.

2.3.2.6 Maintenance and Storage Facility

The proposed Cucamonga Station would include an adjacent maintenance and storage facility with enclosed bays to store, clean, and maintain vehicles. The MSF would be approximately 11,000 square feet, with an additional 5,000 square feet second story and would contain an operations control center with lockers, breakrooms, and restrooms. Employee parking for the facility would be provided at the existing parking lot owned by SBCTA, in the southeastern quadrant of the Milliken Avenue/Azusa Court intersection.

2.3.2.7 **Description of Vent Shaft Options**

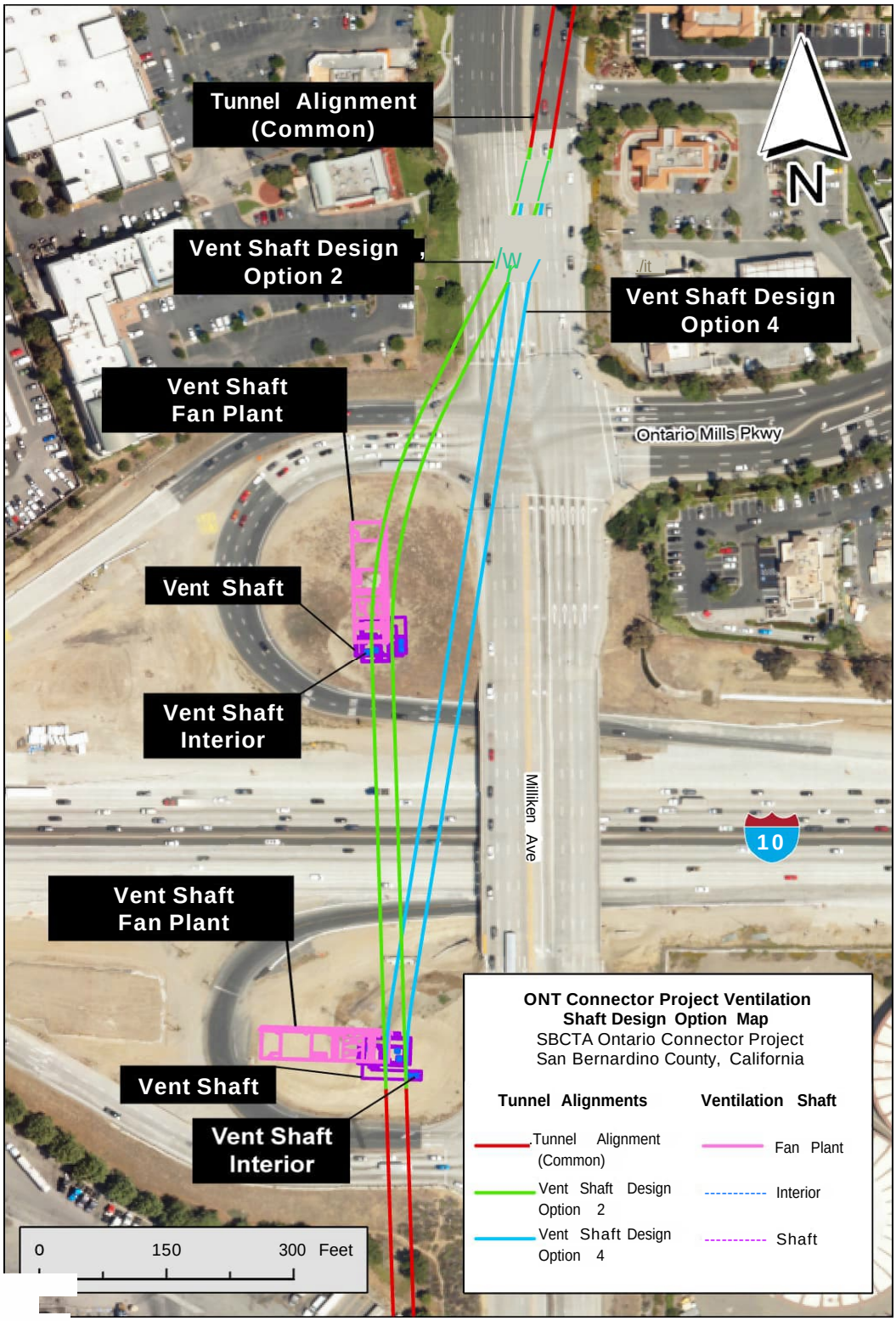
A vent shaft would be constructed to provide a means of emergency passenger egress and first responder access to and from the tunnel. Two locations are being considered west of Milliken Avenue on the north and south sides of I-10, as shown in Figure 2-6. A final decision about the location of the vent shaft would be made after the completion of the CEQA and NEPA environmental processes, and consideration of operational needs, environmental impacts, and stakeholder coordination.

The location option on the north side of I-10 would be in the ROW for the westbound off-ramp and would provide surface ground access from the Milliken Avenue/I-10 westbound off ramp intersection or from the westbound off ramp right lane near the ramp termini or directly from Milliken Avenue. The location option on the south side of I-10 would be in the ROW for the eastbound on-ramp and would provide surface ground access from Milliken Avenue near the eastbound on-ramp.

The vent shaft would consist of both underground and above ground structures. The underground shaft would extend to the tunnel level and the surface structures would consist of a one-(1) story structure above ground.

Access points would include underground, surface, and road access for emergencies to and from the tunnel. The proposed vent shaft would include associated electrical and ventilation equipment, and access would be controlled via a lock and key.

Figure 2-6 Vent Shaft Design Option 2 and Vent Shaft Design Option 4



ırce: HNTB 2024

2.3.2.8 **Operations**

The proposed Project would operate autonomous electric vehicles to transport passengers between the Cucamonga Metrolink Station and ONT. The autonomous electric vehicles would be grouped and queued at their origin station and depart toward the destination station once boarded with passengers. After the group of vehicles arrives at the destination station and passengers deboard, new passengers would board, and the group of vehicles would return to its origin station. If no new passengers are present, empty vehicles would be returned to the origin station to pick up new passengers. The proposed Project would provide a peak one-way passenger throughput of approximately 100 per hour. Operations would be managed by Omnitrans, with on-demand service provided daily from 4:00 a.m. to 11:30 p.m., including weekends and holidays.

Fleet size and capacity of the vehicles will be up to the Operating System Provider and Design-Builder to determine to provide an initial operating system capable of transporting a minimum of 100 passengers per hour per direction and scalable to meet ridership demand. Based on the initial operating requirements and preliminary vehicle capacities, SBCTA is anticipating initial fleet sizes of between 7 and 60 vehicles to be required. Vehicles are rubber-tired electric autonomous vehicles.

2.3.2.9 Proposed **Construction** Approach

This section describes the construction approach for the proposed Project. Overall construction of the proposed Project would last approximately 56 months, with project elements varying in their specific construction duration, as discussed below. Construction of the is projected to start in 2025 and is anticipated to be completed in 2031. The Construction Methods Technical Report (SBCTA 2024b) provides additional details regarding the construction approach and process for the key project elements (stations, MSF, tunnel construction, and vent shaft) associated with the proposed Project.

2.3.2.9.1 General Construction Approach

A construction staging area would be required at each of the three proposed Project stations, which includes the MSF at the Cucamonga Station, and at the vent shaft location. Construction staging areas would be used to store building materials and construction equipment, assemble the tunnel boring machine (TBM), temporarily store excavated materials, and serve as temporary field offices for the contractor. Heavy-duty, steel, track-out grates (i.e., rumble plates) would be staged at the entrance of the construction staging areas to capture dirt and soil debris from the wheels of trucks and construction equipment. Best management practices would minimize a public nuisance that can result from soil and mud tracks on the public roadway. For security purposes, construction staging areas would be equipped with fences, lighting, security cameras, and guards to prevent vandalism and theft.

Cut-and-cover sites would occur at each proposed station location. Cut-and-cover activities involve the excavation of a shallow underground guideway from the existing street surface. During the construction

phase, the cut-and-cover sites at Cucamonga Metrolink Station and Terminal 2 at ONT would be used as the TBM launching and receiving pits. Ultimately, the station cut-and-cover sites would serve as the vehicle ramps for the proposed Project's operations where the underground guideway would transition to at-grade. Cut-and-cover activities would include the following:

- Utility relocation or protection in-place and hanging where cut-and-cover method would be used;
- Soldier pile installation involving shoring on both sides of the excavation footprint to support the excavation and roadways;
- Initial excavation from the surface using large excavators. Installation of temporary support of excavation composed of struts and lagging;
- Stockpiling of excavated material that is deemed suitable for reuse as backfill material;
- Excavation of launching and receiving pits;
- Construction of the permanent structures;
- Backfilling of and restoring the surface once the facilities are completed; and
- Install imported fill supported by soldier pile and lagging with permanent retaining walls constructed where the guideway transitions from at-grade to underground.

Following the mass excavation and grading, the stations would require the installation of the waterproof membrane around the station box. The construction sequence for the station structures would typically commence with construction of the foundation base slab, followed by installation of exterior walls any interior column elements, and pouring of the station roof. Once station structure work is complete, the station excavation would be backfilled, and the permanent roadway would be constructed. Decking removal and surface restoration would then occur. Stations are proposed to be 1 to 2 stories, up to approximately 40 feet in height.

Generally, stations would be built simultaneously with or following guideway construction. However, construction of the Cucamonga Station may need to occur after the completion of all excavation and in-tunnel work. Truck haul routes, described in Table 2-1, would be designated for each staging site to transport excavated material from the staging sites. Additional construction details for the proposed stations and MSF are described below, in Table 2-1, and in the Construction Methods Technical Report (SBCTA 2024b). Table 2-2 provides an overview of the typical sequencing for transit construction activities.

Table 2-1 Stations, Maintenance and Storage Facility Construction Details

Proposed	Construction Area	Duration	Haul Route
Cucamonga Station and MSF	Would require approximately 3.2 acres within the existing Cucamonga Metrolink Station parking lot. Approximately 170 parking spaces would be temporarily unavailable from the existing Metrolink parking lot.	Construction at the Cucamonga Station would occur for up to 37 months.	Haul trucks are needed to support removal and transport of materials from the mass excavation for each construction site (for the stations and vent shaft) and from tunnel boring activities. Haul trucks would collect excavated material from the construction sites and transport it away from the sites, utilizing designated haul routes. Haul trucks would exit the staging area, travel north along Milliken Avenue, and turn right on Foothill Boulevard to access I-15. No road closures are anticipated for staging at the Cucamonga Station.
ONT Terminal 2 Station	Would require approximately 3.4 acres within the existing ONT Terminal 2 parking lot. Approximately 300 parking spaces would be temporarily unavailable from the ONT parking lot.	Construction at ONT Terminal 2 would occur for up to 27 months.	Haul trucks are needed to support removal and transport of materials from the mass excavation for each construction site (for the stations and vent shaft) and from tunnel boring activities. Haul trucks would collect excavated material from the construction sites and transport it away from the sites, utilizing designated haul routes. Haul trucks would exit the staging area, travel east along Terminal Way, and turn left on Haven Avenue to access I-10. No road closures are anticipated for staging at the Terminal 2 Station.
ONT Terminal 4 Station	Would require approximately 3.2 acres within the existing ONT Terminal 4 parking lot. Approximately 300 parking spaces would be temporarily unavailable from the ONT parking lot.	Construction at ONT Terminal 4 would occur for up to 15 months.	Haul trucks are needed to support removal and transport of materials from the mass excavation for each construction site (for the stations and vent shaft) and from tunnel boring activities. Haul trucks would collect excavated material from the construction sites and transport it away from the sites, utilizing designated haul routes. Haul trucks would exit the staging area, travel east along Terminal Way, and turn left on Haven Avenue to access I-10. No road closures are anticipated for staging at the Terminal 4 Station.

Table 2-2 Typical Sequencing of Transit Construction Activities

At Grade or Underground	Activity	Typical Duration (Total Months)	Description
At Grade Construction Activities	Utility Relocation	7-14	Relocate utilities from temporary and permanent elements related to the construction and/or operation of the Project.
At Grade Construction Activities	Construction Staging Laydown Yard	3-6	Prepare existing lots to store construction equipment and materials, including the TBM, office space.
At Grade Construction Activities	Roadway	6-18	Reconfigure roadway, demolition of existing roadway installation of curb and gutter and other public ROW improvements.
At Grade Construction Activities	At-grade Guideway	6-18	Install asphalt and striping for guideway.
At Grade Construction Activities	Station Construction (overall)	24-48	Install mechanical, electrical, and plumbing (MEP), canopies, faregates, ticketing, finishes, stairs, and walkways.
At Grade Construction Activities	Parking	3-6	Restoring existing parking stalls temporarily unavailable due to construction, as applicable.
At Grade Construction Activities	MSF	8-12	Install MEP, fencing, enclosed bays, specialized washing equipment, and rebar installation, and concrete pours.
Underground Construction Activities	Utility Relocation	7-14	Relocate and hang underground utilities from temporary and permanent elements related to the construction and operation of the Project.
Underground Construction Activities	Open Cut and Cut and Cover Construction	18-24	Supports the construction of the TBM launching and receiving pit, and of the access ramps connecting the tunnel with the at-grade stations. Install soldier piles for beam and lag support of excavation and excavation. Cover excavation with temporary decking.
Underground Construction Activities	Bored Tunnel	16-24	Underground guideway construction.
Underground Construction Activities	Ventilation and Emergency Access Shaft	6-8	Install ventilation and emergency access shaft.
Underground Construction Activities	Underground Guideway	12-18	Install asphalt and striping for guideway.

2.3.2.9.2 Construction Details for Cucamonga Station and Maintenance and Storage Facility

Construction at the proposed Cucamonga Station would require a mass excavation and the TBM would be launched from the invert of the Cucamonga Station and retrieved from the ONT Terminal 2 Station construction site. Construction at the proposed Cucamonga Station would require approximately 3.2 acres. Approximately 170 parking spaces would be temporarily unavailable at the Cucamonga Metrolink Station parking lot. Construction at the Cucamonga Station would occur for up to 37 months. No road closures are anticipated for staging at the Cucamonga Station. Equipment needs would include the following: excavators, backhoes, a vertical conveyor system, a gantry crane, a crawler crane, concrete trucks, haul trucks, a wheel loader, Foamplant, cooling towers, a tunnel fan grout plant, segment cars, and flatcars.

Additionally, construction would not interrupt Metrolink service at the Cucamonga Metrolink Station, as construction activities and staging would occur within the existing Cucamonga Station parking lot. SBCTA will coordinate construction at Cucamonga Station with the Southern California Regional Rail Authority (SCRRA), prior to the start of construction and throughout the construction period, to maintain station access and to coordinate station parking, as needed.

Equipment needs would include the following: excavators, backhoes, a vertical conveyor system, a gantry crane, a crawler crane, concrete trucks, haul trucks, a wheel loader, Foamplant, cooling towers, a tunnel fan grout plant, segment cars, and flatcars.

The proposed Cucamonga Station includes an MSF to store, clean, and maintain vehicles. The MSF would be approximately 11,000 square feet, with an additional 5,000 square feet second story and would contain an operations control center with lockers, breakrooms, and restrooms. The MSF would be constructed adjacent to the Cucamonga Station and would include enclosed bays.

2.3.2.9.3 Construction Details for ONT Terminal 2 Station

Construction staging at the proposed ONT Terminal 2 station would require approximately 3.4 acres within the existing ONT Terminal 2 parking lot. Approximately 300 parking spaces would be temporarily unavailable at the ONT Terminal 2 parking lot. Construction at the ONT Terminal 2 Station would occur for up to 27 months. No road closures are anticipated for staging at the ONT Terminal 2 Station. Equipment needs would include the following: a piling rig, a gantry crane, a crawler crane, excavators, concrete trucks, muck trucks, a wheel loader, Foamplant, cooling towers, a tunnel fan, a grout plant, segment cares, and flatcars.

2.3.2.9.4 Construction Details for ONT Terminal 4 Station

Construction Staging at the proposed ONT Terminal 4 station would require approximately 3.2 acres within the existing ONT Terminal 4 parking lot. Approximately 300 parking spaces would be temporarily unavailable at the ONT Terminal 4 parking lot. Construction at the ONT Terminal 4 Station would occur for up to 15 months. No road closures are anticipated for staging at the ONT Terminal 4 Station.

Equipment needs would include the following: a piling rig, a crawler crane, concrete trucks, muck trucks, a compressor, a generator, a water treatment plant, a wheel wash, a wheel loader, backhoes, and excavators.

2.3.2.9.5 Construction Details for the Tunnel

The proposed Project would traverse up to 70 feet in a below-grade tunnel configuration for most of its proposed alignment. A TBM will be utilized in the construction of the tunnel. TBM are typically used in the construction of infrastructure projects to build deep underground tunnels by boring, or excavating, through soil, rocks, and/or other subsurface materials. The TBM would be launched from the Cucamonga Metrolink Station to construct the tunnel.

The TBM would be launched from the invert of the Cucamonga Station and retrieved from the ONT Terminal 2 Station construction site. A large crane would be used to assemble and disassemble the TBM from the excavation and receiving pits. Ontario International Airport Authority height limits at ONT and Rancho Cucamonga, 135 feet and 160 feet, respectively, and would restrict crane heights. The TBM would operate six days a week, with maintenance occurring each Sunday. Construction of the entire tunnel would take approximately 22 months. Both ends of the tunnel would need to be constructed via direct excavation (cut and cover) to launch or retrieve the TBM. After mining is completed and TBM logistics are demobilized, both ends of the tunnel would be utilized to build the invert roadway, walkways, center wall and MEP systems, etc.

Vehicle ramps connecting to the tunnel would be constructed via direct excavation, as well. Equipment at the TBM launch site would include trucks, a crane, excavators, a grout plant, a compressor plant, a tunnel fan, and cooling towers. The launch area would also store tunnel construction materials (rail, pipe, ducts, etc.) and stockpile excavated material.

Truck haul routes at the proposed launch site at Cucamonga Station and the proposed retrieval site at ONT Terminal 2 Station are described in Table 2-1. Construction Methods Technical Report (SBCTA 2024b) includes additional details on the overall construction approach for the proposed tunnel.

2.3.2.9.6 Construction Details for Ventilation Shaft

As previously mentioned in Section 2.3.2.4, two vent shaft design options with different access points are being considered for the proposed Project. Vent shaft design option 2 would be located west of Milliken Avenue on the westbound off-ramp of the I-10. Vent shaft design option 4 would be located west of Milliken Avenue on the eastbound on-ramp of the I-10. The vent shaft will consist of both underground and above ground structures. The underground shaft will extend to the tunnel level and the surface structure will consist of a one-(1) story structure above ground. One vent shaft would be constructed along the tunnel alignment.

The vent shaft could be constructed before or after the construction of the tunnel and would be installed using a similar construction methodology to that of the tunnel and take approximately 6 months to complete. A drill rig would install up to 5 piles deep per day, each 70 feet deep. Piles would be drilled (i.e., no impact driving). The access shaft would then be excavated. The excavation would be supported by an internal bracing system. The vent shaft would require a construction staging area approximately 0.62-acres (27,000 square feet). Anticipated equipment at the location would include haul trucks, a drill rig, a crane, an excavator, a wheel loader, a compressor, and a ventilation fan. The staging area would include material storage, stockpiles of excavated material, water treatment, a workshop, a construction office, and employee parking. Additional details regarding the construction process for the vent shaft are included in the Construction Methods Technical Report (SBCTA 2024b).

2.3.2.9.7 Construction Details for Utility Relocation

Utility relocations are anticipated at the launch and retrieval locations at the Cucamonga Metrolink Station site, ONT, and ventilation/emergency access shaft. Multiple utilities would be relocated to allow for the construction of the access shaft, including: potential electric underground distribution cables owned and operated by Southern California Edison; landscape irrigation line owned and operated by the City of Ontario; and Caltrans fiber optic duct bank. In a future project phase, coordination with the existing utility service providers prior to utility relocation would be conducted to reduce potential impacts to utility service and minimize disruptions. Relocations of existing utilities would be coordinated with utility service providers and would be in previously disturbed areas or established ROW close to their existing locations and would stay within the evaluated Project footprint.

2.3.2.10 Proposed Project Easements

The proposed Project would require easements from 19 properties. This includes the need for 12 permanent subsurface easements, two permanent surface easements, and five parcel acquisitions for both subsurface and surface easements. Seven of the easements would be for the three stations and would total approximately 2 acres. SBCTA would require these easements for construction and/or operation of the proposed Project. There are two locations that are options for the location of the Vent Shaft, both belonging to Caltrans. This document evaluates the impacts for both options without selection of a preferred site. The decision of the preferred site will depend in part on the CEQA and NEPA processes, including any potential input from the public. The final decision as to which option is preferred may occur after the completion of the CEQA/NEPA process. Land uses for the parcels where these easements would be required include industrial, transportation facilities, utilities, and commercial. The owners of these parcels include SBCTA and City of Rancho Cucamonga (Cucamonga Metrolink Station west and east parking lots), OIAA, a utility service provider, and some private owners. No relocations of businesses and residences would be required to construct the proposed Project.

2.3.2.11 **Preliminary Cost Estimate** and Funding

The estimated capital cost of the proposed Project is $538 million. The cost estimates produced during this phase are intended to inform initial decision-making and the alternatives screening process. As design progresses and decisions on the proposed Project features are refined, the capital cost for this alternative may increase. Cost risks associated with this alternative include - Construction impacts from Brightline West; coordinating airport access during construction; and further design and coordination associated with construction of the vent shaft. Table 2-1 shows the Project Cost and funding sources.

Table 2-1: Project Cost and Funding Sources

Funding Sources	Type	Amount (thousands)
Rail Assets	Local	$ 980
State Transit Assistance	State	$ 18,100
State Transit Assistance	State	$ 37,762
Local Transportation Funds	Local	$ 15,167
FTA 5307	Federal	$21,000
Congestion Management and Air Quality Improvement Program	Federal	$ 59,667
Low Carbon Transit Operations	State	$2,000
Local Transportation Funds	Local	$116,324
Future Grant Opportunities	State/Federal	$267,537
TOTAL PROJECT FUNDING REQUIRED		$538,537

Note: Dollar values are in thousands.

2.3.2.12 Permits and Approvals

SBCTA is the proposed Project Lead Agency pursuant to CEQA Guidelines Section 15367. Numerous approvals and/or permits would be required to implement the proposed Project. The environmental documentation for the proposed Project would be used to facilitate compliance with state laws, and the granting of permits by various state and local agencies having jurisdiction over one or more aspects of the proposed Project. Given the disturbed nature of the aboveground proposed Project features and anticipated lack of surface waters at the termini and the access shaft near I-10, the proposed Project does not anticipate the need for Section 404, 401, and/or 1602 permits for the proposed Project. Implementation of the proposed Project would require discretionary actions and permits from the agencies identified in Table 2-4.

Table 2-4: Required Approvals and Permits

#	Requirement/Permit	Permitting Agency
1	Draft Cooperating Coordination Agency Plan	Federal Transit Administration, SBCTA,
2	National Environmental Policy Act Compliance	Federal Transit Administration
3	Form 7460-2-Parts 1 and 2 Obstruction Evaluation/Airport Airspace Evaluation	Federal Aviation Administration
4	California Environmental Quality Act Compliance	SBCTA
5	Section 106 of the National Historic Preservation Act (NHPA) Consultation	State Historic Preservation Officer
6	Air Quality Permit (stationary equipment)	South Coast Air Quality Management District
7	Construction General Permit	State Water Resources Control Board
8	Encroachment Permits	Caltrans, Cities of Ontario and Rancho Cucamonga
9	Discretionary Permit for Airport Property	City of Ontario
10	Tree Removal Permits	Cities of Ontario and Rancho Cucamonga
11	Building Permits	Cities of Ontario and Rancho Cucamonga
12	Airport Development Advisory Board approval (design phase)	Ontario International Airport Authority

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3 INTRODUCTION TO ENVIRONMENTAL ANALYSIS

This chapter contains a discussion of the potential environmental effects of the proposed Project for the environmental topics that were identified through the scoping process. This chapter is the primary component of the Draft Environmental Impact Report (EIR), as it provides information on the existing conditions, type and magnitude of the proposed Project's potential individual and cumulative environmental impacts, and feasible mitigation measures to reduce or avoid significant impacts.

The assessment of each environmental topic includes a discussion of the relevant regulatory framework, methodologies used and the "Thresholds of Significance," based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines.

As required by the CEQA Guidelines, this Draft EIR document discusses any inconsistencies between the proposed Project and applicable policies within San Bernardino County General Plan (2020), the City of Rancho Cucamonga General Plan (2021), and the City of Ontario General Plan (2022). However, consistent with the scope and purpose of this Draft EIR, the discussion primarily focuses on those requirements adopted for the purpose of avoiding or mitigating an environmental effect and an assessment of whether any inconsistency with these standards creates a significant physical impact on the environment. The ultimate determination of whether this proposed Project is consistent with San Bernardino County General Plan, the City of Rancho Cucamonga General Plan, and the City of Ontario General Plan is a decision that resides exclusively with the decision-making body, not with this environmental document.

The existing conditions component of the analysis defines the environmental conditions as they exist on and near the proposed Project site, while the proposed Project impacts are defined as the proposed Project's effect on the existing environment. The impact evaluation describes each impact of the proposed Project, mitigation measures for significant impacts, and level of significance after mitigation. Mitigation measures are designed to reduce a project's potential impact.

A discussion of cumulative effects, which evaluates the impacts associated with the proposed Project in conjunction with other past, present, and probable future development in areas causing related impacts are provided in Section 3.18, Cumulative Impacts.

Environmental resources that were found not to be significant are discussed below:

- Agricultural and Forestry Resources – There are no identified agricultural and forestry resources in the proposed Project area, nor does the proposed Project site contain areas with land use designated for agricultural or forestry use. The proposed Project and the No Project Alternative are anticipated to have no impact, and agricultural and forest resources is further discussed in Chapter 4 of this Draft EIR.
- Mineral Resources – There are no identified mineral resources of state, regional or local value within the proposed Project area. The proposed Project and the No Project Alternative are

anticipated to have no impact, and mineral resources is further discussed in Chapter 4 of this Draft EIR.

- Wildfire – There are no designated wildfire hazard zones and no areas susceptible to wildfire within the proposed Project area. The proposed Project and the No Project Alternative are anticipated to have no impact, and wildfire is further discussed in Chapter 4 of this Draft EIR.

3.1 AESTHETICS AND VISUAL QUALITY

3.1.1 Introduction

This section of this Draft Environmental Impact Report (EIR) provides a summary of the evaluation of the impacts to aesthetics and visual quality resulting from the implementation of the proposed Ontario International Airport (ONT) Connector Project (Project). Detailed information for aesthetics and visual quality resources is included in the Aesthetics and Visual Quality Technical Report (SBCTA 2024; Appendix B).

3.1.2 Regulatory Framework

In addition to federal and state environmental regulations, local agencies may also have requirements or recommendations regarding developments within their boundaries. The proposed Project alignment falls within the City of Rancho Cucamonga and the City of Ontario within San Bernardino County. The discussion in this section identifies the regulatory setting of the proposed Project area regarding these jurisdictions.

3.1.2.1 Federal

Several federal regulations govern the assessment and consideration of visual quality and aesthetic character. These regulations consider the protection and enhancement of existing resources and aesthetic character, as well as the incorporation of design considerations in the development and construction of a project. The following federal regulations and policies apply to the evaluation of visual effects for the proposed Project.

3.1.2.1.1 Federal Highway Administration and Federal Transit Administration

The Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) established Environmental Impact and Related Procedures for the evaluation of urban mass transit projects and the compliance of these projects with 23 United States Code (USC) Section109(h) and 393, as well as other federal statutes.

3.1.2.1.2 Federal Transit Administration Circular 9400.A, Design and Art in Transit Projects

The FTA Circular 9400.A encourages the use of design and artistic considerations in transit projects. FTA recognizes that specific types of transit projects require an assessment of visual effects. The FTA Circular 9400.A provides guidance on opportunities for incorporating art and design into transit projects.

3.1.2.1.3 Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users

Sections 6002-6009 places additional emphasis on environmental considerations such as mitigation, enhancement activities, context sensitive solutions, and Section 4(f). It also advances the idea of coordinating public and agency involvement and promoting the use of visualization techniques to improve stakeholder understanding of the proposed alternatives.

3.1.2.1.4 United States Department of Transportation Act, Section 4(f)

United States Department of Transportation (USDOT) Act Section 4(f) applies to agencies within USDOT and is generally referred to as 49 USC 303. Section 4(f) focuses on the preservation of public parks and recreation lands, wildlife and waterfowl refuges, and historic sites, and includes the preservation of their aesthetic integrity.

3.1.2.1.5 Section 106 of the Historic Preservation Act of 1966

Section 106 furthers the preservation of historic resources, including resources that any Indian Tribe or Native Hawaiian Organization has attached religious or cultural significance to or with. Section 106 is applicable to a visual impacts analysis because historic resources are often considered to be potential visual resources.

3.1.2.2 State

3.1.2.2.1 California Environmental Quality Act

California Environmental Quality Act (CEQA; Public Resources Code Section 21000 et seq.) and CEQA Guidelines (Section 15000 et seq.) require state and local agencies to identify the significant environmental impacts of their actions, including potential significant impacts on aesthetics and visual quality resources, and to avoid or mitigate those impacts, when feasible. CEQA declares that it is the policy of the State of California to take all action necessary to provide people "with…enjoyment of aesthetic, natural, scenic, and historic environmental qualities" (California Public Resources Code Section 21001[b]).

CEQA requires an evaluation of several aspects of visual and aesthetic issues including effects on scenic vistas; damage to scenic resources, including, but not limited to, trees, rock outcroppings and historic buildings within a State scenic highway; effects on the visual character or quality of the site and its surroundings; and effects from new light or glare which may affect nighttime views in the area.

3.1.2.2.2 California Department of Transportation

The proposed Project would encroach on California Department of Transportation (Caltrans) right-of-way (ROW) with the construction and operation of the tunnel ventilation shaft (vent shaft) in either the northwestern or southwestern quadrant of the Interstate 10 (I-10)/Milliken Avenue Interchange. The encroachment will require the removal of vegetation.

3.1.2.2.3 Scenic Routes

Caltrans manages the California Scenic Highway Program which was created by State Legislature in 1963. The purpose of the California Scenic Highway Program is to protect and enhance the natural scenic beauty of California highways and adjacent corridors through special conservation treatment. The program includes a system of highways that are either eligible for designation as scenic highways or have been officially designated. The status of a proposed state scenic highway changes from eligible to officially designated when the local governing body applies to Caltrans for scenic highway approval, adopts a Corridor Protection Program, and receives notification that the highway has been officially designated as a scenic highway (Caltrans 2022).

3.1.2.2.4 California Department of Transportation Landscape Regulations

Caltrans has established a plan selection and setback guide for all new landscape plantings. In most instances, these guidelines are more limiting than previous requirements. The primary concern of the requirements is the safety of maintenance workers and travelers on the roadway. Under the revised guidelines, new plantings may be restricted in their locations, and it cannot be assumed that new plantings will be in-kind and in-place of the existing plantings. In addition, an increase in disease and insect vectors has limited the species that can be replanted.

3.1.2.3 Regional

3.1.2.3.1 San Bernardino County

In August 2008, the San Bernardino County Board of Supervisors launched Green County San Bernardino (San Bernardino County 2008) to spur the use of "green" technologies and building practices among residents, business owners, and developers in the San Bernardino County. In addition, the San Bernardino County has established a set of development standards for businesses and developments that are adjacent to freeway corridors within unincorporated San Bernardino County area. These standards include landscaping and sign regulations.

3.1.2.3.2 The Ontario International Airport Authority Design and Construction Handbook

The ONT Design and Construction Handbook (Ontario International Airport Authority [OIAA] 2019) simplifies and standardizes the development process for all projects undertaken at ONT. The handbook includes design standards that projects at the airport must incorporate. The standards pertaining to aesthetics, including lighting, are as follows:

- Lighting fixtures and design shall provide the lighting levels, visual comfort, color rendering and aesthetics to complement the area where it is installed. Lighting of public areas is especially important, and all lighting design in public areas shall be approved by OIAA prior to submitting documents for plan check. All lighting shall be installed in areas accessible by ladder or lift for ease of maintenance.
- All lighting design shall be as energy efficient as possible and shall comply with the latest Title 24 requirements. Dimmable light-emitting diodes (LEDs) shall be required in lieu of fluorescent luminaries utilizing the appropriate color temperature; provide consistent color temperature (tight binning), high Color Rendering Index (85+), and rated life greater than 50,000 hours. Where necessary, pulse-start metal halide high-intensity discharge sources shall be provided.
- The following signs and sign material are not permitted and may not be displayed on a temporary basis:
    - Paper, poster, or foam board signs;
    - Hand-written signs;
    - Paper banners;

- Signs not approved by the OIAA Owner's Representative;
- Vertical lettered signs; and
- Sign mounted using visible tape.

- Fencing shall be used at exterior construction locations as approved by the OIAA Owner's Representative. Contractor shall submit renderings and barricade specifications for approval prior to installation. All fencing installation shall be secured or anchored using approved means and methods at the discretion of ONT.
- Two types of fencing may be feasible depending on the location and conditions. Standard 6- or 8-foot construction fencing with posts buried in the ground are required. Where K-rails or concrete barriers are used, screen chain-link fencing shall be secured atop the barrier to reach the appropriate height. A screened 4-foot chain-link fence shall be secured along the top of the concrete barriers. The top of the fence shall be uniform and even along the entire length of the fence.
- Construction entrances shall be constructed of framed and screened chain-linked fences. The gate width shall be approved by ONT. Gates shall be locked at all times. Exterior door signage is required.

3.1.2.4 Local

3.1.2.4.1 City of Rancho Cucamonga

The City of Rancho Cucamonga, through its General Plan (City of Rancho Cucamonga 2021a), emphasizes the aesthetics and landscaping as important aspects of the community. City of Rancho Cucamonga General Plan emphasizes a "strength of spirit and a cohesive vision shared by residents, businesses, and City leaders." The City of Rancho Cucamonga's guidelines and requirements are summarized in the next subsection.

3.1.2.4.1.1 Managing Land Uses, Community Design, and Historic Resources

The City of Rancho Cucamonga strives to display a mix of historical, cultural, and architectural heritage to provide a visual connection to the past while embracing the future.

Community Mobility

The City of Rancho Cucamonga General Plan, Mobility and Access chapter describes the City of Rancho Cucamonga's goals to encourage and incorporate more mobility choices to connect residents and visitors to family, friends, jobs, good, services, education, and entertainment, both locally and regionally.

Public Facilities and Infrastructure

The City of Rancho Cucamonga General Plan, Public Facilities and Services chapter details the importance of public facilities to the sense of community and to meet the needs of the areas and populations served.

Specific Plans

In addition to the policies and goals established in the General Plan, the City of Rancho Cucamonga also has the Empire Lakes Specific Plan related to the proposed Project. The Empire Lakes Specific Plan, adopted in 1994 and amended in 2020, describes development of 380 acres within a previously adopted Industrial Specific Plan area east of Milliken Avenue, from the Cucamonga Metrolink Station, south to Fourth Street (Rancho Cucamonga Municipal Code 2022). The Empire Lakes Specific Plan incorporates several design elements that support the aesthetic and visual goals of the City of Rancho Cucamonga General Plan. The Empire Lake Specific Plan's landscape design supports the General Plan.

3.1.2.4.2 City of Ontario

The City of Ontario has established guidelines and requirements for development within the community through its General Plan (City of Ontario 2022a). The City of Ontario General Plan reinforces the need for landscaping and other aesthetic treatments to roadways within the City of Ontario to maintain the City of Ontario's unique aesthetics and visual cohesion. The City of Ontario's guidelines and requirements are summarized below.

3.1.2.4.2.1 City of Ontario General Plan Community Design Element

The Community Design Element (City of Ontario 2022b) articulates design qualities to be applied citywide to preserve the eclectic-built environment that has developed across the City of Ontario for more than a century. It envisions a variety of urban environments that are organized around conveniently located developments, public spaces, and pedestrian and transit environments that are safe, comfortable, and visually appealing. Further, the Community Design Element includes transportation and view corridors design elements as part of the City of Ontario's unique identity because for many people, the primary image of the City of Ontario is shaped by what is seen from transportation and view corridors.

Specific Plans

In addition to the policies and goals established in the City of Ontario General Plan, the City of Ontario also has several specific plans and studies that encompass the proposed Project area (City of Ontario 2022c). These plans include aesthetic and visual resource policies, as follows:

- California Commerce Center Specific Plan (amended 2018)
    - Provide for transportation points, if appropriate
- Ontario Center Specific Plan (amended 2006)
    - A major center open space/view corridor area located adjacent to the San Bernardino (I-10) freeway which provided a visual focus to the Center.
    - Landscaping treatment adjacent to the freeway is a minimum 20-foot-wide setback area from the freeway ROW. This requirement may be reduced by one foot for each foot of landscaping constructed within Caltrans ROW, provided, that a minimum of ten feet of

landscaping shall be provided outside of and adjacent to Caltrans ROW and that the freeway ROW be landscaped as approved by Caltrans.

- Signs are to be located and designed to complement the architecture of the building and overall appearance of the Center; as well as being in conformance with Federal and State Highway standards, where applicable.

- Ontario Mills Specific Plan
  - Where practical, the use of skylights for natural lighting, solar orientation, and the use of deciduous trees for winter sunlight and summer shade for glass window areas should be incorporated.
  - Architecture should display a "timeless" quality. The use of contemporary, clean expressions are encouraged.
  - Where buildings will be visible from a public ROW or public street, the staggering of planes to create pockets of light and shadow and to provide relief from the monotonous, uninterrupted expanses of wall is encourages.
  - Exterior mechanical plants should be screened or contained so as not to be visible from adjacent streets.
  - Where mechanical equipment cannot feasibly be screened from view from the adjacent elevated freeways, it shall be designed as an integral element, including being painted in a matching color.
  - Service areas should not be visible from public rights-of-way or primary building entrances.
  - All ground-mounted utility appurtenances shall be located away from public view or shall be adequately screened. Screening shall be of material complementary to the structure and/or heavy landscaping and berming.
  - No utility appurtenances (e.g. electrical vaults) shall be permitted directly within a pedestrian area.
  - Landscaping should not only be used for an aesthetic purpose, but also to provide visual and user comfort, as well as for energy conservation.
  - The location of plant material should coincide with architectural design such as providing:
    - Emphasis to certain areas and building entries
    - Contrast with or reinforce building lines
    - Visual screening of undesirable elements

- Softening of hard lines of buildings

- Plant materials should be used to alter or modify microclimates by providing shade or wind control, be drought tolerant, and define outdoor spaces such as street edges, formal and informal areas, and pedestrian paths.

3.1.3 Methodology

A qualitative assessment of visual impacts was prepared by evaluating the existing visual character and setting and comparing it to visual resources and visual conditions anticipated to occur with the proposed Project. Visual or aesthetic resources are the natural and built features of the landscape that can be seen. The combination of landform, water, and vegetation patterns represents the natural landscape features that define an area's visual character. Built features, such as buildings, roads, utility structures, and ornamental plantings, reflect human modifications to the landscape. These natural and built landscape features, or visual resources, contribute to the public's experience and appreciation of the environment.

The assessment of visual resources in the proposed Project areas was made based on a review of the plans and policies of the respective communities as described in Section 3.1.2, to determine if any designated visual or aesthetic resources occur within these communities and to determine if the proposed Project design was consistent with these adopted plans. In addition, based on guidance outlined in the Guidelines for the Visual Impact Assessment of Highway Projects (USDOT 2015), an assessment of visual resources was made based on the cohesion or variation of the form, level of upkeep or deterioration of the built environment, and level of natural elements versus the built environment, as follows:

3.1.3.1 Visual Character

Visual character may include the following defined attributes, and is used to describe, not evaluate:

- Form: visual mass and shape;
- Line: edges or linear definition;
- Color: reflective brightness (i.e., light and dark) and hue (i.e., red, green);
- Texture: surface coarseness;
- Dominance: position, size, or contrast;
- Scale: apparent size as it relates to the surroundings;
- Diversity: a variety of visual patterns; and
- Continuity: uninterrupted flow of form, line, color, or textural pattern.

3.1.3.2 Visual Quality

Visual quality refers to the aesthetics of the landscape, which is based in part on the viewer's values and notions about what constitutes a quality setting. To establish an objective framework, FHWA (2015) concludes that vividness, intactness, and unity are valid and reliable criteria for evaluative appraisals of visual quality. Each criterion was assigned a qualitative ranking (low, moderate, and high) for each Visual

Assessment Units (VAU). The combined result of all three criteria indicates the degree of visual quality. The criteria are defined as follows:

- Vividness is the extent to which the landscape is memorable and is associated with distinctive, contrasting, and diverse visual elements. For example, high vividness represents dramatic background views toward the San Gabriel Mountains.
- Intactness is the integrity of visual features in the landscape, and the extent to which the landscape is free from non-typical visual intrusions. For example, high intactness embodies a consistent image of well-maintained homes or multi-family structures and street edge treatment.
- Unity is the extent to which visual elements combine to form a coherent, harmonious visual pattern. For example, high unity attests to the careful design and organization of buildings, structures, railroads, and streets.

3.1.3.3 Viewers and Viewer Response

Viewers are people whose views of the landscape may be altered by the proposed Project—either because the landscape itself has changed or their perception of the landscape has changed. Viewer groups were identified by observing the land uses and circulation patterns throughout the proposed Project area.

Viewer response is a prediction of the viewer's reaction to changes in the visual or aesthetic environment and has two dimensions—viewer exposure and viewer sensitivity. Viewer sensitivity is strongly influenced by a viewer's activity, the amount of time spent looking at a view, and awareness of their surroundings. People who view a landscape infrequently, view it for short periods of time (such as motorists and commuters), or are not attentive to it due to focusing on other activities (such as commercial and office building tenants), are often less sensitive to changes and are assumed to have low viewer sensitivity. Pedestrians spend more time observing the views and scenic resources and tend to be interested in project coherence, cultural order and natural harmony (FHWA 2015). Visual impacts are assessed based on changes to views from publicly accessible locations or public views. As such, commercial and office tenants within local buildings are not considered a viewer ground in the analysis because their views are private views.

For this proposed Project, due to its linear nature along roadways, the visual impact assessment generally follows the guidance outlined in the Guidelines for the Visual Impact Assessment of Highway Projects (USDOT 2015) published by FHWA. However, the FHWA guidelines do not provide precise methodology for analyzing visual and aesthetic impacts because it is acknowledged that the findings of an analysis of existing visual or aesthetic resources and potential visual or aesthetic impacts can be highly subjective, dependent upon the background of the assessor and the opinions of viewers. The qualities that create an aesthetically pleasing setting or that result in the perception of a visual element as aesthetically positive or negative vary from person to person. Different viewers may consider a change in the visual environment as either beneficial or adverse.

The analysis of aesthetics for the proposed Project considers the visual quality of the area immediately surrounding the proposed Project alignment and the impacts of the proposed Project with respect to the existing aesthetic environment. The analysis considers the physical aspects of the proposed Project and its associated design features, as well as an evaluation of visual simulations showing existing and future conditions at representative locations.

It is important to note that an assessment of visual impacts is not a quantitative analysis, but rather qualitative and can be largely subjective. The proposed Project site and surrounding uses were observed, and photographs were taken to determine the short- and long-term visual effects of the proposed Project.

3.1.4 CEQA Thresholds of Significance

According to Appendix G of the 2024 CEQA Guidelines, implementation of the proposed Project may result in a potentially significant impact if it:

- Has a substantial adverse effect on a scenic vista.
- Substantially damages scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.
- In non-urbanized areas, substantially degrades 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 proposed Project is in an urbanized area, conflicts with applicable zoning and other regulations governing scenic quality.
- Creates a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

3.1.5 Existing Setting

The proposed Project alignment is located with developed portions of San Bernardino County within developed portions of the City of Rancho Cucamonga and the City of Ontario at the southern base of the San Gabriel Mountain range, in the upper Santa Ana Valley. The San Gabriel Mountains and San Bernardino Mountains can be seen from most areas in the proposed Project vicinity and provide a scenic backdrop for the City of Rancho Cucamonga and the City of Ontario. Major north-south roadways, such as Archibald, Haven, and Etiwanda and Milliken Avenues, currently have unobstructed views of the San Gabriel Mountains and San Bernardino Mountains to the north and the lower-lying valley to the south. The regional visual setting of the proposed Project alignment is characterized by the following identifying elements: the flat appearance of the foreground landscape, the steep San Gabriel Mountains and San Bernardino Mountains to the north, and views of aircraft taking off and landing at ONT to the south. The proposed Project is within a primarily urban environment with a variety of commercial, industrial, transit/transportation uses, and some residential developments.

The proposed Project's existing setting includes scenic vistas and scenic resources. A scenic vista generally provides focal views of objects, settings, or features of visual interest and include panoramic views of

important visual features, including mountains, striking or unusual natural terrain, or unique urban or historic features as seen from public viewing areas. Scenic resources refer to natural or man-made features of high aesthetic quality. Views of scenic resources from public and private areas contribute to the overall attractiveness of an area and the quality of life for residents, visitors, and the workforce.

As previously noted, the San Gabriel Mountains provide the scenic backdrop, and are visible at surface level along the overall proposed Project alignment. While there are prominent scenic vistas within the City of Rancho Cucamonga, and the City of Ontario, none of these scenic vistas are located within the proposed Project alignment. Further, in the City of Ontario, the Euclid Avenue Corridor and the Misson Boulevard Corridor are considered scenic resources, the built out urban environment which interrupts views, and the distance between these scenic resources and the proposed Project alignment further inhibits views.

In addition, State and County designated, or eligible scenic highways or routes can be considered scenic resources. The nearest officially designated state scenic highway is an approximate 4-mile segment of SR-91 between post mile (PM) 9.2 and PM 13.4, roughly 12-miles southwest of the proposed Project. The next closest officially designated state scenic highway is the Angeles Crest Scenic Highway (SR-2), located on the northern side of the San Gabriel Mountains and approximately 25 miles north of the proposed Project alignment.

3.1.5.1 Area of Potential Impact

The geographic area of proposed Project visibility is referred to as the area of potential impact (API). It is determined by the physical constraints of the environment—landform (i.e., topography); land cover (i.e., vegetation and structures); and temporary presence of typical atmospheric conditions (i.e., smoke, dust, fog, and precipitation). In addition, the extent to which a project is visible is constrained by the physiological limits of human sight—location, proximity, and lighting. A review of the proposed Project alignment was conducted to fully understand the viewsheds and its context. This review included field visits and review of existing proposed Project area photographs taken for this report, aerial photography (Google Earth Pro), recent street views readily available online (Google Maps), and consideration of variations in proposed Project area topography. As a result, it was determined that viewshed distances would vary along and adjacent to the proposed Project alignment. Viewsheds would vary from approximately 125 feet up to approximately 900 feet from the proposed Project alignment, which is appropriate to define the API.

3.1.5.2 Visual Assessment Units

The existing visual and aesthetic conditions of the proposed Project alignment have been assessed by dividing the length of the alignment into three VAUs derived from three generalized geographic segments, beginning in the northern portion of the proposed Project alignment and ending in the southern portion. The VAU segments are shown on Figure 3.1-1 in Section 3.1.6. Each segment provides a framework for

analyzing the existing visual and aesthetic conditions of the corridor, including fore-, mid-, and background views. The existing visual character and quality, as well as the primary viewers, are described below.

3.1.5.2.1 VAU 1 Northern –Cucamonga Metrolink Station to 4th Street

The northern segment of the proposed Project alignment extends from Cucamonga Metrolink Station along Azusa Court to Milliken Avenue south to 4th Street. VAU 1 encompasses portions of the City of Rancho Cucamonga and is characterized by a mix of residential, commercial, industrial, and other uses, the majority of which are not visually memorable.

Cucamonga Metrolink Station is composed of covered seating areas, ticket stations, security lighting, and amenities such as bike racks, lockers, and public phones. Existing structures include the station platform, as well as decorative ornamental landscaping along walkways and within the station's parking areas.

Other visible uses within VAU 1 include a multi-family residential complex on the west side of Milliken Avenue at 7th Street, and at Milliken Avenue and 5th Street large industrial buildings of two to four stories to the east of Milliken Avenue north of 6th Street, two- to three-story commercial office buildings, and small-scale commercial businesses and restaurants at the intersection of Milliken Avenue and 4th Street. Most of the large industrial buildings are shielded by mature landscaping along Milliken Avenue and surrounding roadways. The multi-family residential uses are characterized by traditional large-lot, apartments in various architectural styles with newer amenities.

The primary viewers within VAU 1 consist of residents, motorists, and pedestrians. Milliken Avenue has six travel lanes in this VAU, with mature trees located along the public sidewalk on both sides of the street and within the landscaped roadway islands from Azusa Court south to 4th Street. Additional small trees and shrubs are occasionally visible adjacent to the Milliken Avenue public ROW on the private commercial and industrial properties. A mix of typical roadway lighting, decorative roadway lighting, and decorative pedestrian-level lighting is provided. There are interrupted and distant north-facing views of the San Gabriel Mountains to the north from Milliken Avenue and parking areas at Cucamonga Metrolink Station.

The most prominent views are of the elevated Cucamonga Metrolink Station and tracks, industrial buildings on the northern side of the tracks, and associated urban landscaping which obscure views of the San Gabriel Mountains to the north. Views to the south, west, and east are a continuation of commercial and industrial buildings, parking lots, and associated landscaping. The existing visual quality, as defined in Section 3.1.3.2, of VAU 1 is low due to the lack of visual resources and the interruption of views due to existing structures and mature landscaping.

3.1.5.2.2 VAU 2 Central – 4th Street to East Airport Drive

The central segment of the proposed Project extends from Fourth Street south of I-10 to the intersection of Milliken Avenue and East Airport Drive. VAU 2 encompasses portions of the City of Ontario and is characterized by a mix of residential, hospitality, civic, office, industrial, and other uses, the majority of which are not visually memorable. An exception is the Ontario Mills shopping center, which is one of the primary tourist attractions in the City of Ontario.

Other visible uses within VAU 2 include one- to two-story commercial/office and industrial uses, three- to four-story hotels, two- to three-story commercial office buildings, gas stations, and small-scale commercial businesses and restaurants between 4th Street and I-10. The Ontario Mills shopping center, which is located within this VAU east of Milliken Avenue and north of I-10, is composed of a one-story mall with large windows and decorative signage that is surrounded by expansive parking areas with mature landscaping dispersed throughout.

Architecturally, buildings in this VAU have varied rooflines and heights, multiple stories, and mixed densities. Elevated I-10 and elevated Union Pacific Railroad (UPRR) tracks are prominent visual features in the central VAU. Power transmission lines and poles are located along the UPRR tracks and are visible in this VAU. South of I-10, the buildings are mainly industrial in nature or consist of small-scale commercial businesses and restaurants along East Airport Drive.

The primary viewers within VAU 2 consist of motorists and pedestrians. Milliken Avenue has six to eight travel lanes in this VAU, with mature trees located along the public sidewalk on both sides of the street and within the landscaped roadway islands from 4th Street to I-10. Additional small trees and shrubs are occasionally visible adjacent to the Milliken Avenue public ROW on the private commercial and industrial properties. A mix of typical roadway lighting, decorative roadway lighting, and decorative pedestrian-level lighting is provided. The southern end of the central VAU provides broader views of the San Gabriel Mountains to the north, particularly around the major intersections. At the intersection of Milliken Avenue and I-10, the roadway is slightly elevated to provide I-10 overcrossing, and to the north is an expansive view of the San Gabriel Mountains in the distance. The surrounding views are dominated by commercial and industrial uses and traffic, and landscaping in this area is minimal. The existing visual quality, as defined in Section 3.1.3.2, of VAU 2 is moderately low due to the lack of visual resources and the interruption of views due to existing land uses and traffic.

3.1.5.2.3 VAU 3 Southern – East Airport Drive to Ontario International Airport

The southern segment VAU (VAU 3) extends from the intersection of Milliken Avenue and East Airport Drive west to the parking areas at ONT. This VAU encompasses portions of the City of Ontario and is characterized by a mix of commercial, airport, and airport-serving industrial uses. The UPRR corridor runs adjacent to East Airport Drive and Guasti Road within VAU 3.

ONT is visually characterized by ascending and descending aircraft, signage, airport terminals, and large parking areas. Buildings around the airport are large and restricted in height ranging from one- to two-stories. Power transmission towers and concrete-lined drainage channels are also visually prominent looking east along East Airport Drive. From I-10 south along Milliken Avenue, street landscaping is minimal.

Industrial development in VAU 3 consists of light and heavy industrial uses, offices, manufacturing uses, and distribution centers. Older industrial uses are characterized as functional and large, with box-like

buildings and limited architectural treatments. Many industrial sites in this area have minimal decorative screening or walls.

The primary viewers within this VAU consist of motorists, pedestrians, and airport users. At the intersection of Milliken Avenue and East Airport Drive, the view of the San Gabriel Mountains is partially obscured by the UPRR corridor. Street landscaping is minimal at this intersection. East Airport Drive has five to six travel lanes in this VAU, with mature trees located along the public sidewalk on both sides of the street and within the landscaped roadway islands from Milliken Avenue to South Haven Avenue. A mix of typical roadway lighting, decorative roadway lighting, and decorative pedestrian-level lighting is provided. Due to industrial buildings, there are interrupted to completely obscured views of the San Gabriel Mountains to the north from East Airport Drive west towards Haven Avenue. The San Gabriel Mountains are visible in the distance again at the East Airport Drive and Haven Avenue intersection. A billboard is a pronounced feature at the northwestern corner of the intersection; other views include commercial buildings, street landscaping, and an open field at the southeastern corner of the intersection.

The existing visual quality, as defined in Section 3.1.3.2, above of VAU 3 is moderately low due to the lack of visual resources and the interruption of views due to existing land uses and traffic.

Although the San Gabriel Mountains provide a dramatic regional backdrop, within the proposed Project alignment, visual quality is interrupted or obscured by existing structures, mature street landscaping, power transmission lines, and features associated with urban development. The most pronounced, uninterrupted views of the San Gabriel Mountains are from East Airport Drive to ONT, particularly the intersection of East Airport Drive and Haven Avenue.

3.1.6 Impact Evaluation

3.1.6.1 Have a substantial adverse effect on a scenic vista?

3.1.6.1.1 No Project Alternative

The No Project Alternative includes planned expansion, improvement projects, and routine maintenance activities for the existing roadway system and transit facilities. The project area is fully developed, and there are no scenic vistas from or through the vicinity. Although the San Gabriel Mountains provide a notable scenic backdrop, there are no City of Ontario or City of Rancho Cucamonga designated scenic resources adjacent to or within the No Project Alternative vicinity. Compliance with applicable design guidelines and policies, and the City of Rancho Cucamonga and City of Ontario's Municipal Code, would ensure that implementation of the No Project Alternative would result in less than significant impact.

3.1.6.1.2 Proposed Project

3.1.6.1.2.1 Construction Impacts

As described in Section 3.1.5, while the San Gabriel Mountains provide a notable regional scenic backdrop there are no City or County delineated or designated scenic vistas within the proposed Project alignment.

Construction staging and activities of the proposed Project would include temporary visible construction features such as material and equipment storage, and use of construction equipment, including a tunnel boring machine. As described in Section 3.1.5, the VAUs for the entire Project area are highly urbanized and land uses are primarily industrial and commercial; the residential land uses are limited. Although the San Gabriel Mountains provide the overall visual background for the Project area, broad sweeping views are limited by extensive development.

Construction of the maintenance and storage facility (MSF) would occur in VAU 1. As described in Section 3.1.5, the prominent views in VAU 1 are of the elevated Cucamonga Metrolink Station and tracks, industrial buildings on the northern side of the tracks, and associated urban landscaping which obscure views of the San Gabriel Mountains to the north. Views to the south, west, and east are a continuation of commercial and industrial buildings, parking lots, and associated landscaping. A multi-family residential complex is located east of Milliken Avenue between 7th Street/Anaheim Place and 6th Street, approximately 0.25-miles from the proposed MSF facility. There are no local, regional, or state-designated scenic vistas in VAU-1.

Construction of either vent shaft design option 2 or vent shaft design option 4 would occur in VAU-2. As described in Section 3.1.5, there are no local, regional- or state-designated scenic vistas in VAU-2.

Construction of the terminal stations would occur in VAU-1 and VAU-3. As described in Section 3.1.5, there are no local- or state-designated scenic vistas in VAU-1 or VAU-3. Land uses in both VAUs are primarily industrial and commercial with typical urbanized development and street scaping. Within VAU-3, the San Gabriel Mountains provide the distant background of north-facing views, while south-facing views are characterized by airport terminals, airport signage, large parking areas and ascending and descending aircraft.

Construction staging and activities of the tunnel, the terminal stations, the MSF, and vent shaft design option 2 or vent shaft design option 4 would include visible features, but construction-related activities are short-term and temporary and would not significantly alter views in the immediate area, or of any local-, regional-, or state-designated scenic vistas. Therefore, the temporary construction impacts related to the effects on scenic vistas would be less than significant. No mitigation would be required.

3.1.6.1.2.2 Operational Impacts

The proposed Project includes operation of three passenger stations and a single tunnel (24-foot inner-diameter, bi-directional tunnel) between Cucamonga Metrolink Station and ONT. One passenger station would serve Cucamonga Metrolink Station, and two passenger stations would serve ONT within the existing parking lots located across from ONT Terminals 2 and 4. All passenger stations would be at-grade, as described in Chapter 2 of this Draft EIR. Mechanical, electrical, plumbing, fire protection, communications, and security systems would be integrated into the stations' architecture to minimize visual clutter and incorporate low-maintenance, local climate type appropriate landscaping. The stations would connect to the bored tunnel with an at-grade guideway that would be enclosed by landscape

buffered fencing and walls. A vent shaft approximately 2,000 square feet in size, and up to approximately 70 feet in depth would be constructed at either the northwest quadrant of the I-10/Milliken Avenue interchange (vent shaft design option 2), or at the southwest quadrant of the I-10/Milliken Avenue interchange (vent shaft design option 4). The vent shaft would include associated electrical and ventilation equipment. It is anticipated that the vent shaft would be primarily at-grade and incorporate parking for emergency vehicles.

The MSF would be approximately 11,000 square feet in size, with an additional 5,000 square feet second story, and would be located adjacent to the Cucamonga Station Plaza where the autonomous electric vehicles would be stored and maintained. The proposed MSF would also include an Operations Control Center to manage the system and employee amenities such as lockers, breakroom, and restrooms.

The operation of the proposed Project includes new, visible, at-grade features within VAU-1, VAU-2, and VAU-3, described in Section 3.1.5. These features would not alter the views of any local-, regional-, or state-designated scenic vistas because these scenic resources are not present in any of the VAUs or proposed Project vicinity. While the San Gabriel Mountains provide an overall panoramic scenic background for the proposed Project area, scenic mountain views within the proposed Project area are interrupted by features of typical urban development. Further, the tunnel component, and portions of the vent shaft design option 2 or vent shaft design option 4 would be below the surface and not visible. The at-grade features of the proposed Project such as the MSF station, vent shaft design option 2 and vent shaft design option 4 would comply with all local design standards including landscaping. Therefore, operational impacts related to scenic vistas would be less than significant. No mitigation would be required.

3.1.6.2 Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

3.1.6.2.1 No Project Alternative

The No Project Alternative includes planned expansion, improvement projects, and routine maintenance activities for the existing roadway system and transit facilities. The No Project Alternative would be required to comply with applicable design guidelines and policies, and the City of Rancho Cucamonga and City of Ontario's Municipal Code. There are no state designated scenic highways within the City of Ontario or the City of Rancho Cucamonga and therefore, the No Project Alternative would result in no impact.

3.1.6.2.2 Proposed Project

3.1.6.2.2.1 Construction Impacts

Construction of the proposed Project would not substantially degrade scenic resources including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway. The nearest officially designated State scenic highways are State Route (SR)-2, approximately 25 miles north of the proposed Project, and an approximate 4-mile segment of SR- 91 between PM 9.2 and PM 13.4, roughly

12-miles southwest of the proposed Project. During construction, the proposed Project would not substantially damage scenic resources and the proposed Project would have no impact.

3.1.6.2.2.2 Operational Impacts

Operation of the proposed Project would not substantially degrade scenic resources including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway. As noted above, the nearest officially designated State scenic highways are SR-2, approximately 25 miles north of the proposed Project, and an approximate 4-mile segment of SR- 91 between PM 9.2 and PM 13.4, roughly 12-miles southwest of the proposed Project. During operation, the proposed Project would not substantially damage scenic resources and the proposed Project would have no impact.

3.1.6.3 If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

3.1.6.3.1 No Project Alternative

The No Project Alternative includes planned expansion, improvement projects, and routine maintenance activities for the existing roadway system and transit facilities. There are no City of Ontario or City of Rancho Cucamonga designated scenic resources adjacent to or within the No Project Alternative vicinity. The No Project Alternative would not be in conflict with applicable zoning and other regulations governing scenic quality. Compliance with applicable design guidelines and policies, and the City of Rancho Cucamonga and City of Ontario's Municipal Code, would ensure that implementation of the No Project Alternative would result in a less than significant impact.

3.1.6.3.2 Proposed Project

As previously described, the proposed Project site is located in an area characterized by urban development surrounded by commercial and industrial land uses, roadways and highways, and minimal residential land uses.

Since the proposed Project would occur in an urbanized area, a significant impact would occur if the proposed Project conflicts with applicable zoning and other regulations governing scenic quality. While each jurisdiction within the proposed Project area has design guidance and zoning ordinances that regulate scenic quality of development projects, these guidelines do not directly regulate the design of transportation infrastructure elements.

While the San Gabriel Mountains provide a notable scenic backdrop to the overall proposed Project vicinity, there are no City of Ontario or City of Rancho Cucamonga designated scenic resources adjacent to or within the proposed Project vicinity. The General Plans of the City of Ontario and the City of Rancho Cucamonga provide general guidance related to the protection of scenic quality.

3.1.6.3.2.1 Construction Impacts

Construction impacts related to visual character would be similar to those for scenic vistas and scenic resources, as described in Section 3.1.6.1 and Section 3.1.6.2.

At the Cucamonga Metrolink Station, transit patrons and commuters and employees in the businesses and offices adjacent to the Metrolink Station would primarily experience views of construction activities while utilizing the Metrolink Station and commuting. The change in the visual character of the proposed Project site during construction would be noticed by these viewer groups. However, transit patrons and commuters are considered to have a low sensitivity to any visual changes on the proposed Project site as they are likely passing through the vicinity to reach their destinations and their duration of exposure and awareness of landscape changes would be low.

Travelers and employees at ONT would experience views of construction activities of the two passenger stations, while commuters traveling along Milliken Avenue and East Airport Drive would primarily experience views of construction activities associated with vent shaft design option 2 or vent shaft design option 4 at the Milliken Avenue/I-10 interchange. The change in the visual character at these locations during construction would be noticed by these viewer groups. However, these viewer groups are considered to have a low sensitivity to any visual changes as they are likely passing through the vicinity to reach their place of work or business, or some other destination. In addition, views of construction of the vent shaft may be limited because the area of the proposed vent shafts is at-grade while Milliken Avenue is elevated to accommodate the I-10 interchange, slightly obscuring the views of at-grade areas below the roadway.

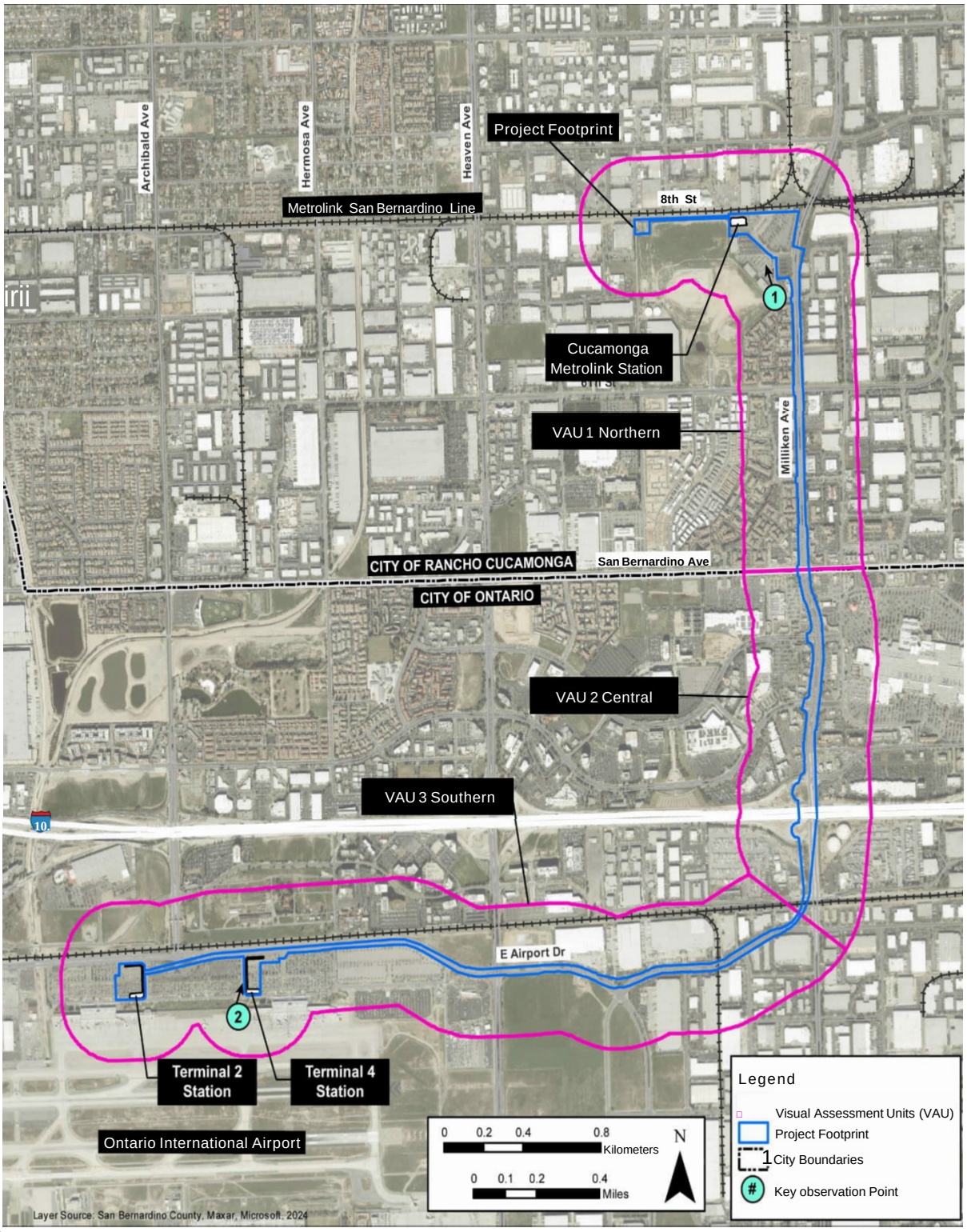
Overall, the construction phase would represent a temporary change in the visual quality and character of the proposed Project site. However, construction would be visibly similar to other construction projects in urban areas and not include blockage or interruption of key views. During construction, the proposed Project site would be surrounded by fencing that would block the majority of material storage and construction activities and would comply with all construction-related ordinances of the City of Rancho Cucamonga and the City of Ontario. Therefore, the proposed Project would not conflict with applicable zoning and other regulations governing scenic quality, and during construction, the proposed Project would have a less than significant impact. No mitigation would be required.

3.1.6.3.2.2 Operational Impacts

To assess the potential visual changes that would result from the operation of the proposed Project, Key Observation Points (KOPs) were selected specifically for the proposed Project. The KOPs are representative of direct views within the proposed Project site and its surrounding area. As shown in the KOPs, the existing environment of the proposed Project is urbanized with mostly industrial and commercial uses and ONT, with expansive views of the San Gabriel Mountains to the north throughout the proposed Project.

The locations of the KOPs are shown on Figure 3.1-1. The KOP 1 and 2 existing views are shown on Figure 3.1-2 and Figure 3.1-3, respectively. Visual simulation was prepared to provide a before-and-after comparison of the visual impacts that could result from the proposed Project. A visual simulation was prepared for the KOP with greatest number of sensitive receptors that could potentially be impacted by the proposed Project.

Figure 3.1-1 Visual Assessment Units and Key Observation Points



Source: AECOM 2024

KOP 1

KOP 1 is in VAU 1 (Figure 3.1-1). The proposed Cucamonga Station and MSF would be located in this area. Figure 3.1- is the KOP 1 existing view from Anaheim Place and 7th Street looking north toward the existing Cucamonga Metrolink Station. The location of this KOP was selected because of the nearby multi-family residential complex located at the corner of Milliken Avenue, and 7th Street. The existing visual quality for this VAU area is low due to the surrounding land uses and development, which include commercial and industrial buildings, parking lots, street landscaping and signage, all of which are visually prominent. Although the residents at the multi-family complex are considered sensitive viewers, most of the viewer groups at this KOP are primarily motorists and pedestrians that would have a low to moderate sensitivity to any visual change, and may have less of a personal investment in the visual appearance of the proposed Project within this VAU because they are primarily visiting, and/or traveling or commuting and have fleeting and/or temporary views of the proposed Project components.

Figure 3.1-2 KOP 1 Viewing North Towards Cucamonga Metrolink Station from Anaheim Place and 7th Street, Located West of Milliken Avenue



Figure 3.1-2 is KOP 1 looking north from the sidewalk at the north end of the multi-family residential complex along Anaheim Place and 7th Street towards the proposed passenger station, approximately 0.25 miles away. As previously described in Chapter 2 (Project Description) of this Draft EIR, the proposed passenger station and MSF would be at-grade and no more than 2-stories, or 40-feet tall, no taller than the existing Cucamonga Metrolink Station. All operational systems would be integrated into the station's

architecture to minimize visual clutter, and the station would include landscaping to buffer and screen views of station elements and fill unprogrammed exterior space.

The proposed tunnel begins at the Cucamonga Metrolink Station adjacent to Milliken Avenue. The proposed station would be connected to the bored tunnel via a cut-and-cover structure and an at-grade guideway. The guideway would be enclosed by fencing and walls that would be buffered with landscaping.

As shown on KOP 1, Figure 3.1-2, the San Gabriel Mountains are visible in the background, but the existing Cucamonga Metrolink Station is not visible due to the extensive street trees in the fore- and middle-ground views, and it is assumed that the proposed passenger station, MSF and tunnel guideway would not be visible. Although the multi-family residential complex is within 0.25-miles of the existing Cucamonga Metrolink Station, the north-end of the complex at Anaheim Place and 7th Street, where Figure 3.1-2 was shot, is exit-only access for the complex thereby limiting residents and visitors' exposure to the north-facing views. While some of the residential units at the Anaheim Place and 7th Street have north-facing views, the complex is oriented toward Milliken Avenue and the street trees and the commercial and retail business located on the north side of 7th Street between Milliken Avenue and Anaheim Place further limits north facing views for residents.

KOP 2

KOP 2 is located in VAU 3 (Figure 3.1-1). KOP 2, as shown on Figure 3.1-3, is the existing setting view looking north/northeast from Terminal Way and East Way, toward ONT parking lot 4, which is the proposed ONT Terminal 4 station location at ONT. This KOP was selected due to the expansive distance views of the San Gabriel Mountains, the proximity to ONT, and surrounding land uses.

As previously described, the existing visual quality for this VAU is considered to be moderately low due to the surrounding land uses and development, which includes ONT, commercial and industrial buildings, parking lots, and parking lot landscaping and lighting, all of which are visually prominent. As shown on Figure 3.1-3, while the San Gabriel Mountains are visible in the background, the distant view is interrupted by the ONT parking lot, street lighting and street trees in the in the foreground and middle ground. Viewer groups at KOP are motorists, commuters, ONT employees, and travelers arriving and departing ONT.

Figure 3.1-4 is a visual simulation of a proposed station terminal at ONT. As previously described, the proposed stations would be no more than 2-stories, or 40-feet tall. Although the Terminal 4 station represents a new a new visual element and would be the only structure visible in the foreground, as shown on Figure 3.1-4, the proposed station eliminates views of cars parked in the lot, yet still provides views of landscape trees, and does not significantly obscure the background view of the San Gabriel Mountains.

Figure 3.1-3 View North/Northeast from Terminal Way and East Way



Figure 3.1-4 Visual Simulation View North Towards Terminal Way and East Way



In addition, the viewer groups at this KOP have a low to moderate sensitivity to any visual changes, and some may have less of a personal investment in the visual appearance of the proposed Project at this KOP because they are primarily moving through the area and have fleeting and/or temporary views of proposed Project components.

As described above, the location of the passenger station and the MSF in VAU 1, shown in Figure 3.1-2, would be in a VAU with low visual quality with primary viewers limited to those traveling through the area to and from other locations, and those accessing the commercial facilities in the area. Although a multi-family residential complex is located within 0.25-miles of the passenger station and MSF, the orientation of, and access to the complex along with existing development and mature street trees limit the views to the north, including the existing Cucamonga Metrolink Station. Therefore, the passenger station and MSF would not significantly impact the overall visual quality in VAU 1.

As described above, the location of the proposed Terminal 4 station in KOP 2, shown on Figure 3.1-3, would be in a VAU that has moderately low visual quality. While the San Gabriel Mountains provide the distant background view to the north, the immediate area is primarily industrial and commercial and primary viewers are motorists, commuters, and employees and travelers of ONT. The ONT parking lots comprise the foreground and middle ground views to the north. As shown in Figure 3.1-4, the visual simulation representing a passenger station at KOP 2, introduces a new visual element at this location. However, given the existing low visual quality, the lack of sensitive viewers, and the general design and anticipated height of the proposed station, the addition of the proposed Terminal 4 station at ONT would not significantly impact the overall visual quality in VAU 3.

Operation of the proposed Project would result in new visual elements in the existing visible environment. All visible, at-grade proposed Project elements, including landscape treatment of the above ground project features, as described in Section 2.0, Project Description, would comply with the design standards, requirements and guidelines pertaining to aesthetics, community and landscape design, described in Section 3.1.2, Regulatory Framework, including the City of Rancho Cucamonga General Plan and the City of Ontario General Plan, the OIAA Design and Construction Handbook, as well as all applicable zoning requirements to protect scenic resources. Therefore, the proposed Project would not conflict with applicable zoning and other regulations governing scenic quality, and during operation, the proposed Project would have a less than significant impact. No mitigation is required.

3.1.6.4 Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

3.1.6.4.1 No Project Alternative

The No Project Alternative includes planned expansion, improvement projects, and routine maintenance activities for the existing roadway system and transit facilities. Construction activities on the Project area may change the view onto the site from surrounding properties. Nighttime construction activities may add additional sources of light and glare; however, construction activities would be temporary and would

be conducted on existing roadways and transit facilities. In addition, the No Project Alternative project area is fully developed and already experiences a high level of existing light and glare consistent with developed, urbanized areas. New sources of substantial light or glare during operation are not anticipated to affect day or nighttime view for the No Project Alternative roject site. Compliance with applicable design guidelines and policies, and the City of Rancho Cucamonga and City of Ontario's Municipal Code would ensure that implementation of the No Project Alternative would result in a less than significant impact.

3.1.6.4.2 Proposed Project

3.1.6.4.2.1 Construction Impacts

The proposed Project site currently has various sources of light and experiences a high level of existing ambient light consistent with developed, urbanized areas, and currently has sources of lighting at the proposed locations of the passenger stations at Cucamonga Metrolink Station and ONT. Construction of the proposed Project would comply with the guidelines described in Section 3.1 that pertain to aesthetics, including lighting during construction activities. Further, construction of the proposed Project would not include nighttime construction activities (primarily due to construction noise restrictions on work hours) which would require nighttime construction lighting. However, standard safety and security lighting would be included during construction but would be hooded and directed toward the construction area; minimal spillover light is anticipated; sensitive receptors such as residences are too far to experience spillover from security lighting; the nearest residents to the proposed Project are in VAU 1, described in Section 3.1.5.2, and are approximately 0.25-mile from the proposed Cucamonga Station and MSF. Construction would not significantly increase the ambient light levels in the vicinity because construction duration would be localized, short-term, and temporary. With compliance with existing regulations, the proposed Project would not have a substantial light or glare impact during construction, and the proposed Project would have a less than significant impact.

3.1.6.4.2.2 Operational Impacts

Once operational, the proposed Project would include installation of new standard exterior and interior security lighting at the stations and MSF, which would operate continuously but would not substantially increase the amount of lighting in the immediate area because similar light sources and levels (e.g., parking lots, buildings, streetlights) currently exist in the area. The nearest sensitive receptors for light and glare are residences; as described above, and in Section 3.1.5.2, the nearest residences to the proposed Project are within VAU 1 and are approximately 0.25-mile from the proposed Cucamonga Station and MSF and are too far to be impacted by spillover lighting. However, to the maximum extent feasible, exterior and interior security nighttime lighting fixtures would be installed to direct the majority of light away from passengers, as well as pedestrians, motorists, and commuters.

In addition, the materials used in the exterior of visible buildings and structures would comply with the City of Rancho Cucamonga Municipal Code Title 17, Article IV Site Development Provisions, and Article VII Design Standards and Guidelines, as well as the following City of Ontario Development Codes: Chapter 1.0

Development Code Enactment and General Provisions, Chapter 5.0 Zoning and Land Use, and Chapter 6.0 Development and Subdivision Regulations to ensure building materials, such as concrete and other surfaces, do not exhibit reflective properties that could result in glare. With compliance with existing regulations, the proposed Project would not have a substantial light or glare impact during operation and the proposed Project would have a less than significant impact.

3.1.7 Mitigation Measures

No mitigation measures would be required for the proposed Project for aesthetics and visual quality.

3.1.8 Impacts After Mitigation

3.1.8.1 Have a substantial adverse effect on a scenic vista?

No mitigation measures would be required, and the proposed Project would have a less than significant impact.

3.1.8.2 Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

No mitigation measures would be required, and the proposed Project would have no impact.

3.1.8.3 If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

No mitigation measures would be required, and the proposed Project would have a less than significant impact.

3.1.8.4 Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

No mitigation measures would be required, and the proposed Project would have a less than significant impact.

3.2 AIR QUALITY

3.2.1 Introduction

This section of this Draft Environmental Impact Report provides a summary of the evaluation of the impacts to air quality resulting from the implementation of the proposed Ontario International Airport (ONT) Connector Project (Project). Detailed information for air quality resources is included in the Air Quality Technical Report (SBCTA 2024a; Appendix C).

3.2.2 Regulatory Framework

3.2.2.1 Federal

3.2.2.1.1 Federal Criteria Air Pollutants

Ozone

Ozone (O_3) is a colorless gas formed in the atmosphere when volatile organic compounds (VOCs) and oxides of nitrogen (NO_x) react in the presence of ultraviolet sunlight. The primary sources of VOCs and NO_X are automobile exhaust and industrial sources. Meteorology and terrain are involved in O_3 formation, and ideal conditions occur during days in summer and early autumn with a combination of low wind speeds, stagnant air, warm temperatures, and cloudless skies. In Southern California, short-term exposures of a few hours to O_3 can result in breathing pattern changes, reduction of breathing capacity, increased susceptibility to infections, inflammation of the lung tissue, and some immunological changes.

Nitrogen Dioxide

Nitrogen Dioxide (NO_2) is typically formed by an atmospheric chemical reaction between Nitrogen Oxide (NO) and atmospheric oxygen. NO and NO_2 are collectively referred to as NO_X and are major contributors to O_3 formation. The primary sources of NO include automobile exhaust and industrial sources. High concentrations of NO_2 can cause breathing difficulties and result in a brownish-red cast to the atmosphere, causing reduced visibility. There is some indication of a relationship between NO_2 and chronic pulmonary fibrosis, and some increase in bronchitis in children (2 and 3 years old) has also been observed at concentrations below 0.3 parts per million (ppm) by volume.

Carbon Monoxide

Carbon Monoxide (CO) is a colorless and odorless gas formed by the incomplete combustion of fossil fuels. CO is emitted almost exclusively from motor vehicles, power plants, refineries, industrial boilers, ships, aircraft, and trains. In urban areas, automobile exhaust accounts for the majority of CO emissions. CO is a non-reactive air pollutant that dissipates relatively quickly, influenced by wind speed, topography, and atmospheric stability. Ambient CO concentrations generally follow the spatial and temporal distributions of vehicular traffic and can become locally concentrated when surface-based temperature inversions are combined with calm atmospheric conditions. The highest levels of CO typically occur during

the colder months of the year when inversion conditions, where a layer of warm air sits atop cool air, are more frequent and can trap pollutants close to the ground. CO competes with oxygen, often replacing it in the blood, thus reducing the blood's ability to transport oxygen to vital organs. Excess CO exposure can result in dizziness, fatigue, and impairment of central nervous system functions.

Sulfur Dioxide

Sulfur Dioxide (SO_2) is a colorless, pungent gas formed primarily by the combustion of sulfur-containing fossil fuels. The main sources of SO_2 are coal and oil used in power plants and industries; as such, the highest levels of SO_2 are generally found near large industrial complexes. In recent years, SO_2 concentrations have been reduced by the increasingly stringent controls placed on stationary source emissions of SO_2 and limits placed on the sulfur content of fuels. SO_2 is an irritant gas that attacks the throat and lungs and can cause acute respiratory symptoms and diminished ventilator function in children. SO_2 can also yellow plant leaves and erode iron and steel.

Particulate Matter

Particulate Matter (PM) is a mixture of extremely small particles and liquid droplets floating in the air, which can include smoke, soot, dust, salts, acids, and metals. PM can form when gases emitted from industries and motor vehicles undergo chemical reactions in the atmosphere. Fine PM sized 2.5 microns or less in diameter ($PM_{2.5}$) and inhalable or coarse PM sized 10 microns or less in diameter (PM_{10}) represent fractions of PM. Fine PM results from fuel combustion (e.g., motor vehicles, power generation, and industrial facilities), residential fireplaces, and woodstoves; and can form in the atmosphere from gases such as sulfur oxides (SO_X), NO_X, and VOCs. Major sources of PM_{10} include crushing or grinding operations; dust stirred up by vehicles traveling on roads; wood-burning stoves and fireplaces; dust from construction, landfills, and agriculture; wildfires and brush/waste burning; industrial sources; windblown dust from open lands; and atmospheric chemical and photochemical reactions.

When inhaled, PM can penetrate and damage the human respiratory system, which may increase the number and severity of asthma attacks, cause or aggravate bronchitis and other lung diseases, and reduce the body's ability to fight infections. Very small particles of substances such as lead (Pb), sulfates, and nitrates can cause lung damage directly or be absorbed into the bloodstream, causing damage elsewhere in the body. Whereas PM_{10} tends to collect in the upper portion of the respiratory system, $PM_{2.5}$ is small enough to penetrate deeper into the lungs and damage lung tissues. Suspended particulates also damage and discolor surfaces on which they settle and produce haze and reduce regional visibility.

Lead

Pb in the atmosphere occurs as a PM. Sources of Pb include leaded gasoline and the manufacturing of batteries, paint, ink, ceramics, ammunition, and secondary Pb smelters. Due to the phase-out of leaded gasoline, there was a dramatic reduction in atmospheric Pb over the past three decades, and secondary

Pb smelters, battery recycling, and manufacturing facilities have become Pb-emission sources of greater concern.

Prolonged exposure to atmospheric Pb can cause serious health effects, such as gastrointestinal disturbances, anemia, kidney disease, and in severe cases, neuromuscular and neurological dysfunction. Low-level Pb exposures during infancy and childhood are of particular concern, as such exposures are associated with decrements in neurobehavioral performance, including intelligence quotient performance, psychomotor performance, reaction time, and growth.

3.2.2.1.2 Clean Air Act and National Ambient Air Quality Standards

United States Environmental Protection Agency (USEPA), under Clean Air Act (CAA) of 1970, 42 United States Code Section 7401, et seq., amended in 1977 and 1990, has developed National Ambient Air Quality Standards (NAAQS) to protect human health and welfare. NAAQS, codified in 40 Code of Federal Regulations (CFR) Part 50, include primary standards, which are designed to protect human health, including sensitive subpopulations, such as children, the elderly, and those with chronic respiratory problems. The secondary standards are designed to protect public welfare, including economic interests, visibility, vegetation, animal species, and other concerns not related to human health. NAAQS apply to the following criteria pollutants: PM_{10}, $PM_{2.5}$, CO, SO_2, NO_2, Pb, and ground-level O_3.

O_3 is not emitted directly from emission sources but is created near the ground level by a chemical reaction between NO_X and VOCs in the presence of sunlight. As a result, NO_X and VOCs are referred to as ozone precursors and are regulated as a means to prevent O_3 formation. NO_X is composed primarily of NO_2 and NO. SO_2 and NO_X are also precursors to secondary PM formation (in particular, $PM_{2.5}$).

NAAQS are expressed in terms of a concentration level and an associated averaging period. The concentration levels may be expressed as ppm, parts per billion (ppb), or micrograms per cubic meter ($\mu g/m^3$). States and municipalities are able to adopt standards more stringent than the NAAQS. Current NAAQS for criteria pollutants and the Federal Register references are included in the Federal and State Air Quality Standards, sourced from the California Air Resources Board (CARB) and summarized in Table 3.2-1.

Table 3.2-1 Federal and State Air Quality Standards

Criteria Pollutant	Averaging Time	California Ambient Air Quality Standards (CAAQS)	NAAQS
O_3	1-Hour	0.09 ppm	—
O_3	8-Hour	0.070 ppm	0.070 ppm
PM_{10}	24-Hour	50 µg/m^3	150 µg/m^3
PM_{10}	Annual	20 µg/m^3	—
$PM_{2.5}$	24-Hour	—	35 µg/m^3
$PM_{2.5}$	Annual	12.0 µg/m^3	12.0 µg/m^3
CO	1-Hour	20 ppm	35 ppm
CO	8-Hour	9 ppm	9 ppm
NO_2	1-Hour	0.18 ppm	0.10 ppm
NO_2	Annual	0.030 ppm	0.053 ppm
SO_2	1-Hour	0.25 ppm	75 ppb
SO_2	24-Hour	0.04 ppm	0.14 ppm
SO_2	Annual Arithmetic Mean	—	0.03 ppm
Pb	30-Day Average	1.5 µg/m^3	—
Pb	Rolling 3-Month Average, 24-Hour	—	1.5 µg/m^3
Sulfates	24-Hour	25 µg/m^3	—
Hydrogen Sulfides	1-Hour	0.03 ppm (42 µg/m^3)	—
Vinyl Chloride	24-Hour	0.01 ppm (26 µg/m^3)	—

Source: CARB 2016

3.2.2.1.3 Attainment Status and Clean Air Act Conformity

CAA requires geographic areas to be designated according to their ability to attain the NAAQS. Areas are categorized for each criteria pollutant as:

- Attainment Area: Areas where no exceedance of NAAQS for a specific criteria pollutant occurred.
- Nonattainment Area: Areas where exceedance of NAAQS for a specific criteria pollutant occurred.
- Maintenance Area: Areas that have previously been designated as nonattainment areas but are still in need of efforts to maintain the improved conditions in the future. Most of CAA rules for nonattainment areas are still applicable to a maintenance area.
- Unclassified Area: Areas where Environmental Protection Agency (EPA) is unable to determine attainment status for evaluating available information.

If an area is designated as nonattainment for a criteria pollutant under the NAAQS, state governments must develop a specific State Implementation Plan (SIP) and implement control plans to reduce the emission level of that pollutant.

Per CAA Section 176(c), federal agencies are required to ensure that their actions conform to the SIP in nonattainment or maintenance areas for purposes of reducing the severity and number of violations of NAAQS in an effort to achieve attainment of these standards. There are two sections of the conformity regulations in CAA that are applicable to federal actions:

- Transportation projects funded or approved by Federal Highway Administration (FHWA) or Federal Transit Administration (FTA), which are governed by CAA's Transportation Conformity Rule (TCR). The TCR is enforced on both a regional level and project level.
- Non-FHWA/FTA projects or components of a FHWA/FTA transportation project requiring actions by other federal agencies such as Federal Aviation Administration, which are governed by CAA's General Conformity Rule. This rule does not apply to the proposed Project because no federal agencies other than FTA are lead or corporate agencies for this federal action.

3.2.2.1.4 Mobile Source Air Toxics

In addition to the criteria pollutants, CAA also lists 187 air toxins, known as hazardous air pollutants (HAPs). CAA authorizes EPA to characterize and control emissions of these pollutants. However, unlike the criteria pollutants, the majority of air toxics do not have ambient air quality standards. Of the 187 HAPs, 93 have been identified as mobile source air toxics (MSATs), and the following nine MSATs are priority pollutants:

- Acetaldehyde,
- Acrolein,
- Benzene,
- 1,3-butadiene,
- Diesel PM plus diesel exhaust organic gases (diesel PM),
- Ethylbenzene,
- Formaldehyde,
- Naphthalene, and
- Polycyclic organic matter.

To reduce emissions of MSATs, EPA has issued various regulations, including the following:

- March 2001: Regulation targeting 21 HAPs from motor vehicles and their fuel. The goal of regulation was to reduce on-highway emissions of benzene, formaldehyde, 1,3-butadiene, and acetaldehyde by 67 to 76 percent (%), and reduce on-highway diesel PM emissions by 90%.
- February 2007: Regulation limiting the benzene content of gasoline and reducing toxic emissions from passenger vehicles and gas cans. EPA estimates that in 2030, this rule will reduce total emissions of MSATs by 330,000 tons and VOC emissions by over 1 million tons.
- April 2014: Regulation requiring Tier 3 standards for motor vehicles. The standards will reduce both tailpipe and evaporative emissions from all passenger vehicles and provide more stringent gasoline sulfur standards.

3.2.2.2 State

3.2.2.2.1 California Environmental Quality Act

California Environmental Quality Act (CEQA) (Sections 21000 et seq.) and 2024 CEQA Guidelines (Sections 15000 et seq.) require state and local agencies to identify the significant environmental impacts of their actions, including potential significant impacts associated with air quality, and to avoid or mitigate those impacts, when feasible.

3.2.2.2.2 State Criteria Air Pollutants

Sulfates

Sulfates are the fully oxidized form of sulfur, which typically occur in combination with metals or hydrogen ions. Sulfates are produced from reactions of SO_2 in the atmosphere. Sulfates can result in respiratory impairment, as well as reduced visibility (CARB 2024a).

Vinyl Chloride

Vinyl chloride is a colorless gas with a mild, sweet odor. Vinyl chloride has been detected near landfills, sewage plants, and hazardous waste sites, due to the microbial breakdown of chlorinated solvents. Short-term exposure to high levels of vinyl chloride in air can cause nervous system effects such as dizziness, drowsiness, and headaches. Long-term exposure through inhalation can cause liver damage, including liver cancer (CARB 2024b).

Hydrogen Sulfide

Hydrogen sulfide is a colorless and flammable gas that has a characteristic odor of rotten eggs. Sources of hydrogen sulfide include geothermal power plants, petroleum refineries, sewers, and sewage treatment plants. Exposure to hydrogen sulfide can result in nuisance odors, as well as headaches and breathing difficulties at higher concentrations (CARB 2024c).

Visibility-Reducing Particles

Visibility-reducing particles are any particles in the air that obstruct the range of visibility. Deterioration of visibility is one of the most obvious manifestations of air pollution and plays a major role in the public's perception of air quality. Visibility reduction from air pollution is often due to the presence of sulfur and NO_X, as well as PM (CARB 2024d).

3.2.2.2.3 California Clean Air Act

Along with the federal CAA regulations, enforced by EPA, California must also comply with the air quality regulations under California Clean Air Act (CCAA). CCAA was adopted in 1988 and requires CARB to establish CAAQS. These standards are also included in Table 3.2-1. In most cases, CAAQS are more stringent than NAAQS. California has also established standards for sulfates, visibility-reducing particles, hydrogen sulfide, and vinyl chloride. Other CARB responsibilities include, but are not limited to, overseeing local air district compliance with state and federal laws; approving local air quality plans; submitting SIPs to EPA; monitoring air quality; determining and updating area designations and maps; and setting emission standards for new mobile sources, consumer products, small utility engines, off-road vehicles, and fuels. In addition to CARB, Regional Air Quality Management Districts and Air Pollution Control Districts administer CCAA on the regional and local levels.

CCAA requires that each area exceeding CAAQS for O_3, CO, SO_2, and NO_2 develop a plan aimed at achieving those standards. California Health and Safety Code Section 40914 requires air districts to design a plan that achieves an annual reduction in district-wide emissions of 5% or more, averaged every consecutive three-year period. To satisfy this requirement, the local air districts must develop and implement air pollution reduction measures, which are described in their air quality attainment plans, and outline strategies for achieving CAAQS for any criteria pollutants for which the region is classified as nonattainment.

3.2.2.2.4 Toxic Air Contaminants

Diesel PM is part of a complex mixture that makes up diesel exhaust. Diesel PM is emitted from a broad range of diesel engines: on-road diesel engines of trucks, buses, and cars, and off-road diesel engines including locomotives, marine vessels, and heavy-duty construction equipment, among others. CARB classified "particulate emissions from diesel-fueled engines" (17 California Code of Regulations [CCR] 93000) as a Toxic Air Contaminant (TAC) in August 1998. According to CARB, diesel PM exposure may lead to aggravated asthma, chronic bronchitis, respiratory and cardiovascular hospitalizations, and other heart and lung impacts (CARB 2008).

3.2.2.2.5 Tanner Air Toxics Act

TACs in California are regulated primarily through Tanner Air Toxics Act (Chapter 1047, Statutes of 1983) and Air Toxics Hot Spots Information and Assessment Act (Chapter 1252, Statutes of 1987). Assembly Bill (AB) 1807 sets forth a formal procedure for CARB to designate substances as TACs. Research, public participation, and scientific peer review must occur before CARB can designate a substance as a TAC. Air

Toxics Hot Spots Information and Assessment Act requires that TAC emissions from stationary sources be quantified and compiled into an inventory according to criteria and guidelines developed by CARB, and, if directed to do so by the local air district, a health risk assessment must be prepared to determine the potential health impacts of such emissions.

3.2.2.2.6 Health and Safety Code Section 41700

Section 41700 of the California Health and Safety Code states that a person shall not discharge, from any source, quantities of air contaminants or other material that causes injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public; or that endanger the comfort, repose, health, or safety of any of those persons or the public; or that cause, or have a natural tendency to cause, injury or damage to business or property. This section of the code also applies to sources of objectionable odors.

3.2.2.2.7 Air Toxics Program

California's Air Toxics Program, established under AB 1807, identifies more than 700 pollutants, of which carcinogenic and non-carcinogenic toxicity criteria have been established for a subset of these pollutants pursuant to the California Health and Safety Code. In accordance with AB 2728, the state list includes the (federal) hazardous air pollutants.

The Air Toxics Hot Spots Information and Assessment Act of 1987 (AB 2588) identifies and evaluates risk from air toxics sources. Under AB 2588, TAC emissions from individual facilities are quantified and prioritized. "High-priority" facilities are required to perform a health risk assessment, and publicize results if specific thresholds are exceeded.

In 2000, CARB approved a comprehensive Diesel Risk Reduction Plan to reduce diesel emissions from both new and existing diesel-fueled vehicles and engines (CARB 2000). The plan was anticipated to result in an 80% decrease in statewide diesel health risk in 2020 compared with the diesel risk in 2000. Additional regulations apply to new trucks and diesel fuel, including the On-road, Heavy-duty, Diesel Vehicle (In-use) Regulation (i.e., "Truck and Bus Regulation"), the On-road, Heavy-duty, (New) Vehicle Program, the In-use, Off-road, Diesel-fueled Fleets Regulation, and the New, Off-road, Compression-ignition (Diesel) Engines and Equipment Program. There also are several Airborne Toxic Control Measures that reduce diesel emissions, such as the following:

- Trucks and Bus Regulation (13 CCR 2025): Requires diesel trucks and buses to be upgraded to reduce emissions depending on date of manufacture and weight.
- In-use Off-road Diesel-fueled Fleets (13 CCR 2449): Reduces diesel PM and NO_X emissions from in-use, off-road, heavy-duty, diesel vehicles through limits on idling, CARB reporting requirements, restrictions on older vehicles, and exhaust retrofits.

- Diesel-fueled Commercial Motor Vehicle Idling (13 CCR 2485): Limits idling of trucks to a maximum of 5 minutes, except when the vehicle is queuing, for diesel-fueled, commercial, motor vehicles with gross weights greater than 10,000 pounds.
- Stationary Compression-ignition Engines (17 CCR 93115): Establishes emission standards and fuel use requirements to reduce diesel PM emissions for agricultural and non-agricultural stationary engines.

3.2.2.2.8 Pavley Standards

AB 1493 ("the Pavley Standard") required CARB to adopt regulations to reduce greenhouse gas (GHG) emissions from non-commercial passenger vehicles and light-duty trucks. CARB introduced a new approach to combine the control of smog-causing pollutants and GHG emissions into a single package of standards. These standards include efforts to support and accelerate the numbers of plug-in hybrids and zero-emission vehicles in California.

3.2.2.2.9 Executive Order N-79-20

Executive Order N-79-20 requires all new passenger vehicles sold in California and all off-road vehicles and equipment be zero-emission where feasible by 2035, while all medium- and heavy-duty vehicles be zero-emission where feasible by 2045. Governor Gavin Newsom ordered extensive inter-agency efforts to support the Executive Order N-79-20, including evaluations of technological feasibility and cost effectiveness, expansion of electric-powered vehicle charging options and affordable fueling, as well as identification of near-term strategies to increase zero-emission public transportation options.

The Executive Order N-79-20 was aimed at transitioning away from fossil fuel dependence in the state, with emphasis on transportation initiatives. However, Governor Newsom addressed efforts to repurpose oil production facilities and extraction sites while continuing the state's existing goals to reduce the carbon intensity of fuels.

3.2.2.3 Regional

3.2.2.3.1 South Coast Air Quality Management District

The proposed Project is located within the South Coast Air Basin (SCAB). The local Air Quality Management or Air Pollution Control Districts are responsible for preparing the portion of the California SIP applicable within their boundaries, adoption of air quality control regulations for stationary sources, and implementation of indirect source and transportation air quality control measures.

South Coast Air Quality Management District (SCAQMD) is the regulatory agency responsible for improving air quality for large areas of Los Angeles, Orange, Riverside and San Bernardino counties, including the Coachella Valley. The region is home to more than 17 million people — about half of the population of the entire state of California.

As stated in Appendix G of the 2024 CEQA Guidelines, the significance criteria established by the applicable air quality management board or air pollution control district may be relied on to make the impact determinations for specific program elements.

Regional Thresholds of Significance

SCAQMD has established recommended screening level thresholds of significance for regional emissions. The SCAQMD regional thresholds of significance (RTSs) are shown in Table 3.2-2. The RTSs were designed to identify those projects that would result in significant levels of air pollution and to assist the region in attaining the applicable state and federal ambient air quality standards, which were established using health-based criteria to protect the public with a margin of safety from adverse health impacts due to exposure to air pollution. Because regional air quality standards have been established for these criteria pollutants to protect the public with a margin of safety from adverse health impacts due to exposure to air pollution, these RTSs can also be used to assess proposed Project emissions and inform the Project's impacts to regional air quality and health risks under CEQA.

Table 3.2-2 SCAQMD Regional Thresholds of Significance for Select Criteria Pollutants

Pollutant	Daily Emissions in lbs/day (Construction)	Daily Emissions in lbs/day (Operation)
NO_X	100	55
PM_{10}	150	150
$PM_{2.5}$	55	55
CO	550	550
VOC	75	55
SO_X	150	150
Pb[1]	3	3

Notes: lbs/day = pounds per day; [1] This analysis does not directly evaluate Pb because little to no quantifiable and foreseeable emissions of this substance would be generated by the proposed Project. Pb emissions have significantly decreased due to the near elimination of leaded fuel use.
Source: SCAQMD 2023

Localized Significance Thresholds

In order to assess local air quality impacts, SCAQMD has developed localized significance thresholds (LSTs) and supporting LST Methodology to assess the proposed Project-related emissions in the proposed Project vicinity (SCAQMD 2008). The LST Methodology found that the primary emissions of concern are NO_2, CO, PM_{10}, and $PM_{2.5}$.

The LSTs represent the maximum emissions from a project that will not cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standards and are developed based on the ambient concentrations of that pollutant for each source receptor area. Because the LSTs consider the ambient air quality, the LSTs can also be used to identify those projects that would result in significant levels of air pollution and impact sensitive receptors.

The LST Methodology provides Look-Up Tables with different thresholds based on the location and size of the project site and distance to the nearest sensitive receptors. The Look-Up Tables provide thresholds for 1-, 2-, and 5-acre project sites.

Air Quality Management Plan

Under CCAA, SCAQMD is required to develop an air quality attainment plan for nonattainment criteria pollutants within the air district. The most recent air quality plans developed by SCAQMD are the 2016 Air Quality Management Plan (AQMP; SCAQMD 2017) to address the 1997 8-hour O3 standards and $PM_{2.5}$ standards and the 2022 AQMP that is focused on attaining the 2015 8-hour O3 standard of 70 ppb (SCAQMD 2022). The 2016 and 2022 AQMPs are the legally enforceable blueprint for how the region will meet and maintain NAAQS and CAAQS. These AQMPs identify strategies and control measures needed to achieve attainment of the 8-hour O3 standard and federal annual and 24-hour standard for $PM_{2.5}$ in the SCAB (SCAQMD 2017; 2022). The future emission forecasts are primarily based on demographic and economic growth projections provided by Southern California Association of Governments (SCAG).

Southern California Air Quality Management District Rule 402

Rule 402 (Nuisance), adopted by SCAQMD on May 7, 1976, states that a person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property. The provisions of this rule shall not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals.

Southern California Air Quality Management District Rule 403

Rule 403 (Fugitive Dust), adopted by SCAQMD on February 7, 1976, and amended on April 20, 2010, has the purpose of reducing the amount of PM entrained in the ambient air as a result of anthropogenic (man-made) fugitive dust sources by requiring actions to prevent, reduce, or mitigate fugitive dust emissions.

3.2.2.3.2 2020-2045 Regional Transportation Plan/Sustainable Community Strategies (Connect SoCal)

The 2020-2045 Regional Transportation Plan/Sustainable Community Strategy (RTP/SCS), also known as Connect SoCal, was adopted by the Regional Council on September 3, 2020, and replaces the 2016-2040 RTP/SCS. The RTP/SCS serves as a long-range regional transportation planning tool through the year 2045. The core vision of the 2020-2045 RTP/SCS is to build upon and expand land use and transportation strategies to increase mobility options, reduce vehicle miles traveled (VMT), and achieve a more sustainable growth pattern (SCAG 2020). The 2020-2045 RTP/SCS lists ten goals that were used to develop the plan and its guiding policies.

1. Encourage regional economic prosperity and global competitiveness.

2. Improve mobility, accessibility, reliability, and travel safety for people and goods.
3. Enhance the preservation, security, and resilience of the regional transportation system.
4. Increase person and goods movement and travel choices within the transportation system.
5. Reduce GHG emissions and improve air quality.
6. Support healthy and equitable communities.
7. Adapt to changing climate and support an integrated regional development pattern and transportation network.
8. Leverage new transportation technologies and data-driven solutions that result in more efficient travel.
9. Encourage development of diverse housing types in areas that are supported by multiple transportation options.
10. Promote conservation of natural and agricultural lands and restoration of habitats.

3.2.2.4 Local

3.2.2.4.1 San Bernardino County

The San Bernardino County General Plan (San Bernardino County 2020) is a collection of planning tools intended to guide future decisions, investments, and improvements throughout San Bernardino County. The San Bernardino County General Plan's Natural Resources Element contains the following policy related to air quality that is applicable to the proposed Project:

- Policy NR-1.8 supports energy efficient construction and operations equipment.

3.2.2.4.2 City of Rancho Cucamonga General Plan

PlanRC is City of Rancho Cucamonga's General Plan with long-term goals, objectives, and policies to guide land use planning decisions and reflect the aspirations and values of the community. PlanRC contains the following goal and policies related to air quality that are applicable to the proposed Project (City of Rancho Cucamonga 2021):

- Goal RC-5 addresses local air quality.
- Policy RC-5.1 minimizes pollutant sources.
- Policy RC-5.4 bolsters health risk assessments to understand health impacts of sensitive receptors.
- Policy RC-5.10 prioritizes non-polluting industries and companies using low air pollution technologies.
- Policy RC-5.11 requires new construction to minimize dust and odor.

3.2.2.4.3 City of Ontario General Plan

City of Ontario's Policy Plan acts as the General Plan, establishes long-term planning and policy goals for environmental infrastructure and policies that support system integration, resource conservation and regeneration, and energy independence. The Environmental Resources Element contains the following goal and policies related to air quality that are relevant to the proposed Project (City of Ontario 2022):

- Goal ER-4 addresses indoor air and outdoor air quality.
- Policy ER-4.5 promotes mass transit and non-motorized travel options.
- Policy ER-4.6 supports efforts to reduce PM.
- Policy ER-4.7 coordinates collaboration with other SCAB agencies to improve regional air quality.

3.2.3 Methodology

Data used to prepare this section were taken from the Air Quality Technical Report (SBCTA 2024a; Appendix C), San Bernardino County General Plan (San Bernardino County 2020), City of Rancho Cucamonga General Plan (City of Rancho Cucamonga 2021), City of Ontario General Plan (City of Ontario 2022), and other relevant documents related to air quality. In addition, the Air Quality Technical Report (SBCTA 2024a; Appendix C) contains the air quality data sheets that were used to present the air quality data in this section.

3.2.3.1 Resource Study Area

The region of influence under the proposed Project would include the SCAB on a regional scale where SCAQMD is the agency responsible for attaining state and federal clean air standards and on a local level, particularly including areas along: 1) the roadway network to be affected with potential impacts analyzed and described in the Transportation Technical Report (SBCTA 2024b; Appendix Q); and 2) the areas immediately adjacent to new stations and tunnel portals.

3.2.3.2 Air Quality Management Plan Consistency

SCAQMD's CEQA Handbook suggests an evaluation of the following two criteria to determine whether a project involving a legislative land use action (such as General Plan land use and zoning designation changes) would be consistent or in conflict with the AQMP:

1. The project would not generate population and employment growth that would be inconsistent with SCAG's growth forecasts.
2. The project would not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations or delay the timely attainment of air quality standards or the interim emissions reductions specified in the AQMP.

Consistency Criterion Number (No.) 1 refers to the SCAG's growth forecast and associated assumptions contained in the 2016-2040 RTP/SCS.

Consistency Criterion No. 2 refers to CAAQS. An impact would occur if the long-term emissions associated with the proposed Project would exceed SCAQMD's RTSs for operation-phase emissions.

3.2.3.3 Construction Impact

Temporary on-road vehicle and off-road equipment emissions associated with construction of the proposed stations, Maintenance Storage Facility (MSF), tunnel, and ventilation shaft (vent shaft) were estimated using the CARB EMFAC2021 and OFFROAD2021 models to estimate emissions factors with the construction resource input data to be established on the regional level as well as specific local sites, such as the proposed Cucamonga Metrolink Station.

3.2.3.3.1 Regional Emissions

The regional emissions associated with each construction phase were compared to the SCAQMD RTSs (as shown in Table 3.2-2) set forth by SCAQMD to determine regional impacts due to the proposed Project.

3.2.3.3.2 Localized Emissions

Localized construction emissions include those emissions only generated within the construction sites, such as for the proposed stations, MSF, tunnel, and vent shaft. The localized construction emissions were estimated using the same modeling tools previously described. The estimated site-specific emissions, the size of the source area, and the distance from sensitive receptors to the site boundary were used for comparison with the applicable SCAQMD-established LSTs to determine potential localized construction period impacts and whether mitigation measures would be warranted.

3.2.3.4 Operational Impact

The operational emissions analysis for the proposed Project provided below and in the Air Quality Technical Report (SBCTA 2024a; Appendix C) addresses sources of direct air pollutant emissions and potential impacts on local and regional air quality under existing conditions, as well as implementation of the proposed Project. CARB EMFAC2021 model was used to predict both local and regional emissions based on the VMT data established through a transportation impact analysis along the corridor and sub traffic network affected by the proposed Project. The change in emissions is anticipated to result in a net reduction in emissions because the proposed Project would reduce total VMT and introduce all electric-powered vehicles that have no engine exhaust emissions.

3.2.3.4.1 CO Hot-Spot Analysis

Although, in California, the California Project-Level Carbon Monoxide Protocol was developed in 1997 to determine the potential CO hot spots, as CO was of local concern, the procedures and guidelines to be followed for CO hot-spot analysis will follow the most recent EPA guidelines.

3.2.3.4.2 PM Hot-spot Analysis

Because the proposed Project involves an underground tunnel operation with all electric-powered vehicles, it is not a highway project nor a new or expanded bus or rail intermodal terminal facility with a significant number of diesel vehicles. Therefore, the proposed Project would not be considered to have potential air quality concerns. A qualitative assessment is provided in the Air Quality Technical Report (SBCTA 2024a; Appendix C).

3.2.3.4.3 Tunnel Portals Ventilation System Impact Analysis

Because no operational emissions would occur under the proposed Project, as both vehicles and exhaust fans would be electrically powered, an impact analysis of the localized tunnel portals ventilation system is not warranted.

3.2.4 CEQA Thresholds of Significance

According to Appendix G of the 2024 CEQA Guidelines, implementation of the proposed Project may result in a potentially significant impact if it would:

- Conflict with or obstruct implementation of the applicable air quality plan;
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard;
- Expose sensitive receptors to substantial pollutant concentrations; and/or
- Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

3.2.5 Existing Settings

Air quality is defined by the concentration of pollutants in relation to their impact on human health. Concentrations of air pollutants are determined by the rate and location of pollutant emissions released by pollution sources, and the atmosphere's ability to transport and dilute such emissions. Natural factors that affect transport and dilution include terrain, wind, and sunlight. Therefore, ambient air quality conditions within the local air basin are influenced by such natural factors as topography, meteorology, and climate, in addition to the amount of air pollutant emissions released by existing air pollutant sources.

3.2.5.1 General Climatic Conditions

Climate, topography, and meteorology influence regional and local ambient air quality. Southern California is characterized as a semiarid climate, although it contains three distinct zones of rainfall that coincide with the coast, mountain, and desert. The proposed Project is located within the SCAB. The SCAB

is bounded by the Pacific Ocean to the west, the San Gabriel Mountains, San Bernardino Mountains, and San Jacinto Mountains to the north and east, and the San Diego County line to the south.

The topography and climate of Southern California combine to make the SCAB an area of high air pollution potential. A warm air mass frequently descends over the cool, moist marine layer produced by the interaction between the ocean's surface and the lowest layer of the atmosphere. The warm upper layer forms a cap over the cooler surface layer, which traps the pollutants near the ground. Light winds can further limit ventilation. Additionally, abundant sunlight triggers the photochemical reactions that produce O_3 and the majority of PM (SCAQMD 2017).

The meteorological monitoring station at ONT has climatological data (1991 through 2020 monthly normal) tabulated by the National Centers for Environmental Information (National Centers for Environmental Information 2022). The mean daily temperature ranges from 55.2 degrees Fahrenheit (°F) in December to 80.1°F in August. Precipitation peaks between December and March and is infrequent during the rest of the year, especially during the summer months. The monthly variability of temperature and precipitation for the ONT is shown in Table 3.2-3.

Table 3.2-3 Summary of General Climatic Conditions at Ontario International Airport

Month	Mean Maximum Temperature (°F)	Mean Minimum Temperature (°F)	Mean Daily Temperature (°F)	Mean Precipitation (inches)
January	67.7	44.6	56.1	2.57
February	68.1	46.2	57.1	3.07
March	71.7	48.7	60.2	1.64
April	75.7	51.1	63.4	0.76
May	79.8	55.6	67.7	0.30
June	86.4	60.0	73.2	0.02
July	93.8	64.7	79.2	0.05
August	94.9	65.2	80.1	0.03
September	91.3	63.8	77.6	0.10
October	82.6	57.1	69.8	0.41
November	74.7	49.0	61.9	0.80
December	66.9	43.6	55.2	1.89
Annual	79.5 (average)	54.1 (average)	66.8 (average)	11.64 (total)

Source: National Centers for Environmental Information 2022

3.2.5.2 Existing Air Quality and Attainment Status

3.2.5.2.1 Attainment Status

Both EPA and CARB use ambient air quality monitoring data to designate areas according to their attainment status for criteria air pollutants. The purpose of these designations is to identify the areas with air quality problems and initiate planning efforts for improvement. The three basic designation categories are nonattainment, attainment, and unclassified. An attainment designation for an area signifies that pollutant concentrations did not exceed the established standard. In most cases, areas designated or re-designated as attainment must develop and implement maintenance plans (i.e., an area that was previously in nonattainment but now attains the standard). These areas are designated as maintenance areas and are currently under a maintenance plan to ensure continued compliance with the standard.

In contrast to attainment, a nonattainment designation indicates that a pollutant concentration has exceeded the established standard. Nonattainment may differ in severity. To identify the severity of the problem and the extent of planning and actions required to meet the standard, nonattainment areas are assigned a classification that is commensurate with the severity of their air quality problem (e.g., moderate, serious, severe, and extreme).

Finally, an unclassified designation indicates that insufficient data exist to determine attainment or nonattainment. In addition, the California designations include a subcategory of nonattainment-transitional, which is given to nonattainment areas that are progressing and nearing attainment.

As shown in Table 3.2-4, the SCAB is designated as an attainment area for all criteria air pollutants except O_3, PM_{10}, and $PM_{2.5}$ under CAAQS. San Bernardino County is designated as attainment, or maintenance, for all criteria pollutants except O_3, PM_{10}, and $PM_{2.5}$ under the NAAQS.

3.2.5.2.2 Air Quality Monitoring Stations

SCAQMD is responsible for enforcing the rules and regulations protecting air quality in the SCAB. Ambient air pollutant concentrations in the SCAB are measured at air quality monitoring stations operated by CARB and SCAQMD. As shown in Figure 3.2-1, the closest active air quality monitoring stations to the proposed Project are the following:

- Pomona, Air Quality System (AQS) Site Identification (ID) 06-037-1701. Located: 924 North Garey Avenue, Pomona.
- Upland, AQS Site ID 06-071-1004. Located: 1350 San Bernardino Road, Upland.
- Fontana, AQS Site ID 06-071-2002. Located: 14360 Arrow Boulevard, Fontana.
- Ontario Route 60 – Near Road, AQS Site ID 06-071-0027. Located: 2330 South Castle Harbour Place, Ontario.

Table 3.2-4 CAAQS/NAAQS Attainment Status

Criteria Pollutant	Averaging Time	CAAQS Designation (SCAB)[1]	NAAQS Designation (San Bernardino County)[2]
O_3	1-Hour	Nonattainment	—
O_3	8-Hour	Nonattainment	Nonattainment (Severe)
PM_{10}	24-Hour	Nonattainment	Nonattainment (Moderate)
PM_{10}	Annual	Nonattainment	—
$PM_{2.5}$	24-Hour	Nonattainment	Nonattainment (Serious)
$PM_{2.5}$	Annual	Nonattainment	Nonattainment (Serious)
CO	1-Hour	Attainment	Attainment (Maintenance)
CO	8-Hour	Attainment	
NO_2	1-Hour	Attainment	Unclassifiable/Attainment
NO_2	Annual	Attainment	Attainment
SO_2	1-Hour	----	Unclassifiable/Attainment
SO_2	24-Hour	----	Unclassifiable/Attainment
SO_2	Annual Arithmetic Mean	----	Unclassifiable/Attainment
Pb	30-Day Average	Attainment	—
Pb	Rolling 3-Month Average 24 Hour	Attainment	Unclassifiable/Attainment
Sulfates	24-Hour	Attainment	—
Hydrogen Sulfides	1-Hour	Attainment	—
Vinyl Chloride	24-Hour	Attainment	—

Source: SCAQMD 2016, EPA 2024a

The most recent monitor values (for 2019 through 2021) for these monitoring stations were taken from the EPA's Air Quality Database (EPA 2024b), which are presented in Table 3.2-5. As shown in Table 3.2-5, monitoring stations closest to the proposed Project were showing compliance with CO, NO_2, and SO_2 NAAQS and CAAQS standards. Exceedances were measured for O_3, $PM_{2.5}$, and PM_{10} (CAAQS only

3.2.5.2.3 Sensitive Receptors

Some members of the public are especially sensitive to air pollutant emissions and should be given special consideration when evaluating air quality impacts from projects. SCAQMD considers a sensitive receptor to be a receptor such as a residence, hospital, or convalescent facility where it is possible that an individual could remain for 24 hours. Receptors such as industrial or commercial facilities may be considered for LST analysis for shorter-term pollutant/standards (such as 1-hour NO_2 and 1-hour/8-hour CO) because workers can be at these sites between 1 and 8 hours.

Figure 3.2-1 Air Quality Monitoring Station Locations



Source: AECOM 2024

Table 3.2-5 Air Quality Monitoring Concentrations

Pollutant	Averaging Period	Standard	Monitoring Station	Design Concentration (2019-2021)	Exceed Standard?
CO	1-Hour	NAAQS: 35 ppm CAAQS: 20 ppm	Pomona, ID 06-037-1701	2.1 ppm	No
CO	1-Hour	NAAQS: 35 ppm CAAQS: 20 ppm	Upland, ID 06-071-1004	1.6 ppm	No
CO	1-Hour	NAAQS: 35 ppm CAAQS: 20 ppm	Fontana, ID 06-071-2002	2.2 ppm	No
CO	8-Hour	NAAQS: 9 ppm CAAQS: 9 ppm	Pomona, ID 06-037-1701	1.4 ppm	No
CO	8-Hour	NAAQS: 9 ppm CAAQS: 9 ppm	Upland, ID 06-071-1004	1.2 ppm	No
CO	8-Hour	NAAQS: 9 ppm CAAQS: 9 ppm	Fontana, ID 06-071-2002	1.2 ppm	No
NO_2	1-Hour	NAAQS: 100 ppb CAAQS: 180 ppb	Pomona, ID 06-037-1701	58 ppb	No
NO_2	1-Hour	NAAQS: 100 ppb CAAQS: 180 ppb	Ontario Route 60 – Near Road, ID 06-071-0027	75 ppb	No
NO_2	1-Hour	NAAQS: 100 ppb CAAQS: 180 ppb	Upland, ID 06-071-1004	47 ppb	No
NO_2	1-Hour	NAAQS: 100 ppb CAAQS: 180 ppb	Fontana, ID 06-071-2002	59 ppb	No
NO_2	Annual	NAAQs: 53 ppb CAAQS: 30 ppb	Pomona, ID 06-037-1701	18 ppb	No
NO_2	Annual	NAAQs: 53 ppb CAAQS: 30 ppb	Ontario Route 60 – Near Road, ID 06-071-0027	30 ppb	No (but at CAAQS)
NO_2	Annual	NAAQs: 53 ppb CAAQS: 30 ppb	Upland, ID 06-071-1004	15 ppb	No
NO_2	Annual	NAAQs: 53 ppb CAAQS: 30 ppb	Fontana, ID 06-071-2002	19 ppb	No
O_3	8-Hour	NAAQS: 0.070 ppm (2015) CAAQS: 0.070 ppm	Pomona, ID 06-037-1701	0.090 ppm	Yes
O_3	8-Hour		Upland, ID 06-071-1004	0.103 ppm	Yes
SO_2	1-Hour	NAAQS: 75 ppb CAAQS: 250 ppb	Fontana, ID 06-071-2002	2 ppb	No
SO_2	1-Hour	CAAQS: 0.04 ppm	Fontana, ID 06-071-2002	0.001 ppm	No

Pollutant	Averaging Period	Standard	Monitoring Station	Design Concentration (2019-2021)	Exceed Standard?
$PM_{2.5}$	24-Hour	NAAQS: 35 µg/m^3	Fontana, ID 06-071-2002	37 µg/m^3	Yes
$PM_{2.5}$	Annual	NAAQS: 12 µg/m^3 CAAQS: 12 µg/m^3	Ontario Route 60 – Near Road, ID 06-071-0027	14.2 µg/m^3	Yes
$PM_{2.5}$	Annual	NAAQS: 12 µg/m^3 CAAQS: 12 µg/m^3	Fontana, ID 06-071-2002	12.1 µg/m^3	Yes
PM_{10}	24-Hour	NAAQS:150 µg/m^3 CAAQS: 50 µg/m^3	Fontana, ID 06-071-2002	83 µg/m^3	No for NAAQS Yes for CAAQS
PM_{10}	Annual	CAAQS: 20 µg/m^3	Upland, ID 06-071-1004	33 µg/m^3	Yes
PM_{10}	Annual	CAAQS: 20 µg/m^3	Fontana, ID 06-071-2002	37 µg/m^3	Yes

Source: EPA 2024b

Residential areas are considered sensitive to air pollution because residents (including children and the elderly) tend to be at home for extended periods of time, resulting in sustained exposure to pollutants present. Recreational land uses are considered moderately sensitive to air pollution. Exercise places a high demand on respiratory functions, which can be impaired by air pollution even though exposure periods during exercise are generally short. In addition, noticeable air pollution can detract from the enjoyment of recreation. Industrial and commercial areas are considered the least sensitive to air pollution because exposure periods are relatively short and intermittent, as the majority of the workers tend to stay indoors for most of the time.

Sensitive receptors closest to the proposed Project include the following:

- Commercial properties within 0.01-miles to 0.09-mile of all four construction locations.
- Apartment community within 0.23-miles of the Cucamonga Metrolink Station site.
- Restaurant located within 0.07-miles northwest of vent shaft design option 2.
- Restaurant located within 0.11-miles southwest of vent shaft design option 4.
- Airport terminal located within 0.7-miles of the proposed ONT Terminal 2 Station.
- Airport terminal located within 0.11-miles of the proposed ONT Terminal 4 Station.

3.2.6 Impact Evaluation

3.2.6.1 Conflict with or obstruct implementation of the applicable air quality plan?

3.2.6.1.1 No Project Alternative

The No Project Alternative includes planned construction associated with expansion, improvement, and routine maintenance activities for the existing roadway system and transit facilities. The construction of these projects would be required to be in compliance of regulatory requirements with implementing SCAQMD rules and regulations to ensure that there would be a less than significant impact to sensitive land uses along the corridor. The operation of the roadway system would remain the same as the existing condition, resulting in no conflict with or obstruction of implementation of the 2016 and 2022 AQMPs. Therefore, the No Project Alternative would have a less than significant impact.

3.2.6.1.2 Proposed Project

3.2.6.1.2.1 Construction Impacts

The AQMP discussed in Section 3.2.2, Regulatory Setting, was prepared to accommodate growth, to reduce the high levels of pollutants within areas under the jurisdiction of SCAQMD, to return clean air to the region, and to minimize the impact of reduced air quality on the economy. Projects that are considered to be consistent with the AQMP would not interfere with attainment because this growth is included in the projections used during the preparation of the AQMP. Therefore, projects, uses, and activities that are consistent with the applicable assumptions used in the development of the AQMP would not jeopardize attainment of the air quality levels identified in the AQMP, even if they exceed the SCAQMD's recommended daily emissions thresholds.

Projects that are consistent with the employment and population projections identified by the SCAG are considered consistent with the AQMP growth projections, since land use and transportation control portions of the AQMP. Another measurement tool in determining consistency with the AQMP is to determine how a project accommodates the expected increase in population or employment. Generally, if a project is planned in a way that results in the minimization of VMT, and consequently the minimization of air pollutant emissions, that aspect of the project is consistent with the AQMP.

Under the General Plans associated with the San Bernardino County, City of Ontario and City of Rancho Cucamonga, population is expected to be within the expected SCAG percentage growth rates, which are then used to determine the growth assumed in the AQMP. Therefore, because the proposed Project, would generate long-term emissions of criteria pollutants that would reflect a net reduction from levels of criteria pollutants, the proposed Project would be considered to be in conformance with the AQMP.

Construction of the proposed Project would include a tunnel boring machine (TBM) to build the 4.2-mile tunnel 70 feet below ground surface. The proposed Project would also include construction of the proposed stations, MSF, and vent shaft. Details of the construction activities for the proposed Project are

found in the Construction Methods Technical Report (SBCTA 2024c; Appendix F). The 2016 and 2022 AQMPs for the region account for construction activity emissions. The construction duration for the proposed Project is from 2025 to 2031 and is not anticipated to conflict with the 2016 and 2022 AQMP assumptions. For these reasons, the proposed Project is considered to be in conformance with the AQMP and the proposed Project would have a less than significant impact.

3.2.6.1.2.2 Operational Impacts

The most current air quality plans for the region are the SCAQMD 2016 and 2022 AQMPs, which aim to address both 1997 (revoked) and 2015 8-hour O3 and 24-hour $PM_{2.5}$ standards. The 2016 and 2022 AQMPs are based on demographic growth forecasts for various socioeconomic categories developed by SCAG for their 2016-2040 RTP/SCS and 2020-2045 RTP/SCS, respectively. Thus, consistency with the planning assumptions contained within the 2016-2040 RTP/SCS demonstrates consistency with SCAQMD's 2016 AQMP, and consistency with planning assumptions within the 2020-2045 RTP/SCS demonstrates consistency with SCAQMD's 2022 AQMP. The proposed Project is consistent with both SCAG's 2016-2040 RTP/SCS and 2020-2045 RTP/SCS, which are long-range transportation plans. SCAG develops and updates the RTP/SCS every four years, where 2020-2045 RTP/SCS is an update of 2016-2040 RTP/SCS. The RTP/SCS provides a vision for transportation investments throughout the region. Using growth forecasts and economic trends that project out over a 20-year period, the RTP/SCS considers the role of transportation in the broader context of economic, environmental, and quality-of-life goals for the future, identifying regional transportation strategies to address the mobility needs of the community. The RTP/SCS integrates land use and transportation strategies that will achieve CARB's GHG emissions reduction targets in accordance with Senate Bill 375, with a key goal of reducing regional levels of VMT over time to decrease emissions from vehicles, which the proposed Project would help advance by encouraging alternative modes of transit and decreasing VMT (SCAG 2020).

The proposed Project would not delay the goals of the AQMP because the proposed Project would not cause any significant air quality impacts during operation and does not alter any land use classification. Further, the proposed Project advances the AQMP's goals of encouraging alternative modes of transit (namely mass transit) and reducing emissions by decreasing VMT and vehicle idling time associated with passenger vehicles. The usage of autonomous electric vehicle technology also supports goals to reduce mobile source emissions.

As a result, the proposed Project is consistent with SCAG's 2016-2040 RTP/SCS, SCAG's 2020-2045 RTP/SCS, and both the SCAQMD 2016 and 2022 AQMP, and would not impair or delay the region's ability to achieve the SCAQMD's goals for attainment of air quality standards. Therefore, operation of the proposed Project would not conflict with or obstruct implementation of the applicable air quality plan, and the impact would be less than significant.

3.2.6.2 Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard?

3.2.6.2.1 No Project Alternative

The No Project Alternative includes planned construction and operation associated with expansion, improvement, and routine maintenance activities for the existing roadway system and transit facilities. The No Project Alternative assumes that the limited public transportation (bus line) to ONT provided by Omnitrans would remain as it currently exists. Construction of planned projects under the No Project Alternative would be required to stay within SCAQMD's threshold for maximum daily emissions. Adherence to applicable regulatory requirements would ensure that the construction and operational activities associated with the No Project Alternative would result in a less than significant impact.

3.2.6.2.2 Proposed Project

3.2.6.2.2.1 Construction Impacts

Table 3.2-6illustrates the proposed Project maximum regional daily emissions during construction, including those from on-road hauling trucks, to be emitted from four open construction/staging areas. Construction of the proposed Project would require a TBM to build the 4.2-mile tunnel 70 feet below ground surface. As a result, construction would require over 200 daily truck trips to transport construction waste away from the site. The construction emissions are estimated for each day of proposed Project construction, which captures the activities occurring across the various construction phases of the proposed Project. The maximum daily emissions are reported for the days within the proposed Project construction period that produce the highest emissions of a given criteria air pollutant. As shown, the proposed Project would not exceed any applicable SCAQMD regional thresholds.

Table 3.2-6 Maximum Daily Regional Construction Emissions

Construction Area	NO_x lbs/day	PM_{10} lbs/day	$PM_{2.5}$ lbs/day	CO lbs/day	VOC lbs/day	SO_x lbs/day
Cucamonga Metrolink Station (including MSF) and TBM Retrieval	27.7	33.9	4.5	28.8	3.3	0.1
Vent Shaft	25.4	17.6	2.6	29.7	3.0	0.1
ONT Terminal 4 Station	22.6	33.6	4.1	25.8	2.7	0.1
ONT Terminal 2 Station	36.2	34.4	4.8	45.3	5.0	0.2
Maximum Daily Regional Construction Emissions	95.2	118.3	15.0	107.0	11.1	0.6
SCAQMD Threshold	100	150	55	550	75	150
Exceed Threshold?	No	No	No	No	No	No

Source: SBCTA 2024a

In addition, Table 3.2-7 provides the maximum localized construction emissions per construction site. Localized construction emissions represent emissions that are produced within the construction site only. Consistent with SCAQMD LST Methodology, only on-site emissions are included; thus, on road emissions outside of the construction site are excluded from the localized totals, though these emissions are included in the regional totals listed in Table 3.2-6. Although each construction site would affect a given size of land as shown in Table 2-1, the size of earth disturbance area where equipment and trucks would operate, resulting in on-site fugitive dust emissions, would be limited. As the SCAQMD LST Significance Threshold was established in a size sequence in terms of 1, 2, or 5 acres, the analysis assumed that approximately 1 and 2 acre-land area where equipment and trucks would actually operate is considered for the vent shaft and each station site, respectively.

Localized construction emissions per site are compared to mass emission rates (lbs/day) provided by SCAQMD through a Look-Up Table based on the size of the construction disturbance area and closest distance to a sensitive receptor. As described in Section 3.2.6.3, sensitive receptor distances can vary between NOx/CO and PM_{10}/$PM_{2.5}$ because NOx and CO also consider commercial and industrialized locations, which may result in shorter distances to the closest receptor.

As shown in Table 3.2-7, the estimated maximum local daily emissions for construction of the proposed Project would be less than the SCAQMD mass daily significance thresholds for all criteria pollutants. Based on net reduction in operational emissions and temporary increase in construction emissions being below applicable RTS and LST, the proposed Project would not violate air quality standards or result in a cumulatively considerable net increase in O_3 (NO_x, as an O_3 precursor), PM_{10}, and $PM_{2.5}$.

Table 3.2-7 Maximum Daily Localized Emissions

Construction Area	Maximum Daily Localized Construction Emissions (lbs/day)			
	NO_x	PM_{10}	$PM_{2.5}$	CO
Cucamonga Metrolink Station (including MSF) and TBM Retrieval	19.27	33.22	4.17	19.68
SCAQMD Significance Threshold for Southwest San Bernardino Valley (approximately 2 acres of site disturbance, receptor distance of 25m for NO_x/CO and 200m for PM_{10}/$PM_{2.5}$)	170	66	36	1,232
Exceed Threshold?	No	No	No	No
Vent shaft design option	16.98	16.86	2.33	20.55
SCAQMD Significance Threshold for Southwest San Bernardino Valley (approximately 1 acres of site disturbance, receptor distance: 100m for NO_x/CO and 200m for PM_{10}/$PM_{2.5}$)	211	103	32	2,423
Exceed Threshold?	No	No	No	No
ONT Terminal 4 Station	14.14	32.86	3.84	16.70
SCAQMD Significance Threshold for Southwest San Bernardino Valley (approximately 2 acres of site disturbance, receptor distance: 50m for NO_x/CO and 500m for PM_{10}/$PM_{2.5}$)	263	160	150	3, 218
Exceed Threshold?	No	No	No	No
ONT Terminal 2 Station	27.78	33.63	4.55	36.21
SCAQMD Significance Threshold for Southwest San Bernardino Valley (approximately 2 acres of site disturbance, receptor distance: 25m for NO_x/CO and 500m for PM_{10}/$PM_{2.5}$)	170	160	150	1,232
Exceed Threshold?	No	No	No	No

Source: SBCTA 2024a

SCAQMD recommends that individual projects that exceed the SCAQMD-recommended daily thresholds for project-specific impacts be considered to cause a cumulatively considerable increase in emissions for those pollutants for which the SCAB is in non-attainment. The proposed Project would implement MM-AQ-1 to require basic construction emission practices to address potential impacts for PM_{10} and $PM_{2.5}$ fugitive emissions. In addition, MM-AQ-1 would require dust control measures for the proposed Project. However, the proposed Project is located within a non-attainment zone and the construction of the proposed Project would include PM_{10}, $PM_{2.5}$, NO_x, and VOC emissions. Even with implementation of MM-AQ-1, the proposed Project in combination with the development of the cumulative projects would

exceed the same significance thresholds and result in a significant cumulative impact. Cumulative development would result in a significant impact in terms of violation of an air quality standard or a substantial contribution to an existing or projected air quality violation. Therefore, the proposed Project's contribution would be cumulatively considerable, and the cumulative impact would be significant and unavoidable.

3.2.6.2.2.2 Operational Impacts

San Bernardino County is designated as in attainment, or maintenance, for all criteria pollutants except for ozone, PM_{10}, and $PM_{2.5}$ under NAAQS. To determine if the proposed Project would result in a cumulatively considerable net increase in the aforementioned pollutants, the proposed Project-level emission comparisons to applicable RTSs and LSTs can serve as an indicator. In addition, operation of the proposed Project would provide a net benefit in total emissions through the use of electric vehicles.

Once the proposed Project is operational, the vehicles operating between Cucamonga Metrolink Station and the ONT would be electric-powered, and ventilation fans within the tunnel and vent shaft would also be electric. Therefore, with the anticipation of single-occupancy vehicles being replaced by the proposed electric-powered vehicles, it is anticipated that reduced VMT would cause air emissions to decline, yielding a net air quality benefit through the corridor under the proposed Project, as shown in Table 3.2-8. Therefore, the proposed Project would not result in a cumulatively considerable net increase of any criteria pollutant, and operational impacts would be less than significant.

Table 3.2-8 San Bernardino County-Wide Net Change in Operational Vehicle Miles Traveled

Year	Existing VMT	No Project Alternative VMT	Proposed Project VMT	VMT Difference between Proposed Project and No Project Alternative
2016	330,113,226	---	---	---
2031	---	376,199,889	376,178,116	-21,773
2051	---	437,648,772	437,603,538	-45,234

Source: Appendix C

3.2.6.3 Expose sensitive receptors to substantial pollutant concentrations?

3.2.6.3.1 No Project Alternative

The No Project Alternative includes planned construction and operation associated with expansion, improvement, and routine maintenance activities for the existing roadway system and transit facilities. The No Project Alternative may expose sensitive receptors to substantial pollutant concentrations since exposure depends on the proximity of sensitive receptors to the No Project Alternative. However, construction and operation of these projects would be required to comply with SCAQMD rules and regulations to ensure that there is no substantial pollutant concentration exposure to sensitive receptors. Adherence to applicable regulatory requirements would ensure that the construction and operation of the No Project Alternative would result in a less than significant impact.

3.2.6.3.2 Proposed Project

3.2.6.3.2.1 Construction Impacts

The SCAQMD's LST methodology is used to evaluate localized ambient air quality impacts and whether construction would expose sensitive receptors to substantial pollutant concentrations. The RTS were designed to identify those projects that would result in significant levels of air pollution and to assist the region in attaining the applicable state and federal ambient air quality standards. These guidelines were established using health-based criteria to protect the public with a margin of safety from adverse health impacts due to exposure to air pollution. In addition, the LSTs represent the maximum emissions from a project that would not cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standards and are developed based on the ambient concentrations of that pollutant for each source-receptor area.

As shown in Table 3.2-6, the proposed Project's maximum regional daily emissions of criteria pollutants would not exceed any applicable SCAQMD RTSs. In addition, as shown in Table 3.2-7, maximum localized construction emissions of criteria pollutants for sensitive receptors would be below the LSTs, which focus specifically on sensitive receptors. As such, the criteria air pollutant emissions associated with the proposed Project would not expose sensitive receptors to substantial criteria pollutant concentrations during construction.

Further, the primary source of TACs is from diesel PM emissions due to temporary construction equipment activities, including tunneling activities, where a TBM would be used to construct the 4.2-mile tunnel 70 feet below ground surface, and transportation of construction-related waste, which is anticipated to require over 200 haul truck trips daily. However, construction equipment is mobile in most cases, and would move around each construction site throughout the day and over the course of the construction period with less cumulative impact at any one receptor location as compared to stationary sources. In addition, operation of the equipment would be temporary and limited to construction activities. There are sensitive receptors in proximity to the MSF, but due to the temporary and mobile nature of insignificant emissions compared to RTSs and LSTs, it is expected that the proposed Project would not result in substantial pollutant concentrations at sensitive receptors.

These sources during construction of the proposed Project would contribute to cumulative PM emissions, which were previously noted as being below RTS and LSTs. As such, due to the temporary and mobile nature of the main sources of TAC emissions and the insignificant PM emissions compared to RTSs and LSTs, the proposed Project would not result in substantial TAC pollutant concentrations at sensitive receptors and the proposed Project would have a less than significant impact.

3.2.6.3.2.2 Operational Impacts

As shown in Table 3.2-6, the proposed Project's operational activities would result in a net air quality benefit, as reduced VMT would result in reduced regional and local operational emissions. As such, the

proposed Project would not expose sensitive receptors to substantial concentrations of pollutants during operations because the proposed Project does not include any land uses or operational emissions that would materially impact ambient air quality. Therefore, operational impacts would be less than significant.

3.2.6.4 Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

3.2.6.4.1 No Project Alternative

The No Project Alternative includes planned construction and operations associated with expansion, improvement, and routine maintenance activities for the existing roadway system and transit facilities. The No Project Alternative assumes that the limited public transportation (bus line) to ONT provided by Omnitrans would remain as it currently exists. Construction and operation of the No Project Alternative may result in new emissions, including those leading to odors. Further, the No Project Alternative could adversely affect sensitive receptors depending on where potential odors may be produced.

The occurrence and severity of other emissions, such as those leading to odor impacts, depend on numerous factors, including the nature, frequency, and intensity of the source; wind speed and direction; and the presence of sensitive receptors. While offensive odors rarely cause any physical harm, they still can be very unpleasant, leading to considerable distress and often generating citizen complaints to local governments and regulatory agencies. Projects with the potential to frequently expose individuals to objectionable odors are deemed to have a significant impact.

However, the planned projects anticipated under the No Project Alternative would be required to comply with SCAQMD Rule 402 (Nuisance) during construction and operation. Rule 402 requires that the No Project Alternative not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property. Compliance with this rule would limit construction emissions from fuel-combustion sources that may be considered objectionable from impacting sensitive receptors. The No Project Alternative would be subject to project specific evaluation of emission impacts, including those emissions causing odors, and mitigation would be required to reduce any potential impacts. Therefore, with adherence to existing regulations and mitigation measures to reduce potential impacts, the No Project Alternative would have a less than significant impact related to odors.

3.2.6.4.2 Proposed Project

3.2.6.4.2.1 Construction Impacts

Construction activities associated with the proposed Project could result in short-term odor emissions from diesel exhaust associated with construction equipment. One major component of the proposed Project's construction is tunnel boring, which would require a TBM to build the 4.2-mile tunnel 70 feet below ground surface. As a result, construction would require over 200 daily truck trips to transport construction waste away from the site, which may produce odors. The proposed Project would utilize typical construction techniques, as well as TBMs from tunnel construction, and the odors would be typical of most construction sites and temporary in nature. In addition, the proposed Project is required to comply with SCAQMD Rule 402 (Nuisance). Rule 402 requires that the proposed Project not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property. Compliance with this rule would limit construction emissions from fuel-combustion sources that may be considered objectionable from impacting sensitive receptors. These compliance measures could include utilizing best available technology (BAC) for reducing emissions such as applying diesel particulate filters and/or Tier 4 engines to construction equipment to the extent practicable. Therefore, the proposed Project would not create significant objectionable odors affecting a substantial number of people during construction, and impacts would be less than significant.

3.2.6.4.2.2 Operational Impacts

The occurrence and severity of other emissions, such as those leading to odor impacts, depend on numerous factors, including the nature, frequency, and intensity of the source; wind speed and direction; and the presence of sensitive receptors. While offensive odors rarely cause any physical harm, they still can be very unpleasant, leading to considerable distress and often generating citizen complaints to local governments and regulatory agencies. Projects with the potential to frequently expose individuals to objectionable odors are deemed to have a significant impact.

According to SCAQMD, land uses associated with odor complaints typically include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. During operation, not only does compliance with SCAQMD Rule 402 apply, but the proposed electric vehicles would have minimal to no odor emissions. Thus, the proposed Project would not result in odors adversely affecting a substantial number of people during operation, and impacts would be less than significant.

3.2.7 Mitigation Measures

The following mitigation measure would be implemented during construction activities for the proposed Project.

MM-AQ-1 Implement Basic Construction Emission Control Practices. The following construction measures to limit and reduce air emissions from the construction sites will be implemented:

A. Control fugitive dust as required by District Rule 403 and enforced by District staff.

B. Water all exposed surfaces two times daily. Exposed surfaces include, but are not limited to soil piles, graded areas, unpaved parking areas, staging areas, and access roads.

C. All haul trucks transporting soil, sand, or other loose material off site shall be covered.

D. Cover or maintain at least two feet of free board space on haul trucks transporting soil, sand, or other loose material on the site. Any haul trucks that would be traveling along freeways or major roadways should be covered.

E. Use wet power vacuum street sweepers to remove any visible trackout mud or dirt onto adjacent public roads at least once a day. Use of dry power sweeping is prohibited.

F. Limit vehicle speeds on unpaved roads to 15 miles per hour.

G. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. In addition, building pads shall be laid as soon as possible after grading, unless seeding or soil binders are used.

H. Idling times shall be minimized either by shutting equipment off when not in use or by reducing the maximum idling time to 5 minutes (as required by California airborne toxics control measure Title 13, Section 2485 of the California Code of Regulations). Provide clear signage that posts this requirement for workers at the entrances to the site.

I. Provide current certificate(s) of compliance for the California Air Resources Board's In-Use Off-Road Diesel-Fueled Fleets Regulation [California Code of Regulations, Title 13, sections 2449 and 2449.1].

J. Maintained all construction equipment in proper working condition according to manufacturer's specifications. The equipment must be checked by a certified mechanic and determined to be running in proper condition prior to operation.

No mitigation measures are required for the air quality during operation activities for the proposed Project.

3.2.8 Impacts After Mitigation

3.2.8.1 Conflict with or obstruct implementation of the applicable air quality plan?

No mitigation measure would be required, and the proposed Project would have a less than significant impact.

3.2.8.2 Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard?

MM-AQ-1 would be implemented during construction to address potential impacts for PM_{10} and $PM_{2.5}$ fugitive emissions and implement dust control measures to reduce impacts. However, the construction of the proposed Project would include PM_{10} and $PM_{2.5}$ emissions, and development of the cumulative projects would, in combination with the proposed Project, exceed the same significance thresholds. Therefore, the proposed Project's contribution during construction would be cumulatively considerable, and the cumulative impact would have a significant and unavoidable impact. No mitigation measure would be required for the proposed Project during operation and the proposed Project would have a less than significant impact.

3.2.8.3 Expose sensitive receptors to substantial pollutant concentrations?

No mitigation measure would be required, and the proposed Project would have a less than significant impact.

3.2.8.4 Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

No mitigation measure would be required, and the proposed Project would have a less than significant impact.

3.3 BIOLOGICAL RESOURCES

3.3.1 Introduction

This section of this Draft Environmental Impact Report (EIR) provides a summary of the evaluation of the impacts to biological resources resulting from the implementation of the Ontario International Airport (ONT) Connector Project (Project). Detailed information for biological resources is included in the Biological Resources Technical Report (SBCTA 2024; Appendix D).

3.3.2 Regulatory Framework

3.3.2.1 Federal

3.3.2.1.1 Clean Water Act Section 404

The United States Army Corps of Engineers (USACE) regulates discharge of dredged or fill material into waters of the United States. These waters include wetlands and non-wetland bodies of water that meet specific criteria, including a direct or indirect connection to interstate commerce. The USACE regulatory jurisdiction, pursuant to Clean Water Act (CWA) Section 404 and current regulatory definitions, is founded on a direct intermittent or perennial hydrological surface connection between the water body in question and waters subject to interstate commerce during typical years. In order to be considered a jurisdictional wetland under CWA Section 404, an area must possess three wetland characteristics: hydrophytic vegetation, hydric soils, and wetland hydrology. Each characteristic must meet a specific set of mandatory wetland criteria.

The discharge of dredged or fill material (temporarily or permanently) into waters of the United States (including wetlands) requires authorization from USACE pursuant to CWA Section 404.

3.3.2.1.2 Federal Endangered Species Act

Under provisions of the Federal Endangered Species Act Section 7(a)(2), a federal agency that permits, licenses, funds, or otherwise authorizes a project activity must consult with United States Fish and Wildlife Service (USFWS) and/or National Marine Fisheries Service if the activity may affect a listed endangered or threatened species or its designated critical habitat. The purpose of this consultation is to ensure that a federal agency's actions would not jeopardize the continued existence of any listed species or destroy or adversely modify critical habitat.

3.3.2.1.3 Migratory Bird Treaty Act

Native bird species and their nests are protected under the Migratory Bird Treaty Act (MBTA) (16 United States Code Sections 703 through 712). The MBTA states that all migratory birds and their parts (including eggs, nests, and feathers) are protected. The MBTA prohibits the take, possession, import, export, transport, sale, purchase, barter, or offering for sale, purchase, or barter, of any migratory bird or its eggs, parts, or nests, except as authorized under a valid permit.

The MBTA makes it unlawful to pursue, hunt, take, capture, or kill migratory birds. Fixing America's Surface Transportation Act Section 1439 provides a temporary conditional authorization of take under MBTA for nesting swallows on certain bridges.

3.3.2.1.4 Executive Order 13112—Invasive Species

On February 3, 1999, President Clinton signed Executive Order 13112, requiring federal agencies to combat the introduction, or spread of invasive species in the United States. The Order defines invasive species as:

> *"... any species, including its seeds, eggs, spores, or other biological material capable of propagating that species, that is not native to that ecosystem whose introduction does or is likely to cause economic or environmental harm or harm to human health."*

3.3.2.2 State

3.3.2.2.1 California Environmental Quality Act

California Environmental Quality Act (CEQA) (Sections 21000 et seq.) and CEQA Guidelines (Sections 15000 et seq.) require state and local agencies to identify the significant environmental impacts of their actions, including potential significant impacts associates with biological resources, and to avoid or mitigate those impacts, when feasible.

3.3.2.2.2 California Fish and Game Code Section 1600

California Fish and Game Code Section 1600 et seq. requires notifying California Department of Fish and Wildlife (CDFW) prior to any project activity that might (1) substantially divert or obstruct the natural flow of any river, stream or lake; (2) substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake; or (3) deposit or dispose of debris, waste, or other material where it may pass into any river, stream, or lake. If, after this notification, CDFW determines that the activity may substantially adversely affect fish and wildlife resources, a Lake or Streambed Alteration Agreement will need to be obtained. CDFW has not defined wetlands for jurisdictional purposes. CDFW generally includes within the jurisdictional limits of streams and lakes and any riparian habitat present. Typical riparian habitat includes willows, alders, sycamores, cottonwoods, and other vegetation associated with stream banks or lake shorelines. In most situations, wetlands associated with a stream or lake would fall within the limits of riparian habitat. Thus, defining the limits of CDFW jurisdiction based on riparian habitat will automatically include any wetland areas. Wetlands not associated with a lake, stream, or other regulated areas generally are not subject to CDFW jurisdiction.

3.3.2.2.3 Clean Water Act Section 401 and California Porter-Cologne Water Quality Control Act

Regional Water Quality Control Board (RWQCB) is responsible for the administration of CWA Section 401. The RWQCB also asserts authority over waters of the State of California under waste discharge requirements pursuant to California Porter-Cologne Water Quality Control Act (Porter-Cologne Act). The definition of waters under the jurisdiction of the State of California is broad and includes any surface water

or groundwater, including saline waters within the boundaries of the State of California. Waters that meet the definition of waters of the United States are also considered waters of the State of California, but the jurisdictional limits of waters of the State of California may extend beyond the limits of waters of the United States. Isolated waters that may not be subject to regulations under federal law are considered to be waters of the State of California and regulated accordingly. While there is no formal statewide guidance for the delineation of non-wetland waters of the State of California, jurisdiction generally corresponds to the surface area of aquatic features that are at least seasonally inundated, as well as all areas within the banks of defined rivers, streams, washes, and channels, including associated riparian vegetation.

Currently, each RWQCB reserves the right to establish criteria for the regulation of non-wetland waters of the State of California. In order to be considered a jurisdictional wetland water of the State of California, an area must meet the definition set forth in the State Water Resources Control Board's (SWRCB's) 2020 State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State (SWRCB 2020), which defines wetlands as having (1) continuous or recurrent saturation of the upper substrate caused by groundwater or shallow surface water, or both; (2) hydric substrates; and (3) vegetation dominated by hydrophytes or no vegetation. Each characteristic must meet a specific set of mandatory wetland criteria.

The discharge of dredged or fill material (temporarily or permanently) into waters of the State of California (including wetlands) requires authorization from RWQCB pursuant to CWA Section 401 or pursuant to Porter-Cologne Act in the absence of waters of the United States.

3.3.2.2.4 California Endangered Species Act

The California Endangered Species Act (CESA) is administered by CDFW and prohibits the "take" of plant and animal species identified as either threatened or endangered in California by the Fish and Game Commission (California Fish and Game Code Sections 2050 through 2097). "Take" is defined to mean hunt, pursue, catch, capture, or kill, or to attempt those activities. CESA Sections 2080.1 and 2081 allow CDFW to authorize exceptions to the take prohibition for state-listed threatened or endangered plant and animal species for purposes such as public and private development, provided the take is incidental to an otherwise lawful activity and the take is minimized and fully mitigated.

Fully Protected Species. California Fish and Game Code Sections 3511, 4700, 5050, and 5515 designate 37 fully protected species and prohibit the take or possession at any time of such species with certain limited exceptions.

Bird Protections. California Fish and Game Code Sections 3503, 3503.5, and 3513 protect birds. Section 3503 states that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by code or any regulation made pursuant thereto. Section 3503.5 prohibits the take, possession, or destruction of any nests, eggs, or birds in the orders Falconiformes (New World vultures, hawks, eagles, ospreys, and falcons, among others) or Strigiformes (owls). Section 3513 prohibits the take or possession of any migratory nongame bird

or part thereof, as designated in MBTA. To avoid violation of the take provisions, it is generally required that project-related disturbance at active nesting territories be reduced or eliminated during the nesting cycle.

Bat Protection. Bats and other nongame mammals are protected in California under California Fish and Game Code Sections 2000, 2002, 2014, and 4150 and California Code of Regulations Section 251.1. California Fish and Game Code Section 4150 states that all nongame mammals or parts thereof may not be taken or possessed, except as otherwise provided in the code or in accordance with regulations adopted by California Fish and Game Commission. Thus, destruction of an occupied, nonbreeding bat roost resulting in the death of bats, or disturbance that causes the loss of a maternity colony of bats (resulting in the death of young bats), is prohibited.

3.3.2.3 Local

A list of relevant local goals and polices are discussed in the Biological Resources Technical Report (SBCTA 2024; Appendix D). A summary of local goals and policies is provided in this section.

3.3.2.3.1 San Bernardino County General Plan

The San Bernardino County General Plan, Natural Resources (NR) Element, sets forth goal NR-5 and policies NR-5.1 through NR-5.8 that regulate public services and recreation in the San Bernardino County (San Bernardino County 2020). A brief summary of applicable goal and policies is provided as follows:

- Goal NR-5 addresses biological resources and encourages open spaces.
- Policy NR-5.1 addresses coordinated habit planning.
- Policy NR-5.2 addresses capacity for resource protection and management.
- Policy NR-5.3 addresses conservation actions for multiple resource preservation benefits.
- Policy NR-5.4 addresses off-base recovery efforts.
- Policy NR-5.5 addresses mitigation and future responsibilities.
- Policy NR-5.6 addresses mitigation banking.
- Policy NR-5.7 addresses development review, entitlement, and mitigation.
- Policy NR-5.8 encourages the use of non-invasive species.

The City of Rancho Cucamonga General Plan, Resources Conservation Element, sets forth goal RC-3 and policies RC-3.1 through 3.6 that regulate public services and recreation in the City of Rancho Cucamonga (City of Rancho Cucamonga 2021). A brief summary of applicable goal and policies is provided as follows:

- Goal RC-3 addresses habitat conservation.
- Policy RC-3.1 encourages the preservation of sensitive habitats.

- Policy RC-3.2 encourages biological preserve expansions.
- Policy RC-3.3 encourages the creation of wildlife corridors.
- Policy RC-3.4 addresses landscape design.
- Policy RC-3.5 addresses buffers between new developments and wildlife habitat areas.
- Policy RC-3.6 addresses grading and vegetation removal.

3.3.2.3.2 City of Rancho Cucamonga Tree Preservation Ordinance, Municipal Code Chapter 17.80, Tree Preservation

City of Rancho Cucamonga Tree Preservation Ordinance, Chapter 17.80, provides provisions to protect trees (considered to be a community resource) from indiscriminate cutting or removal (City of Rancho Cucamonga 2022). Specifically, the provisions are to protect and expand eucalyptus windrows through planting of new spotted gum eucalyptus windrows along the established grid pattern as development occurs.

3.3.2.3.3 City of Rancho Cucamonga Municipal Code Section 17.16.080, Tree Removal Permit

City of Rancho Cucamonga Municipal Code Section 17.16.080, Tree Removal Permit, is intended to protect trees defined as heritage trees (City of Rancho Cucamonga 2022). According to the City of Rancho Cucamonga ordinance, "heritage trees" means any tree, shrub, or plant that meets at least one of the following criteria:

- All eucalyptus windrows;
- All woody plants in excess of 30 feet (ft) in height and having a single trunk circumference of 20 inches or more, as measured 4.5 ft from ground level;
- Multi-trunk tree(s) having a total circumference of 30 inches or more, as measured 24 inches from ground level;
- A stand of trees, the nature of which makes each dependent upon the others for survival; or
- Any other tree that may be deemed historically or culturally significant by the City of Rancho Cucamonga's Planning Director because of size, condition, location, or aesthetic qualities.

Removal of heritage trees requires a tree removal permit from the City of Rancho Cucamonga's Planning Director.

3.3.2.3.4 City of Ontario General Plan

The City of Ontario General Plan, Environmental Resources (ER) Element, sets forth goals and policies that regulate public services and recreation in the City of Ontario (City of Ontario 2022). A summary of applicable goal and policies to the proposed Project is provided as follows:

- Goal ER-5 addresses the protection of biological, mineral, and agricultural resources.

- Policy ER-5.1 addresses the protection of biological resources and habitat conservation areas.
- Policy-5.2 addresses the entitlement and permitting process regarding protected species.

3.3.2.3.5 City of Ontario Municipal Code, Volume II, Chapter 2, Parkway Tree Regulations (Ordinance 1664)

City of Ontario Municipal Code, Chapter 2, Parkway Tree Regulations, is intended to preserve parkway trees; to regulate the maintenance and removal of such trees; to establish the varieties, minimum sizes, methods, and locations for the planting thereof; and other related matters (City of Ontario 2021). A "parkway" is defined as that portion of any public street right-of-way (ROW) between the ROW boundary line and the curb line, along with the area enclosed within the curb lines of a median divider. The property owner abutting upon public ROW is responsible for watering any tree located in the parkway and for trimming that can be done from the ground to preserve the neat appearance and unobstructed use of the parkway, while the City of Ontario is responsible for all major pruning. Removal or relocation of any parkway tree requires prior authorization from the Public Works Agency of the City of Ontario through a permit process, and planting of a replacement tree, whenever feasible, shall be a condition included in any permit issued by the City of Ontario for the removal of any parkway tree. Alternatively, a cash-in-lieu deposit may be accepted by the City of Ontario as an alternative to the actual planting of any required parkway tree based on a fair value established by the Public Facilities Manager.

3.3.2.3.6 City of Ontario Municipal Code, Section 6.05.020, Tree Preservation Policy, and Protection Measures

The City of Ontario Municipal Code, Tree Preservation Policy and Protection Measures, is intended to establish policies and measures that will further the preservation, protection, and maintenance of established and healthy heritage trees within the City of Ontario to improve the community forest that provides environmental, aesthetic, and economic benefits and enhances the quality of life. It is pertinent to the public welfare that such trees be protected from indiscriminate cutting or removal. A "heritage tree" is defined as a tree designated for preservation pursuant to Section 4.02.060 (Historic Preservation - Historic Landmark and District Designations, and Architectural Conservation Areas) of this Development Code, a tree of historic or cultural significance, or a tree of importance to the community due to any one of the following factors:

- It is one of the largest or oldest trees of the species located in the City of Ontario, with a trunk diameter of 18 inches or greater, measured at 54 inches above natural grade.
- It has historical significance due to an association with a historic building, site, street, person, or event.
- It is a defining landmark or significant outstanding feature of a neighborhood or district, or typical of early Ontario landscapes, including: *Cinnamomum camphora* (camphor tree); *Cedrus deodara*

(Deodar cedar); *Platanus acerifolia*; *Quercus suber* (cork oak); *Quercus ilex* (holly oak); and *Schinus molle* (Peruvian pepper).

- It is a native tree. The term "native tree" means any one of the following California native tree species that has a trunk diameter of more than 8 inches, measured at 54 inches above natural grade, including: *Platanus racemosa* (California sycamore); *Pinus torreyana* (Torrey pine); *Quercus agrifolia* (coast live oak); *Quercus engelmannii* (Engelmann oak); *Quercus lobata* (valley oak); or *Umbellularia californica* (California bay).

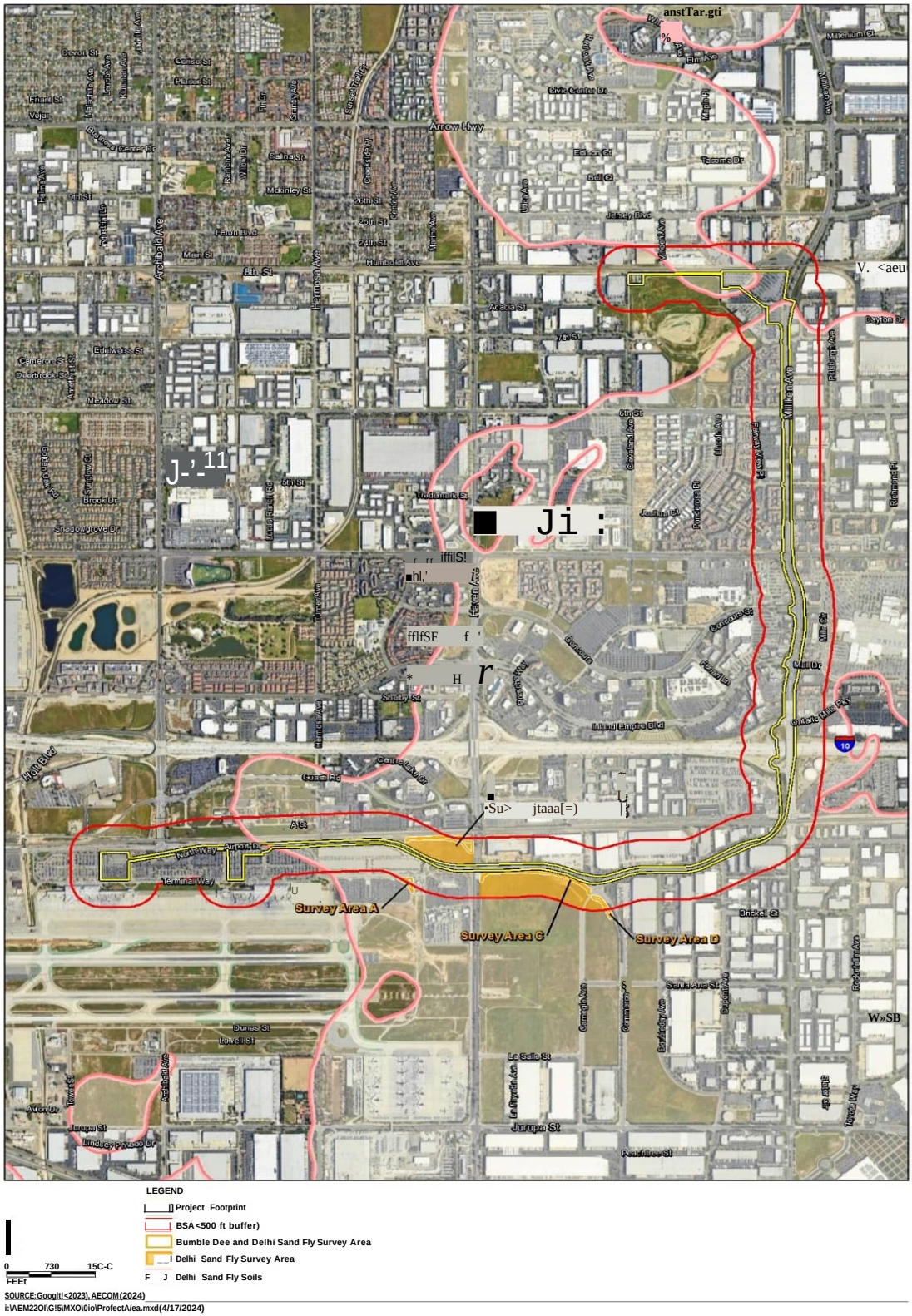
3.3.3 Existing Setting

3.3.3.1 Site Characteristics

The proposed Project is located in the City of Rancho Cucamonga and the City of Ontario within San Bernardino County. The proposed Project site is located within the United States Geological Survey (USGS) 7.5-minute series topographic quadrangle of Guasti, California (Township 1S, Range 7W) (USGS 2022). The Biological Survey Area (BSA), shown in Figure 3.3-1, is located in the South Coast subregion of the Southwestern California region of the California Floristic Province. The South Coast subregion is characterized by valleys and small hills extending from the coast inland to the foothills of the Transverse and Peninsular Mountain Ranges. Much of the subregion is extensively developed with urban, suburban, and agricultural uses. The natural vegetation of the subregion consists primarily of chaparral, coastal sage scrub (CSS), non-native annual grassland, and some riparian scrub and woodland. Much of the natural vegetation occurs in scattered, often fragmented patches on hills or in other areas not easily developed and/or protected under regional or local land use plans. Specifically, the proposed Project is located within portions of developed and maintained areas along Milliken Avenue and East Airport Drive.

Much of the BSA consists of urban development and ornamental landscaping. Undeveloped areas within the BSA contain a mixture of CSS, non-native annual grassland, and ornamental vegetation along Milliken Avenue and East Airport Drive and surrounding the residential and commercial developments that are affected by regular vehicular traffic, noise, and anthropogenic uses. Mapped vegetation communities in the BSA include non-native annual grassland, CSS, and developed/disturbed. There are two concrete-lined drainage channels, one cobble ditch, and two earthen channels that are potentially jurisdictional features within the BSA. Elevations in the BSA range from approximately 955 to 1,127 ft above mean sea level. The topography within the BSA is relatively flat with slight topographic variation. Soil types vary throughout the BSA, and most of the soils have been impacted by development.

Figure 3.3-1 Biological Study Area (BSA) and Survey Areas



The climate is classified as Mediterranean (i.e., arid climate with hot, dry summers and moderately mild, wet winters). The average annual precipitation is approximately 14 inches. Although most of the precipitation occurs from November through May, thunderstorms may occur at all times of the year and can cause extremely high precipitation rates. Average annual temperatures typically range between 43 degrees Fahrenheit (°F) and 93 °F.

3.3.3.2 Adjacent Uses

Existing development in the immediate vicinity of the proposed Project site includes a mix of industrial, commercial, manufacturing, transportation, office, multi-family residential, hotel, and airport-related land uses. Adjacent uses include the following:

- North: Railroad tracks, industrial and manufacturing uses, trucking facilities, surface parking lots, Rancho Cucamonga Fire Station Number 174, and All Risk Training Center for the Rancho Cucamonga Fire Protection District.
- South: Industrial and manufacturing uses, along with trucking facilities, rental car facilities, parking lots, hotel uses, and other airport related uses. ONT includes two passenger terminals, general aviation facilities, air freight buildings, parking lots, and numerous airport and aircraft maintenance and support services.
- East: The eastern side of Milliken Avenue from 5th Street south to 4th Street consists primarily of hotel uses. Concentrated areas of commercial uses and restaurants are located along Milliken Avenue from 4th Street south to Interstate 10 (I-10), including Ontario Mills, which is a regional shopping mall complex. Hotel uses are also located adjacent to the Ontario Mills shopping mall.
- West: The western side of Milliken Avenue from approximately 7th Street south to 4th Street consists primarily of multi-family residential uses. Concentrated areas of large retail, commercial uses, restaurants, hotels, and the Toyota Arena are located along Milliken Avenue from 4th Street south to I-10.

3.3.3.3 Literature Review

A literature review and records search were conducted in June 2022 to identify the existence or potential occurrence of sensitive or special-status biological resources (e.g., plant and animal species) in or within the vicinity of the proposed Project site. The literature review included a search of the current database records from CDFW's California Natural Diversity Database (CNDDB) (CDFW 2022a), USFWS Information for Planning and Consultation (IPaC) and the National Oceanic and Atmospheric Administration (NOAA). Prior biological resources survey data and environmental reports prepared for other projects at or near the proposed Project location were also reviewed.

The CNDDB contains records of reported occurrences of special-status species and habitats that may occur within or in the immediate vicinity of the proposed Project site. From these data sources, lists of sensitive wildlife and plant species potentially occurring within the proposed Project site were developed.

3.3.3.4 Field Review

The general survey and habitat mapping was conducted in September 2022 to characterize the biological resources of the BSA and to ascertain the presence or absence of sensitive plants and animals and the likelihood of their occurrence in the BSA. The BSA includes the entire proposed ground-disturbance area (temporary and permanent) associated with the proposed Project design, and a 500-foot buffer.

Field investigations of undeveloped habitat in the northern portion of the BSA were not conducted due to lack of legal rights to access. These areas were viewed in the field, as feasible, from adjacent areas using binoculars. In addition, these areas were assessed via desktop review of aerial photographs. A summary of applicable literature review and initial field investigations is provided as follows.

- General Habitat Suitability Survey: During the course of biological surveys conducted on September 1 and 9, 2022, biologists noted wildlife species and habitat conditions within the BSA.
- Burrowing Owl Survey: A burrowing owl habitat assessment was conducted on July 9, 2021. Biologists conducted a single burrowing owl breeding season survey in accordance with the CDFW's 2012 Staff Report on Burrowing Owl Mitigation due to the proposed Project initiation date occurring late in the survey season on July 15, 2021.
- Crotch's Bumble Bee, Year 1 (2021): A Crotch's bumble bee habitat assessment was conducted on July 9, 2021. Visual Crotch's bumble bee surveys, conducted within undeveloped portions of the BSA, have the potential to support Crotch's bumble bee. Surveys were conducted by walking transects through the vegetation within the BSA. Survey transects were spaced approximately 30 ft apart or closer if needed for visual coverage of potential nest sites. Surveys consisted of looking for potential nest sites (e.g., holes, crevices), as well as looking for Crotch's bumble bees on the ground or in vegetation and following them to an active nest.
- Delhi Sands Flower-Loving Fly (DSF) Survey, Year 1 (2021): A DSF habitat assessment was conducted on July 9, 2021. A single-year survey was conducted by a qualified biologist for DSF in areas of the BSA containing potentially suitable habitat within mapped Delhi soils and where access was permitted. The surveys were conducted in accordance with the terms of obtained Federal 10(a)(1)(A) Permit TE-777965 and the Interim General Survey Guidelines for the DSF (USFWS 1996). The survey protocol was modified to accommodate a late start on the DSF survey season, which begins on July 1 and ends on September 20. To make up for approximately two weeks of missing DSF survey data, four extra surveys were completed during Weeks 4 and 5 of the survey season. The survey consisted of 23 site visits from July 22, 2021, through September 20, 2021.

- Bat Habitat Assessment (2022): During the daylight hours on September 21, 2022, a qualified bat specialist conducted a daytime bat habitat suitability assessment at all of the bridge and culvert structures within the proposed Project footprint and a 500-foot buffer. During the habitat assessment, potential roost sites were identified by examining the sides and underside of each structure with a high-powered light-emitting diode spotlight for any structural features, such as crevices or recessed spaces, that may be suitable for use as day- or night-roosting habitat.

  Structural features suitable for day-roosting bats include crevices (e.g., hinges or expansion joints), weep holes, or cavities, while structural features used by night-roosting bats include features suitable for day roosting, as well as recessed areas (e.g., concrete girders that can trap warm air, or the walls of concrete box culverts). Each structure was also inspected for the presence of bats or any bat sign (e.g., guano, urine staining, or vocalizations).

  Features suitable for use as day-roosting habitat were also assessed for potential use as maternity roost sites based on indications that the observed roost feature supports or may support a large congregation of bats. Potential foraging habitat was also assessed within and adjacent to the structures on the basis of vegetation composition, presence of water, and connectivity to other areas providing suitable foraging or roosting habitat.

  The presence of large trees and palm trees within the study area that are suitable for foliage-roosting species were noted during the assessment, although roosting activity at these locations was difficult to confirm due to the nature of this roosting behavior (i.e., these species tend to roost singly, beneath leaves, and may roost in a different location each night).

The biologists involved in the field surveys are well versed in all habitat types found within the BSA and are authorized by CDFW and USFWS to conduct surveys for and monitor special-status species that occur within the vicinity of the BSA, including roosting bats, plants, and other mammals, amphibians, reptiles, and birds.

3.3.3.5 Biological Conditions

Natural areas supporting native CSS vegetation occur along of the western slope of Milliken Avenue south of I-10, north of the intersection of Milliken Avenue and Guasti Road. Prominent vegetation types within the BSA are discussed in the following subsection.

3.3.3.5.1 Vegetation/Natural Communities

Figure 3.3-2 shows the mapped land cover types within the BSA, and Table 3.3-1 shows the acreage of each vegetation type and land use within the BSA. The vegetation communities within the BSA are discussed as follows:

Table 3.3-1 Vegetation and Land Cover Types Mapped within the BSA

Vegetation	Acreage Total
Coastal Sage Scrub	0.85
Non-native Annual Grassland	76.14
Developed/Disturbed	622.12
Total	699.11

Note: calculated using geographic information system software

- CSS: Areas classified as CSS were composed of native drought-deciduous shrubs forming a dense but patchy matrix, frequently interspersed ornamental shrubs, and native and non-native annuals. CSS was encountered on disturbed and revegetated slopes located on the western side of Milliken Avenue, south of I-10. Characteristic species included rubber rabbitbrush (*Ericameria nauseosa*), California buckwheat (*Eriogonum fasciculatum*), and California sagebrush (*Artemisia californica*).
- Non-native Annual Grassland: Areas classified as non-native annual grassland are dominated by annual grasses that are primarily Mediterranean in origin. Dominant plant species include ripgut grass (*Bromus diandrus*), wild oat (*Avena fatua*), and mouse barley (*Hordeum murinum*). Many species of native forbs and bulbs, as well as naturalized annual forbs, are found in annual grassland such as shortpod mustard (*Hirschfeldia incana*). Non-native annual grasslands are located along the road shoulders and areas of high disturbance (i.e., former golf course) within the BSA.
- Developed/Disturbed: Areas classified as developed/disturbed consist of buildings, roadways, and other paved areas that contain ornamental landscaping. These developed/disturbed areas are regularly disturbed by anthropogenic uses and contain patches of bare ground and ruderal/weedy vegetation cover.

3.3.3.5.2 Animal Species

Most animal species observed within the BSA during the September 2022 surveys are characteristic of those found throughout most of Southern California. A complete list of observed or otherwise detected animal species is provided in Appendix D of this Draft EIR. Table 3.3-2 lists special-status species evaluated for potential occurrence within the BSA.

3.3.3.6 Jurisdictional Waters

No areas were identified that would be considered wetlands, jurisdictional waters of the United States (subject to CWA Section 404) or streams (subject to Fish and Wildlife Code of California Sections 1601 or 1603) based upon current rules, guidelines, and/or legal interpretation.

Figure 3.3-2 Vegetation and Potential Jurisdictional Features (Page 1 of 13)

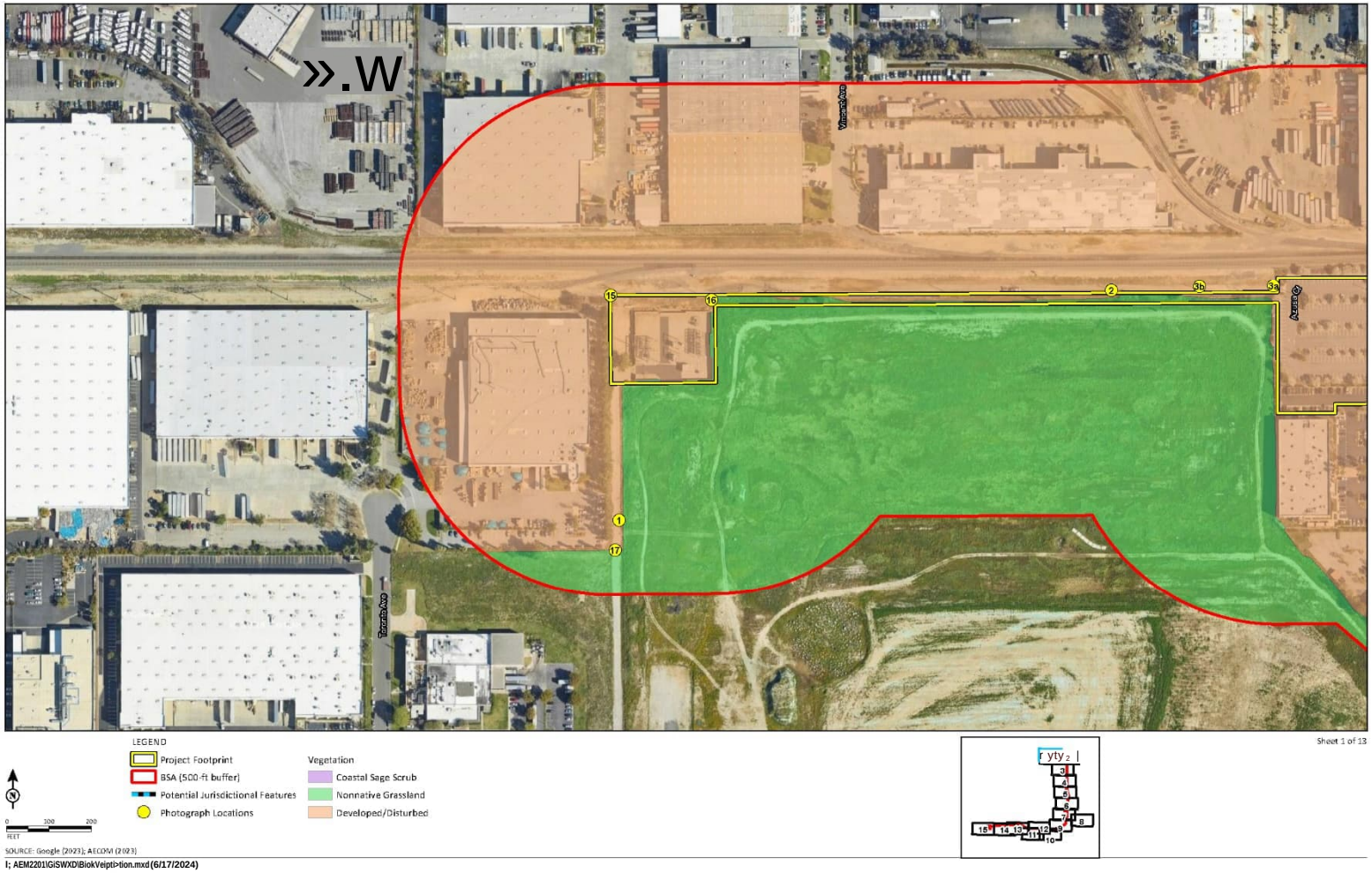


Figure 3.3-3 Vegetation and Potential Jurisdictional Features (Page 2 of 13)

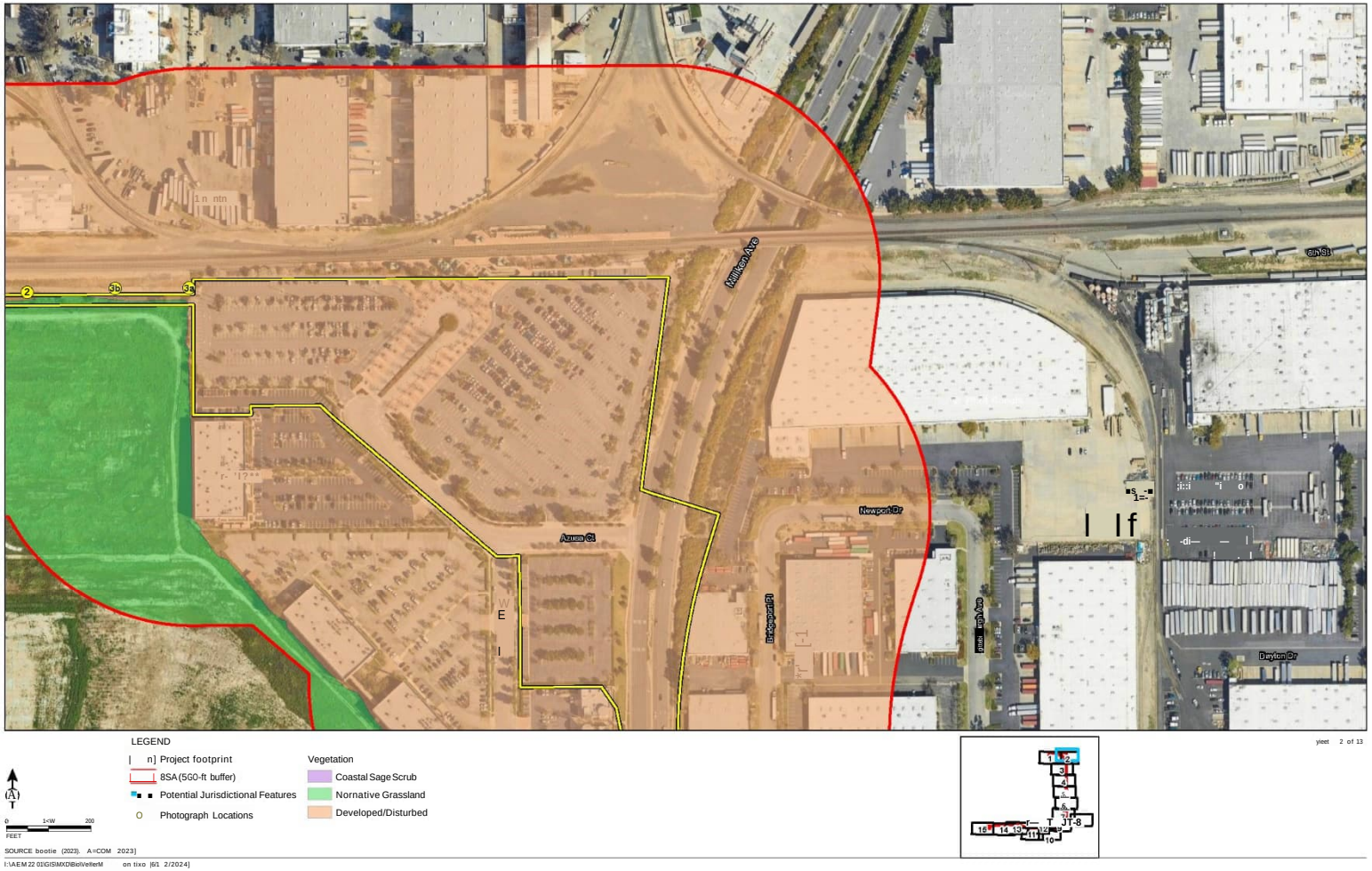


Figure 3.3-4 Vegetation and Potential Jurisdictional Features (Page 3 of 13)

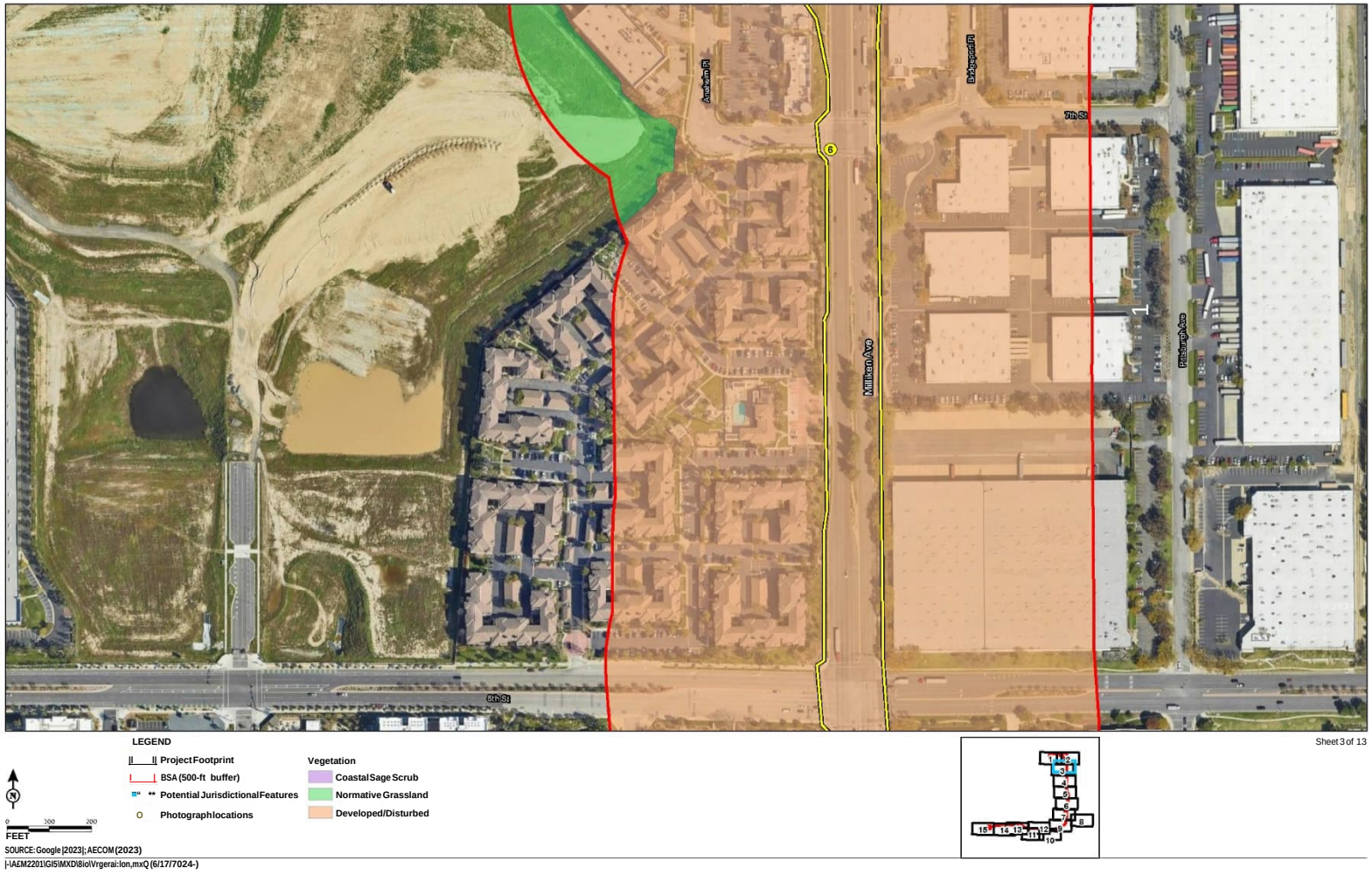


Figure 3.3-5 Vegetation and Potential Jurisdictional Features (Page 4 of 13)

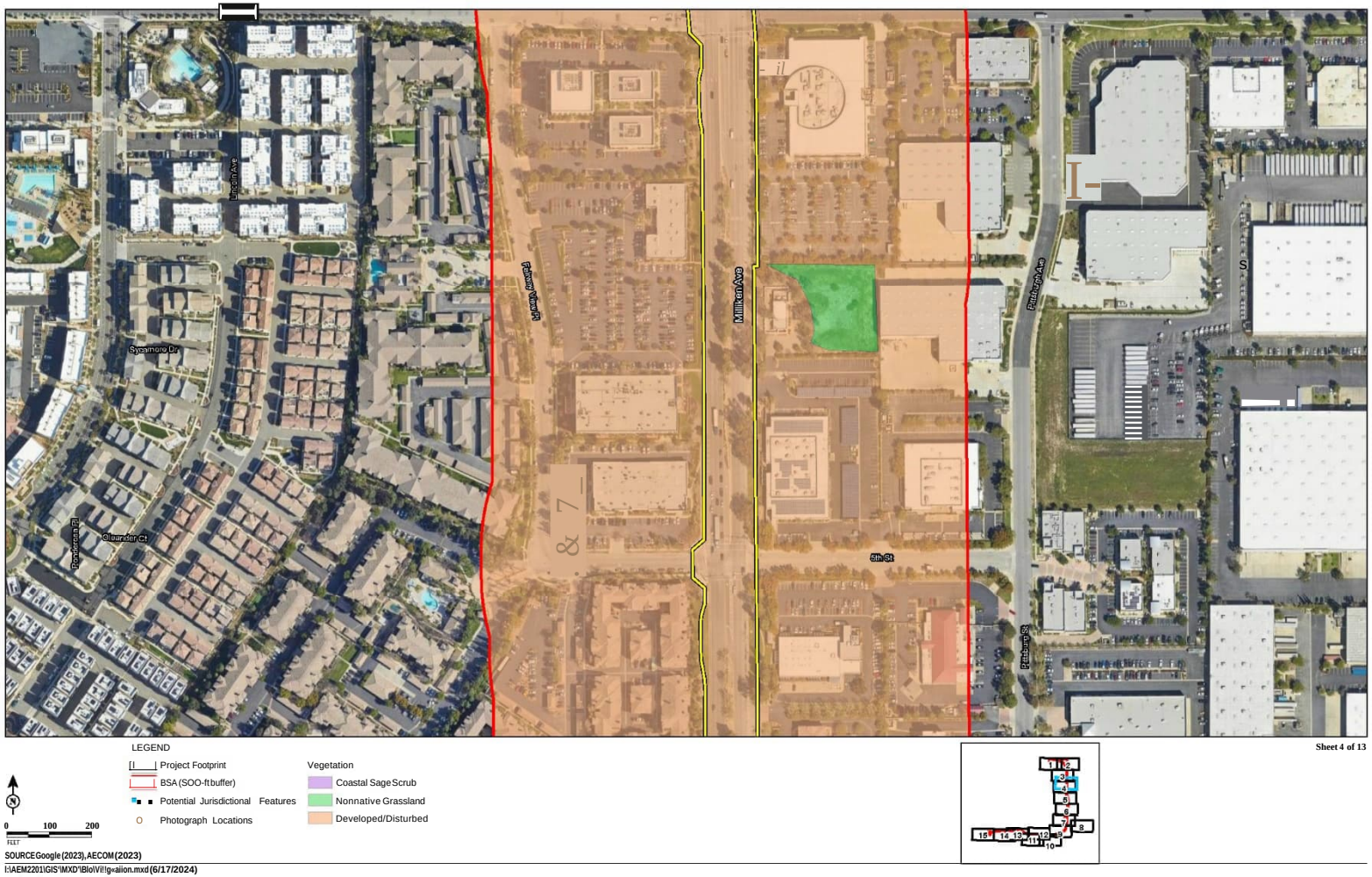


Figure 3.3-6 Vegetation and Potential Jurisdictional Features (Page 5 of 13)

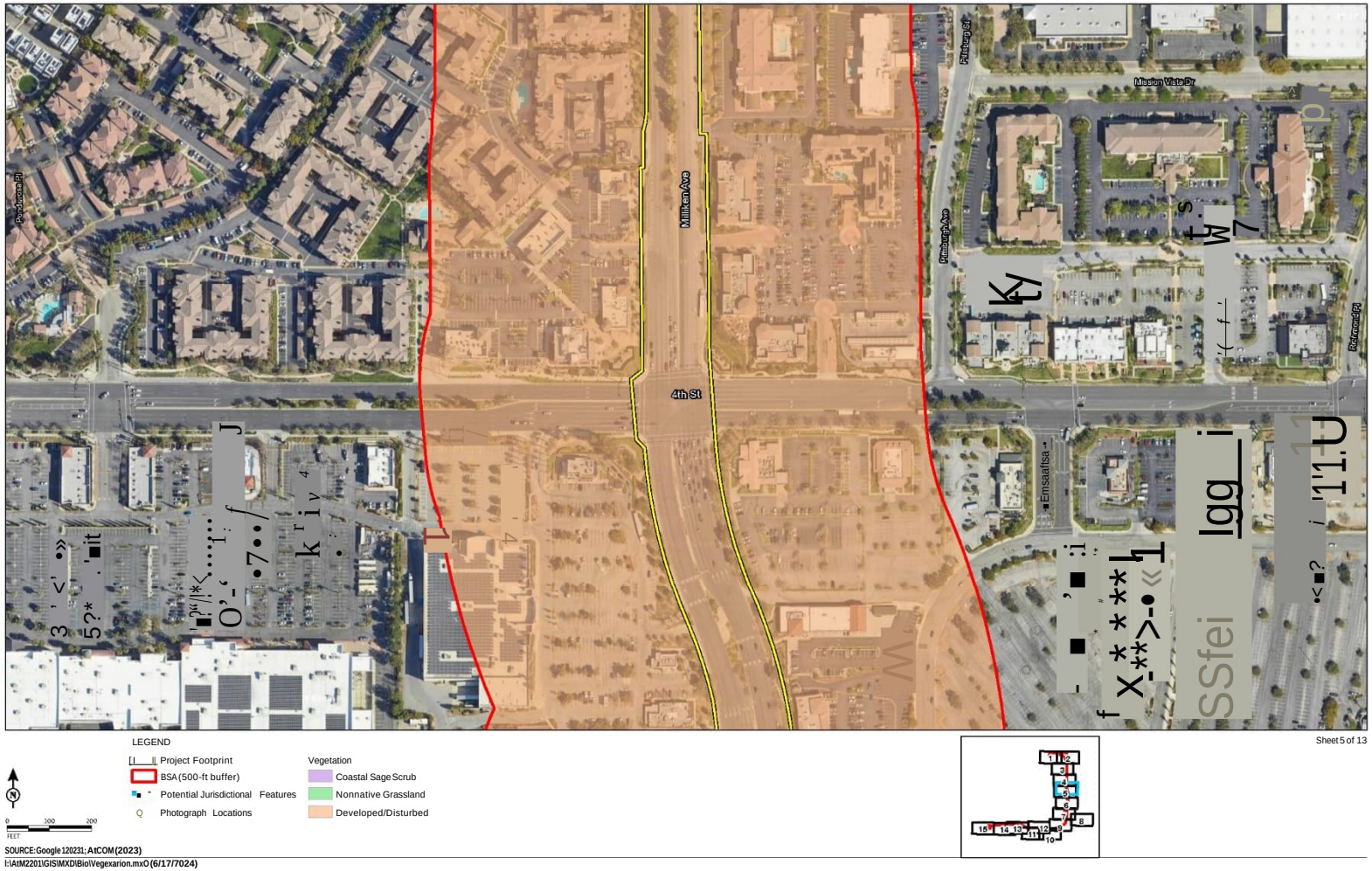


Figure 3.3-7 Vegetation and Potential Jurisdictional Features (Page 6 of 13)

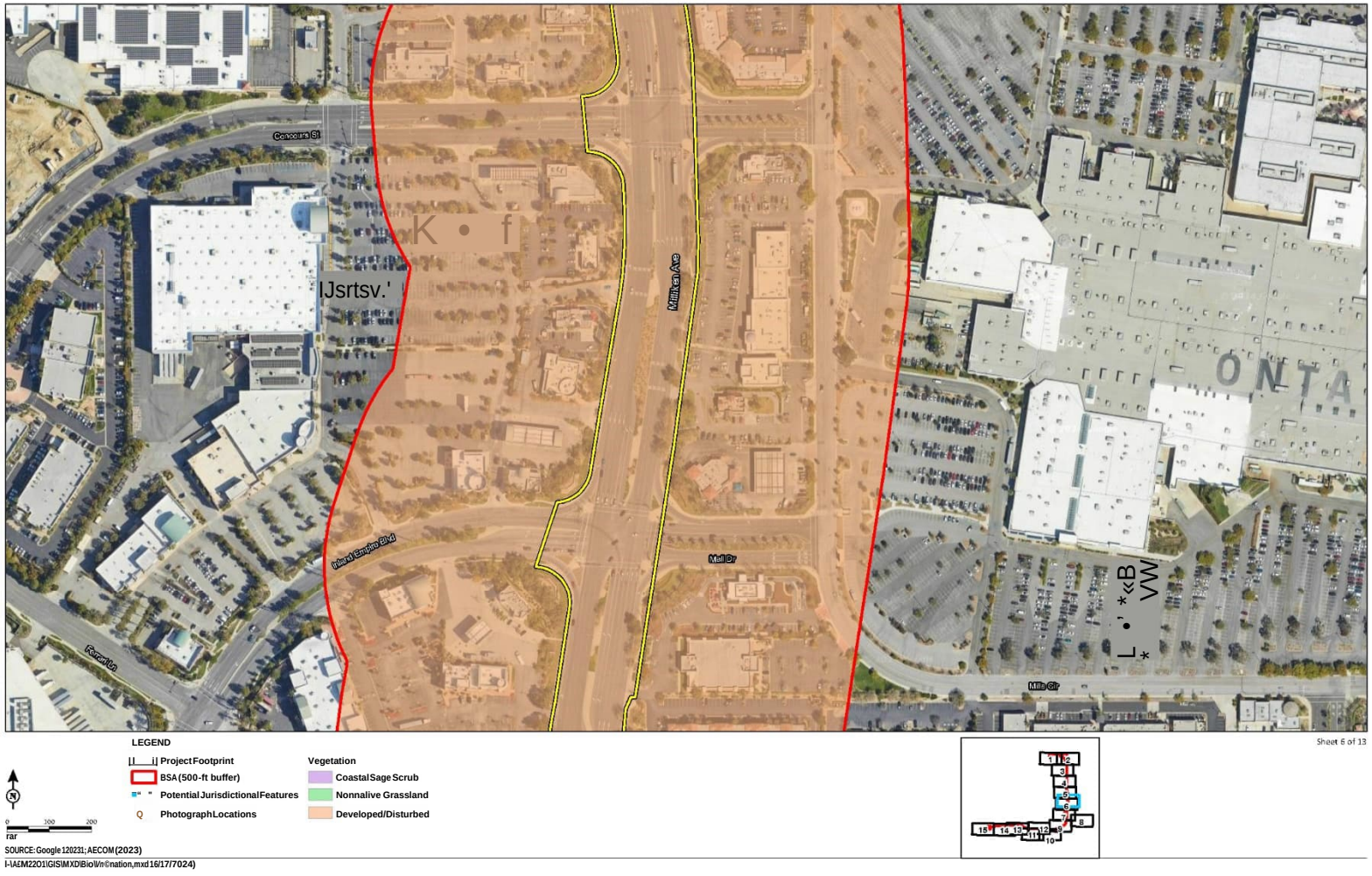


Figure 3.3-8 Vegetation and Potential Jurisdictional Features (Page 7 of 13)

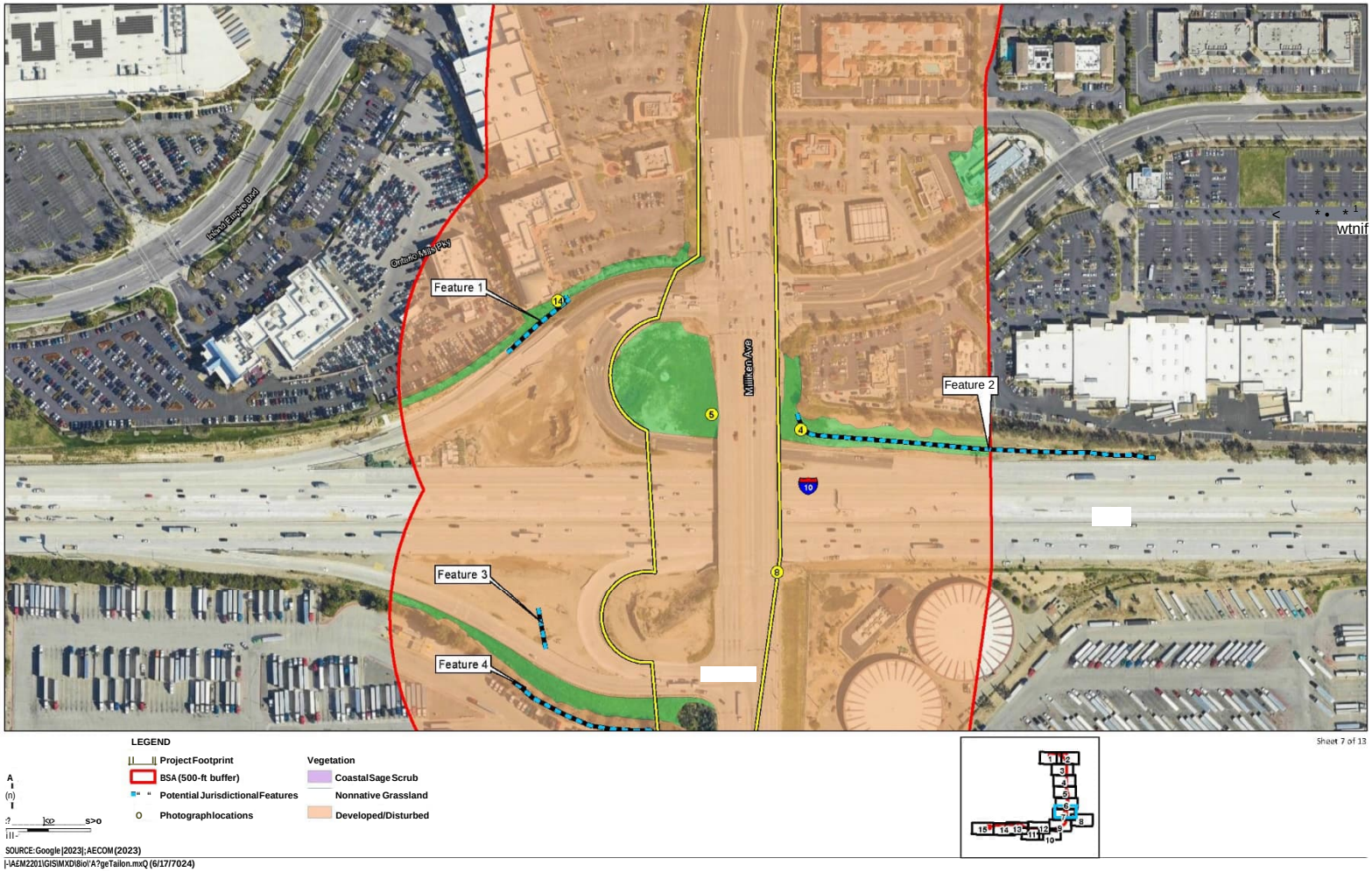


Figure 3.3-9 Vegetation and Potential Jurisdictional Features (Page 8 of 13)

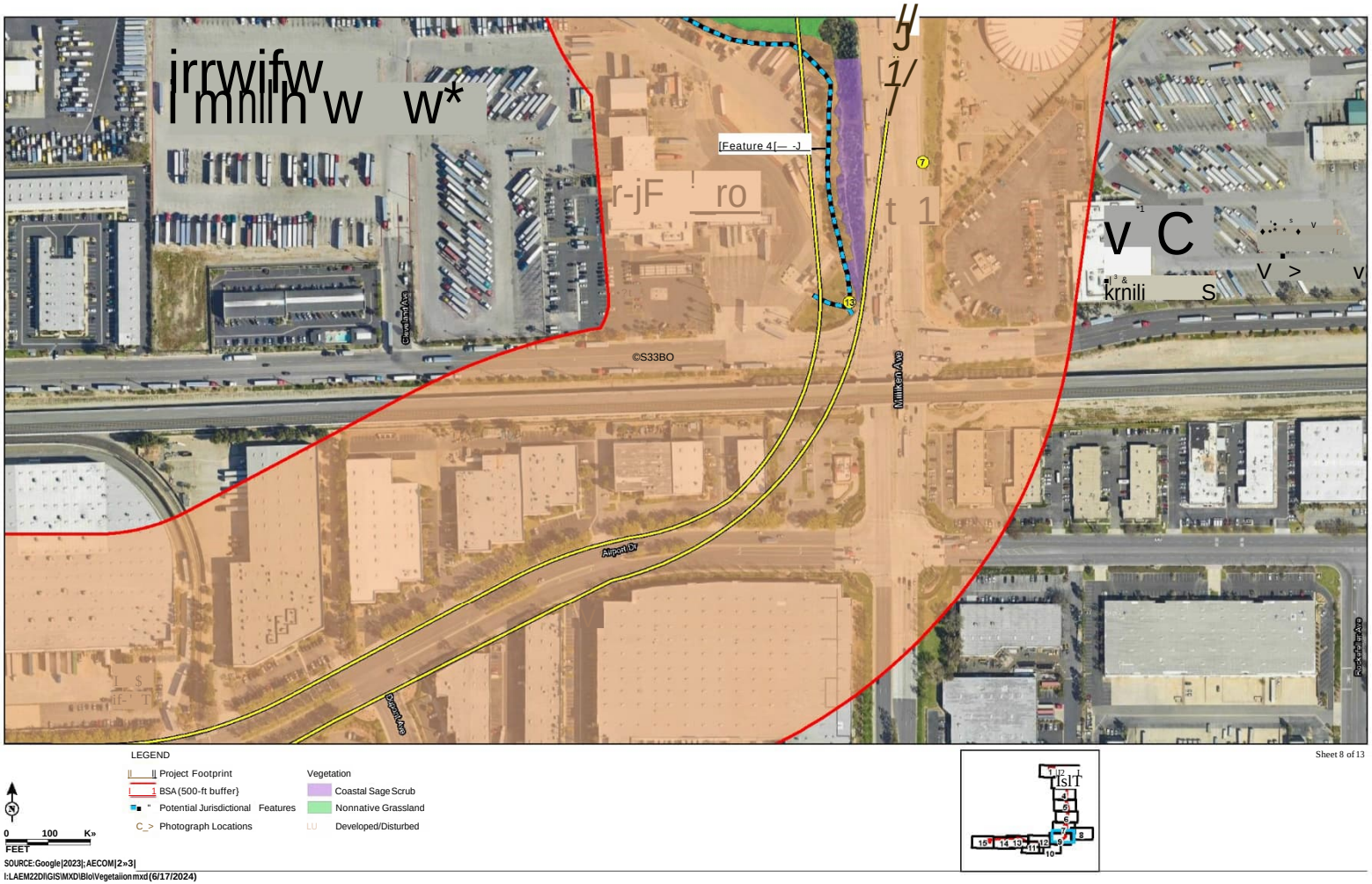


Figure 3.3-10 Vegetation and Potential Jurisdictional Features (Page 9 of 13)



Figure 3.3-11 Vegetation and Potential Jurisdictional Features (Page 10 of 13)

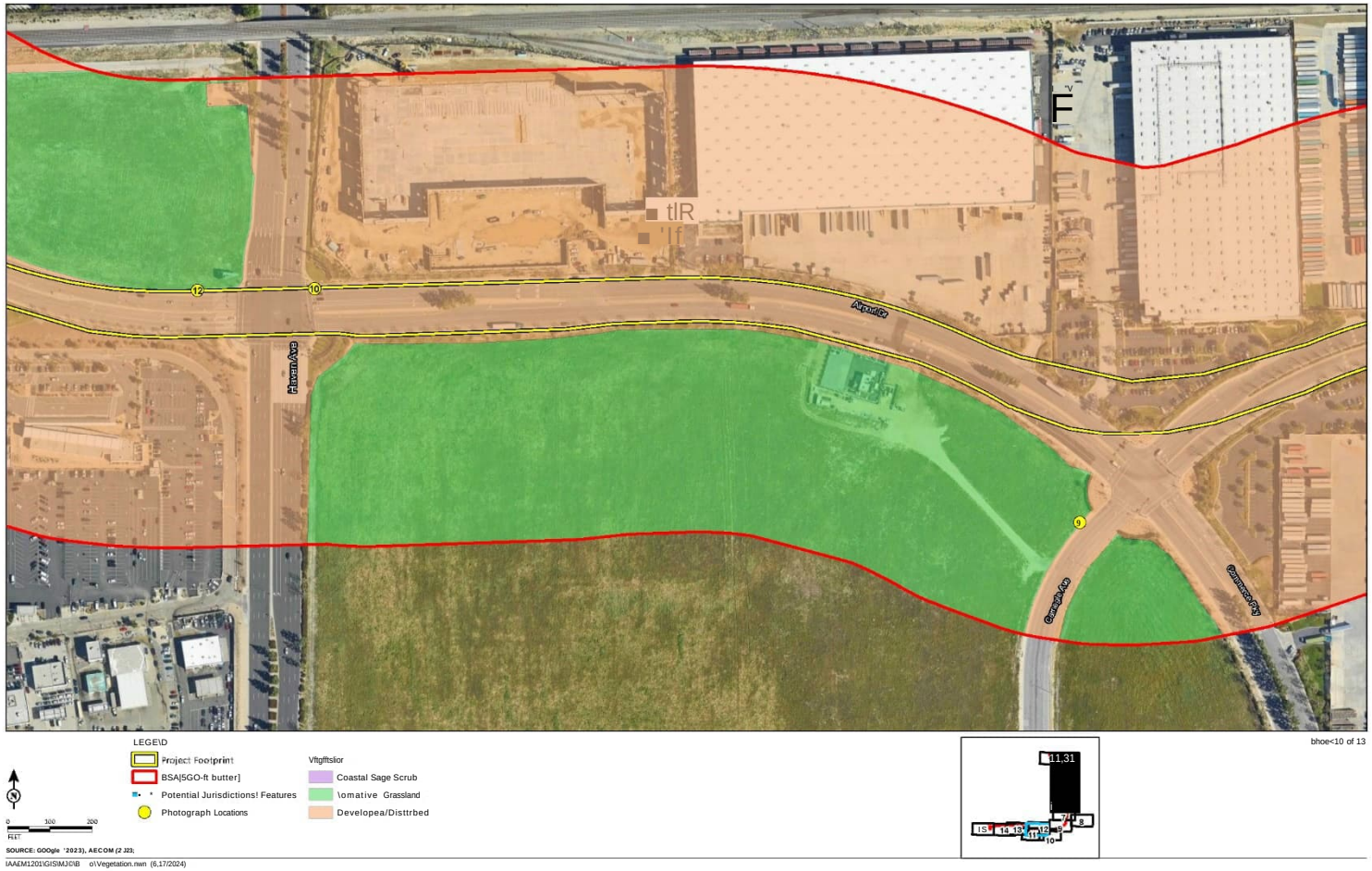


Figure 3.3-12 Vegetation and Potential Jurisdictional Features (Page 11 of 13)



Figure 3.3-13 Vegetation and Potential Jurisdictional Features (Page 12 of 13)

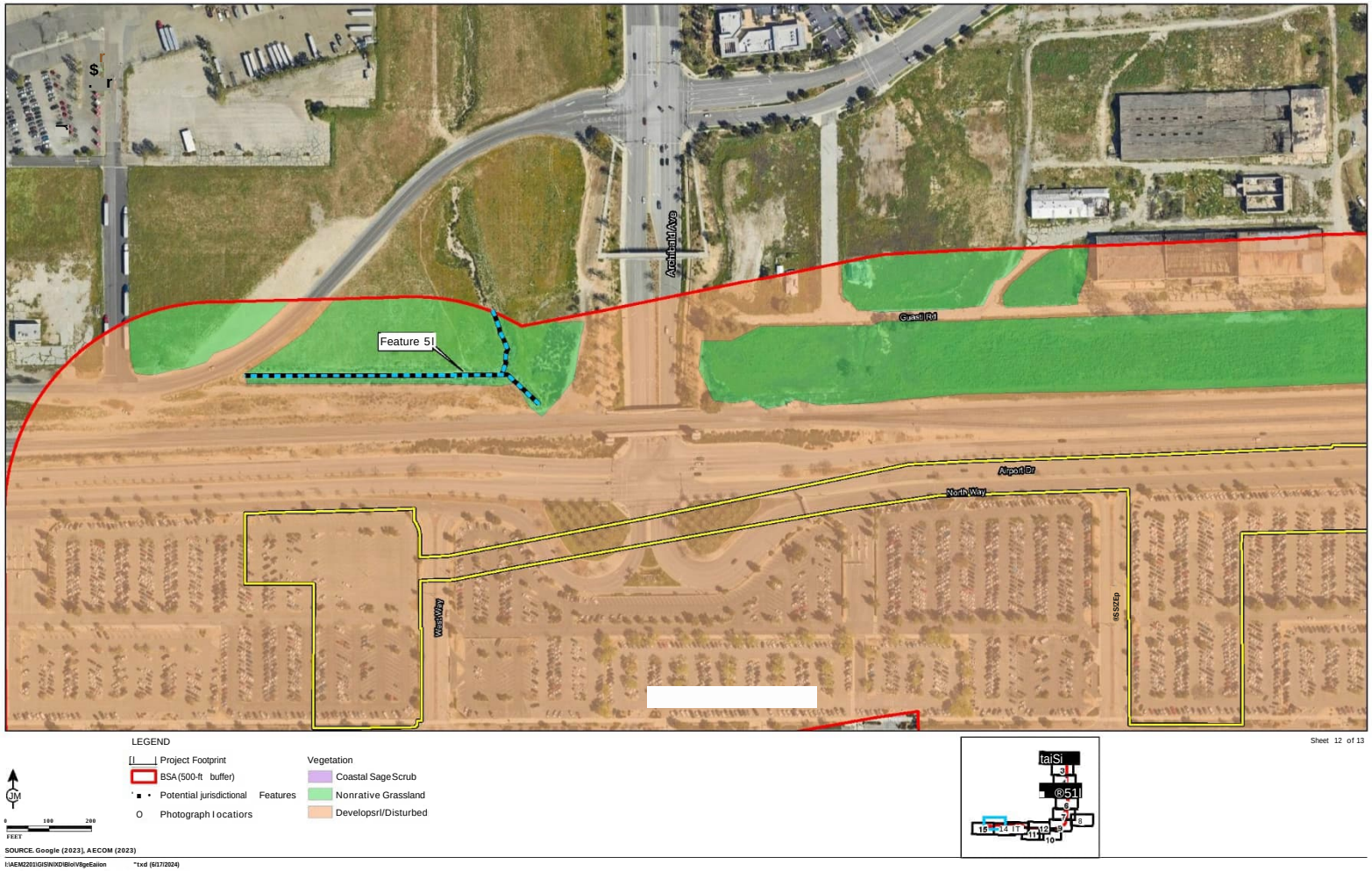
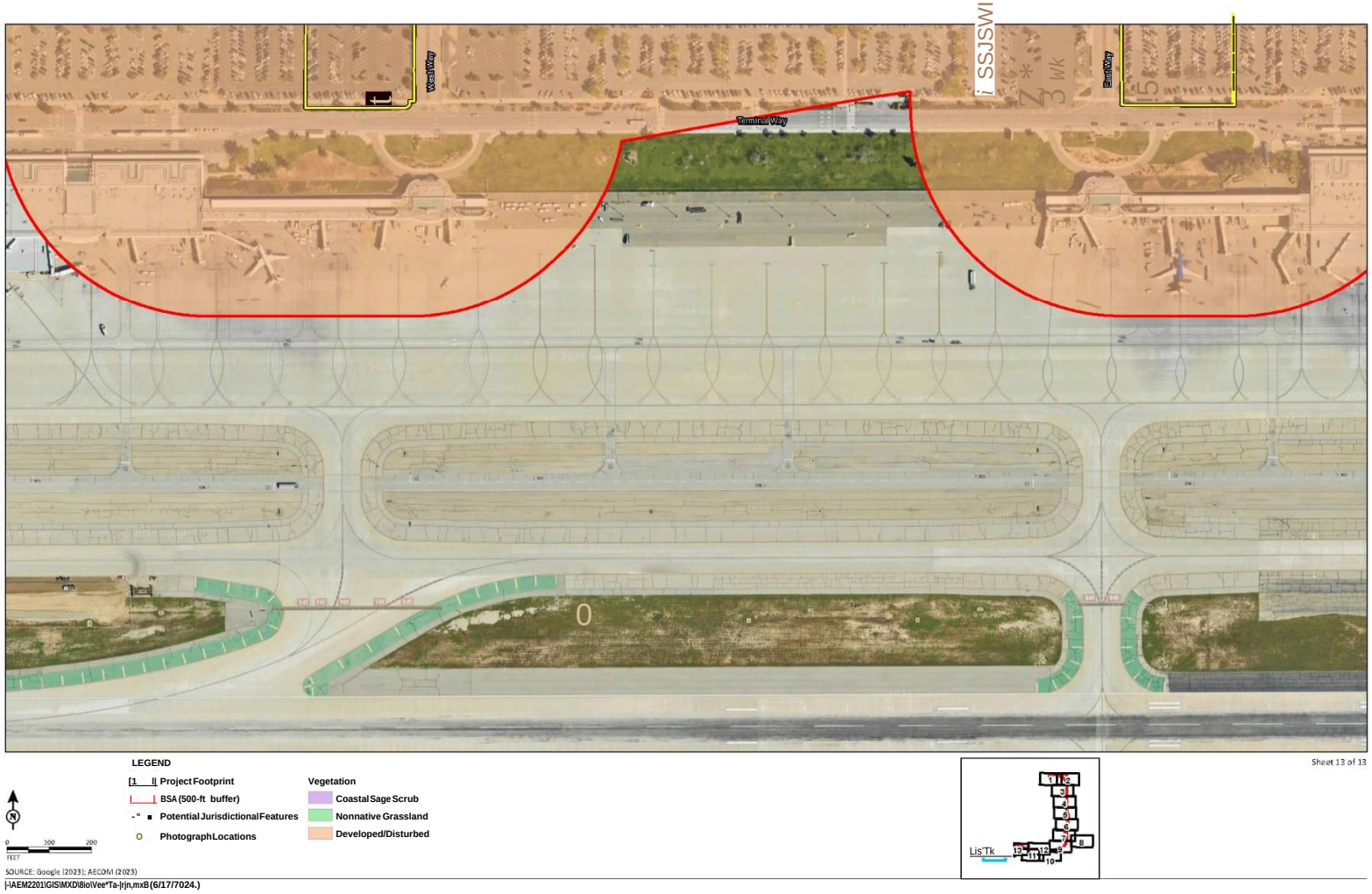


Figure 3.3-14 Vegetation and Potential Jurisdictional Features (Page 13 of 13)



3.3.3.6.1 Habitat Connectivity

Terms such as wildlife corridors, linkages, crossings, and travel routes are used to describe the physical connections that allow wildlife to move among and between suitable habitats. In some cases, the connection may be provided through undisturbed landscapes or environments fragmented by urban development. To clarify the meaning of these terms and to facilitate the discussion of wildlife movement in this analysis, these terms are defined as follows.

Wildlife corridors link areas of suitable habitat that are otherwise separated by areas of unsuitable habitat, such as rugged terrain, changes in vegetation, or human disturbance. Wildlife corridors are essential to the regional ecology of a species because they provide avenues of genetic exchange and allow animals to access alternative territories as dictated by fluctuating population densities. Fragmentation of open space areas by urbanization creates “islands” of wildlife habitat that are more or less isolated from each other. In the absence of habitat linkages that allow movement between habitat islands, studies have concluded that some wildlife species, especially the larger and more mobile mammals, would not persist over time because fragmentation limits infusion of new individuals and erodes genetic diversity. Corridors mitigate the effects of this fragmentation by (1) allowing animals to move between remaining habitats, thereby permitting depleted populations to be replenished and promoting genetic exchange; (2) providing escape routes from fire, predators, and human disturbances, thus reducing the risk of catastrophic events (such as fire or disease) that could lead to local extinction; and (3) serving as travel routes for individual animals as they move within their home ranges in search of food, water, mates, and shelter. Wildlife corridors are typically relatively small, linear habitats that connect two or more habitats that would otherwise be fragmented or isolated from one another.

Table 3.3-2 Listed, Proposed, and Special-Status Species Potentially Occurring or Known to Occur in the BSA

Species Scientific Name	Species Type	Species Common Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
Abronia villosa var. aurita	Plants	Chaparral sand-verbena	US: – CA: – CNPS: 1B.1	Annual or perennial herb. Sandy areas (generally flats and benches along washes) in chaparral and CSS, and improbably in desert dunes or other sandy areas, below 1,615 m (5,300 ft) in elevation.	HP	Not Expected. Although CSS is located in the BSA, the CSS is on the slopes of Milliken Avenue and adjacent to commercial development, and the habitat is not located in a sandy, flat, or wash area and is subject to regular disturbance. No chaparral or desert dunes habitat is present in the BSA.
Ambrosia monogyra	Plants	Singlewhorl burrobush	US: – CA: – CNPS: 2B.2	Perennial shrub. Sandy soils in washes and ravines in chaparral and desert scrub below 500 m (1,640 ft) in elevation. In California, known from Riverside, San Bernardino, and San Diego counties. Also occurs in Arizona, New Mexico, Texas, and Mexico.	HA	Absent. No chaparral habitat is present in the BSA.

Species Scientific Name	Species Type	Species Common Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
Ambrosia pumila	Plants	San Diego ambrosia	US: FE CA: – CNPS: 1B.1	Perennial herb. Occurs in open habitats in coarse substrates near drainages, and in upland areas on clay slopes or on the dry margins of vernal pools. This species occurs in a variety of associations dominated by sparse grasslands or marginal wetland habitats such as river terraces, pools, and alkali playas. Known populations in Riverside County are associated with silty alkaline soils in open, gently sloped grasslands. Known from western San Diego County, southwestern Riverside County (at Skunk Hollow and north of Lake Elsinore along Nichols Road), and Baja California from 21 to 488 m (70 to 1,600 ft) in elevation.	HA	Absent. No clay soils or vernal pools occur in the BSA.
Aphylion validum ssp. *validum*	Plants	Rock Creek broomrape	US: – CA: – CNPS: 1B	Parasitic on various chaparral shrubs. Found in granitic soils of chaparral, pinyon-juniper woodland at 1,250 to 2,000 meters (4,100 to 6,600 ft) elevation. Known only from Inyo, Los Angeles, San Bernardino and Ventura Counties, California.	HA	Absent. No chaparral or pinyon-juniper woodland occur in the BSA.
Arctostaphylos glandulosa ssp. *gabrielensis*	Plants	San Gabriel manzanita	US: – CA: – CNPS: 1B.1	Evergreen shrub. Rocky areas in chaparral from 595 to 1,500 m (1,950 to 5,000 ft) in elevation. Known only from Los Angeles, Santa Barbara, and San Bernardino counties, California.	HA	Absent. No chaparral habitat is present in the BSA.

Species Scientific Name	Species Type	Species Common Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
Arenaria paludicola	Plants	Marsh sandwort	US: FE CA: CE CNPS: 1B.1	Perennial herb. Boggy areas in freshwater marshes and swamps below 170 m (560 ft) in elevation (formerly higher). Known to presently occur only in San Luis Obispo County (at Oso Flaco Lake and Morro Bay). Believed extirpated from Los Angeles, San Francisco, Santa Cruz, Riverside, and San Bernardino counties and from the State of Washington. The last known record of this species in Riverside, San Bernardino, or Los Angeles counties is from 1900.	HA	Absent. No freshwater marshes or swamps are present in the BSA.
Astragalus brauntonii	Plants	Braunton's milk-vetch	US: FE CA: – CNPS: 1B.1	Perennial herb. Generally shallow calcium carbonate soils derived from marine substrates, although it is occasionally found downstream of known occurrences on noncarbonate soils, where survivorship of plants may be reduced. Usually on sandstone with carbonate layers following fire but may follow other disturbance and occur on stiff, gravelly clay soils over granite. Typically associated with the fire-dependent chaparral habitat on limestone and on down-wash sites below 640 m (2,100 ft) in elevation. Known only from Los Angeles, Orange, Riverside, and Ventura counties.	HA	Absent. No chaparral or limestone habitat is present in the BSA.

Species Scientific Name	Species Type	Species Common Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
Atriplex coulteri	Plants	Coulter's saltbush	US: – CA: – CNPS: 1B.2	Perennial herb. Alkaline or clay soils in ocean bluffs and ridge tops and alkaline low places in coastal bluff scrub, coastal dunes, CSS, and valley and foothill grasslands below 460 m (1,500 ft) in elevation. In California, known only from Los Angeles, Orange, Santa Barbara, San Bernardino, San Luis Obispo, Ventura, and San Diego counties. Also occurs in Mexico.	HA	Absent. No ocean bluffs, coastal dunes, or alkaline low places like coastal bluff scrub habitats are present in the BSA.
Berberis nevinii	Plants	Nevin's barberry	US: FE CA: CE CNPS: 1B.1	Perennial evergreen shrub. Gravelly wash margins in alluvial scrub or coarse soils and rocky slopes in chaparral at 70 to 825 m (220 to 2,700 ft) in elevation. Known occurrences at higher elevations are planted (not natural). Known only from Los Angeles, San Bernardino, Riverside, and San Diego counties, California.	HA	Absent. No washes, alluvial scrubs, rocky slopes or chaparral habitats are present in the BSA
Calochortus clavatus var. *gracilis*	Plants	Slender mariposa lily	US: – CA: – CNPS: 1B.2	Perennial bulbiferous herb. Chaparral, CSS, and grassland in the Transverse Ranges at 320 to 1,000 m (1,050 to 3,300 ft) in elevation. Known only from the western transverse ranges and San Gabriel Mountains of Los Angeles and Ventura counties, California.	HP	Not Expected. Marginal CSS habitat exists in the BSA on the slopes of Milliken Avenue and adjacent to commercial development; however, the disturbed nature limits the probability of occurrence. This species was not observed during the field surveys.

Species Scientific Name	Species Type	Species Common Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
Calochortus weedii var. *intermedius*	Plants	Intermediate mariposa lily	US: – CA: – CNPS: 1B.2	Perennial bulbiferous herb. Occurs in chaparral, coastal scrub, and valley and foothill grasslands. Often in dry, rocky soils from 120 to 855 m (395 to 2,805 ft) in elevation. In the western Riverside County area, this species is known from the hills and valleys west of Lake Skinner and Vail Lake (*The Vascular Plants of Western Riverside County, California,* F.M. Roberts et al., 2004). Appears to intergrade with *Calochortus plummerae,* which is mostly east and north of the Santa Ana Mountains.	HP	Not Expected. Marginal CSS habitat exists in the BSA on the slopes of Milliken Avenue and adjacent to commercial development; however, the disturbed nature limits the probability of occurrence. This species was not observed during the field surveys.
Calystegia felix	Plants	Lucky morning-glory	US: – CA: – CNPS: 1B.1	Annual rhizomatous herb. Wetland and marshy areas, sometimes alkaline, sometimes artificially watered, from 30 to 215 m (100 to 700 ft) in elevation. All of the known extant occurrences are associated with well-watered landscaping on recently completed industrial, commercial, and residential developments in the city of Chino within a historical area of artesian springs. Older collections are from areas that are now heavily urbanized (including one from South Los Angeles and another from Pico Rivera in Los Angeles County). Known to occur only in western San Bernardino County. Presumed extirpated from Riverside and Los Angeles counties.	HA	Absent. No wetlands or marshy areas occur in the BSA.

Species Scientific Name	Species Type	Species Common Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
Calystegia sepium ssp. *binghamiae*	Plants	Santa Barbara morning-glory	US: – CA: – CNPS: 1A	Annual rhizomatous herb. Coastal marshes below 220 m (720 ft) in elevation. In California, known only from San Bernardino and Orange counties. Believed extirpated from Los Angeles and Santa Barbara counties. Presumed extinct from 1999 until rediscovered near entrance to Chaffey College in Chino in 2011.	HA	Absent. No coastal marshes occur in the BSA.
Camissoniopsis lewisii	Plants	Lewis' evening-primrose	US: – CA: – CNPS: 3	Annual herb. Sandy or clay areas in CSS, grassland, and woodland below 300 m (1,000 ft) in elevation. In California, known only from Los Angeles and San Diego counties. Believed extirpated from Orange County. Also occurs in Mexico.	HP	Not Expected. No clay soils occur in the BSA.
Centromadia pungens ssp. *laevis*	Plants	Smooth tarplant	US: – CA: – CNPS: 1B.1	Annual herb. Occurs in alkaline areas in chenopod scrub, meadows, playas, riparian woodland, valley, and foothill grassland below 488 m (1,600 ft) in elevation.	HA	Absent. No vernal pools, playas, freshwater marshes, or similar habitats occur in the BSA.
Chloropyron maritimum ssp. *maritimum*	Plants	Salt marsh bird's-beak	US: FE CA: CE CNPS: 1B.1	Annual herb. Coastal dunes and salt marshes. In California, known from Los Angeles, Orange, Santa Barbara, San Bernardino, San Diego, San Luis Obispo, and Ventura counties.	HA	Absent. No coastal dunes or salt marshes occur in the BSA.

Species Scientific Name	Species Type	Species Common Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
Chorizanthe parryi var. *parryi*	Plants	Parry's spineflower	US: – CA: – CNPS: 1B.1	Annual herb. Sandy or rocky soils in chaparral, CSS, oak woodlands, and grassland at 30 to 1,707 m (100 to 5,600 ft) in elevation.	HP	Not Expected. Marginal CSS habitat is present in the BSA on the slopes of Milliken Avenue and adjacent to commercial development; however, the habitat is limited and disturbed, reducing the probability of occurrence. This species was not observed during the field surveys.
Chorizanthe xanti var. *leucotheca*	Plants	White-bracted spineflower	US: – CA: – CNPS: 1B.2	Annual herb. Coastal scrub, Mojavean desert scrub and pinyon/juniper woodlands. Riverside, San Bernadino and San Diego counties.	HA	Absent. No clay soils occur in the BSA.
Cladium californicum	Plants	California saw-grass	US: – CA: – CNPS: 2B.2	Perennial rhizomatous herb. Marshes and seeps below 600 m (2,000 ft) in elevation. In California, known from Inyo, Riverside, Santa Barbara, San Bernardino and San Luis Obispo counties. Believed to be extirpated from Los Angeles and perhaps San Bernardino counties. Also occurs in Arizona, New Mexico, Nevada, Texas Utah, and Mexico.	HA	Absent. No marshes or seeps occur in the BSA.
Claytonia peirsonii ssp. *peirsonii*	Plants	Peirson's spring beauty	US: – CA: – CNPS: 1B.2	Perennial herb. This subspecies known only from San Bernardino County in subalpine and upper montane coniferous forest of the San Gabriel Mountains; gravelly soils or scree; elevations of 2,135 to 2,750 m (7,000 to 9,000 ft). Occurs in San Bernardino County.	HA	Absent. No suitable habitat for this species is present in the BSA, and the BSA is outside the elevational range of this species.
Cryptantha incana	Plants	Tulare cryptantha	US: – CA: – CNPS: 1B.3	Annual herb. Occurs in lower montane coniferous forest between 1,430 and 2,150 m (4,690 and 7,055 ft) in elevation.	HA	Absent. No suitable habitat for this species is present in the BSA, and the BSA is outside the elevational range of this species.

Species Scientific Name	Species Type	Species Common Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
Dodecahema leptoceras	Plants	Slender-horned spineflower	US: FE CA: SE CNPS: 1B.1	Annual herb. Occurs in sandy, cobbly riverbed alluvium in alluvial fan sage scrub (usually late seral stage), on floodplain terraces and benches that receive infrequent overbank deposits from generally large washes or rivers. Additionally, it is most often found in shallow, silty depressions dominated by leather spineflower (*Lastarriaea coriacea*) and other native annual species and is often associated with cryptogamic soil crusts composed of bryophytes, algae, and/or lichens. Occurs at 183 to 762 m (600 to 2,500 ft) in elevation.	HA	Absent. No alluvial fan sage scrub on floodplain terraces and benches occurs in the BSA.
Dudleya multicaulis	Plants	Many-stemmed dudleya	US: – CA: – CNPS: 1B.2	Perennial herb. Occurs in chaparral, CSS, and valley and foothill grasslands, usually in heavy, often clay soils. From 14 to 722 m (45 to 2,370 ft) in elevation.	HP	Not Expected. No clay soils occur in the BSA.
Eriastrum densifolium ssp. *sanctorum*	Plants	Santa Ana River woollystar	US: FE CA: SE CNPS: 1B.1	Perennial herb. Riversidean alluvial fan sage scrub and chaparral in sandy or gravelly soils of floodplains and terraced fluvial deposits of the Santa Ana River and larger tributaries (Lytle and Cajon creeks, and lower portions of City and Mill creeks) at 90 to 625 m (300 to 2,100 ft) in elevation in San Bernardino and Riverside counties. Presumed extirpated from Orange County.	HA	Absent. No alluvial fan sage scrub and chaparral occur in the BSA.

Species Scientific Name	Species Type	Species Common Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
Eriogonum microthecum var. *johnstonii*	Plants	Johnston's buckwheat	US: – CA: – CNPS: 1B.3	Perennial deciduous shrub. Upper montane and subalpine coniferous forest of the San Gabriel Mountains; 1,800 to 2,900 m (5,900 to 9,500 ft) in elevation.	HA	Absent. No suitable habitat for this species is present in the BSA, and the BSA is outside the elevational range of this species.
Horkelia cuneata var. *puberula*	Plants	Mesa horkelia	US: – CA: – CNPS: 1B.1	Perennial herb. Sandy or gravelly soils in chaparral, or rarely in cismontane woodland or CSS at 70 to 825 m (200 to 2,700 ft) in elevation. Known only from San Luis Obispo, Santa Barbara, Ventura, Los Angeles, Orange, and San Bernardino counties, California. Believed extirpated from Riverside and San Diego counties.	HP	Not Expected. Marginal CSS habitat exists in the BSA on the slopes of Milliken Avenue and adjacent to commercial development; however, the disturbed nature limits the probability of occurrence. This species was not observed during the field surveys.
Lasthenia glabrata ssp. *coulteri*	Plants	Coulter's goldfields	US: – CA: – CNPS: 1B.1	Annual herb. Vernal pools and alkaline soils in marshes, playas, and similar habitats below 1,219 m (4,000 ft) in elevation.	HA	Absent. No vernal pools or similar habitats occur in the BSA.
Lilium parryi	Plants	Lemon lily	US: – CA: – CNPS: 1B.2	Perennial herb. Bulbiferous perennial herb of wet areas in meadows and riparian and montane coniferous forests at 1,219 to 2,804 m (4,000 to 9,200 ft) in elevation.	HA	Absent. No suitable habitat is present, and the BSA is outside the elevational range of this species.
Linanthus concinnus	Plants	San Gabriel linanthus	US: – CA: – CNPS: 1B.2	Annual herb. Dry rocky slopes in lower and upper montane coniferous forest at 1,520 to 2,800 m (5,000 to 9,200 ft) in elevation; known only from Los Angeles and San Bernardino counties.	HA	Absent. No lower and upper montane coniferous forest is present in the BSA, and the BSA is outside the elevation range of this species.

Species Scientific Name	Species Type	Species Common Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
Lycium parishii	Plants	Parish's desert-thorn	US: – CA: – CNPS: 2B.3	Perennial shrub. Coastal scrub and Sonoran desert scrub at 135 to 1,000 m (440 to 3,300 ft) in elevation. In California, known from Imperial and San Diego counties. Report from Riverside County is based on a misidentification. Known only historically from San Bernardino County (benches and/or foothills north of San Bernardino).	HA	Absent. Considered absent from the BSA. This species is outside the known range of this species.
Malacothamnus parishii	Plants	Parish's bush-mallow	US: – CA: – CNPS: 1A	Perennial deciduous shrub. Known only from one occurrence in 1895, in chaparral and CSS at 490 m (1,600 ft) in elevation in the vicinity of San Bernardino. Presumed extinct.	HP	Not Expected. Marginal CSS habitat is present in the BSA on the slopes of Milliken Avenue and adjacent to commercial development; however, the habitat is limited and disturbed, reducing the probability of occurrence. This species was not observed during the field surveys.
Monardella australis ssp. *jokerstii*	Plants	Jokerst's monardella	US: – CA: – CNPS: 1B.1	Perennial rhizomatous herb. Steep scree or talus slopes between breccia and secondary alluvial benches along drainages and washes, in lower montane coniferous forest and chaparral at 1,350 to 1,750 m (4,430 to 5,740 ft). Known only from the San Gabriel Mountains of San Bernardino County, California.	HA	Absent. No alluvial benches occur in the BSA.
Monardella brewerii ssp. *glandulifera*	Plants	Monardella brewerii ssp. glandulifera	US: – CA: – CNPS: 1B.2	Annual herb. Dry, grassy openings, ridgetops, in lower montane coniferous forest and chaparral 500--2000 m (1,640 to 6560 ft). Known only from the San Gabriel Mountains of San Bernardino County, California.	HA	Absent. No grassy openings in lower montane coniferous forest and chaparral slopes occur in the BSA.

Species Scientific Name	Species Type	Species Common Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
Monardella macrantha ssp. *hallii*	Plants	Hall's monardella	US: – CA: – CNPS: 1B.3	Perennial rhizomatous herb. Dry slopes and ridges in openings in chaparral, woodland, and forest at 695 to 2,195 m (2,280 to 7,200 ft) in elevation. Known only from Los Angeles, San Diego, Orange, Riverside, and San Bernardino counties, California. In the western Riverside County area, known only from higher elevations in the Santa Ana and Agua Tibia Mountains (*The Vascular Plants of Western Riverside County, California,* F.M. Roberts et al., 2004).	HA	Absent. No slopes, ridges, or chaparral occur in the BSA.
Monardella pringlei	Plants	Pringle's monardella	US: – CA: – CNPS: 1A	Annual herb. Sandy hills in CSS at 300 to 400 m (980 to 1,300 ft) in elevation. Known only from two occurrences west of Colton. Last seen in 1941. Habitat lost to urbanization. Presumed extinct.	HP	Not Expected. Marginal CSS habitat is present in the BSA on the slopes of Milliken Avenue and adjacent to commercial development. However, the habitat is limited and disturbed, reducing the probability of occurrence. This species is considered extirpated in San Bernardino County. This species was not observed during the field surveys.
Muhlenbergia utilis	Plants	Aparejo grass	US: – CA: – CNPS: 2B.2	Perennial rhizomatous herb. Wet sites along streams and ponds within meadows, CSS, chaparral, and cismontain woodland below 2,325 m (7,627 ft) in elevation. In California, known from Inyo, Kern, Monterey, San Bernardino, San Luis Obispo, Santa Barbara, and Ventura counties. Also occurs in Arizona, Nevada, New Mexico, and Mexico.	HP	Not Expected. Marginal CSS habitat is present in the BSA on the slopes of Milliken Avenue and adjacent to commercial development. However, the habitat is limited and disturbed, reducing the probability of occurrence. This species was not observed during the field surveys.

Species Scientific Name	Species Type	Species Common Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
Navarretia prostrata	Plants	Prostrate vernal pool navarretia	US: – CA: – CNPS: 1B.1	Perennial rhizomatous herb. Marshes from 6 to 335 m (20 to 1,100 ft) in elevation.	HA	Absent. No marshes occur in the BSA.
Opuntia basilaris var. *brachyclada*	Plants	Short-joint beavertail	US: – CA: – CNPS: 1B.2	Perennial stem. Sandy soil or coarse, granitic loam in chaparral, Joshua tree woodland, Mojavean desert scrub, and pinyon-juniper woodland at 425 to 1,800 m (1,400 to 5,900 ft) n elevation in the Providence Mountains and desert slopes of the San Gabriel and San Bernardino Mountains. Known only from Los Angeles and San Bernardino counties, California.	HA	Absent. No clay soils, vernal pools, or alkaline soil occur in the BSA.
Oreonana vestita	Plants	Woolly mountain-parsley	US: – CA: – CNPS: 1B.3	Perennial herb. Scree, talus, or gravel on high ridges in subalpine coniferous forest and upper montane coniferous forest at 1,615 to 3,500 m (5,300 to 11,500 ft) in elevation. Known only from Kern, Los Angeles, and San Bernardino counties, California.	HA	Absent. No suitable habitat is present, and the BSA is outside the elevational range of this species.
Orobanche valida ssp. *valida*	Plants	Rock Creek broomrape	US: – CA: – CNPS: 1B.2	Perennial herb. Parasitic on various chaparral shrubs. Found in granitic soils of chaparral, pinyon-juniper woodland at 1,250 to 2,000 m (4,100 to 6,600 ft) in elevation. Known only from Inyo, Los Angeles, San Bernardino and Ventura counties, California.	HA	Absent. No granitic soils or pinyon juniper woodland occurs in the BSA. The BSA is outside the elevational range of this species.

Species Scientific Name	Species Type	Species Common Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
Phacelia stellaris	Plants	Brand's star phacelia	US: – CA: – CNPS: 1B.1	Annual herb. Dunes and sandy openings in CSS communities at 5 to 400 m (20 to 1,300 ft) in elevation. In western Riverside County, this species appears to be restricted to sandy washes and benches in alluvial floodplains. Known only from Los Angeles (believed extirpated), Riverside, and San Diego counties, California. The most recent record of this species from Los Angeles County was in 1943.	HP	Not Expected. Marginal CSS is present in the BSA on the slopes of Milliken Avenue and adjacent to commercial development, but the CSS is not located within a dune or sandy openings. Furthermore, the disturbed nature limits the probability of occurrence. This species was not observed during the field surveys.
Pseudognapha-lium leucocephalum	Plants	White rabbit-tobacco	US: – CA: – CNPS: 2B.2	Perennial herb. Sand and gravel at the edges of washes or mouths of steep canyons at 0 to 2,134 m (0 to 7,000 ft) in elevation.	HA	Absent. No sandy gravel or washes occur in the BSA.
Sagittaria sanfordii	Plants	Sanford's arrowhead	US: – CA: – CNPS: 2B.2	Perennial rhizomatous herb. Marshes and swamps below 650 m (2,100 ft) in elevation. Occurs in standing or slow-moving fresh water (ponds, marshes, and ditches). Known only from Butte, Del Norte, El Dorado, Fresno, Merced, Mariposa, Placer, Sacramento, Shasta, San Joaquin, and Tehama counties. Believed extirpated from Southern California.	HA	Absent. No marshes or swamps occur in the BSA.

Species Scientific Name	Species Type	Species Common Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
Senecio aphanactis	Plants	Chaparral ragwort	US: – CA: – CNPS: 2B.2	Annual herb. Openings (especially alkaline flats) in cismontane woodland, CSS, and chaparral at 15 to 800 m (50 to 2,600 ft) in elevation. Known in California from Alameda, Contra Costa, Fresno, Los Angeles, Merced, Monterey, Orange, Riverside, Santa Barbara, Santa Clara, San Diego, San Luis Obispo, Solano, and Ventura counties. Also occurs in Baja California.	HP	Not Expected. Marginal CSS habitat is present in the BSA on the slopes of Milliken Avenue and adjacent to commercial development. However, the habitat is limited and disturbed, reducing the probability of occurrence. This species was not observed during the field surveys.
Sidalceane omexicana	Plants	Salt spring checkerbloom	US: – CA: – CNPS: 2B.2	Perennial herb. Occurs in chaparral, coastal scrub, lower montane coniferous forest, Mojavean desert scrub, and playas at 15 to 1,530 meters (50 and 5,020 ft) in elevation. Kern, Orange, Riverside, San Bernardino, San Diego, Ventura, and Kern counties.	HP	Not Expected. Marginal CSS habitat is present in the BSA on the slopes of Milliken Avenue and adjacent to commercial development. However, the habitat is limited and disturbed, reducing the probability of occurrence. This species was not observed during the field surveys.
Sphenopholis obtusata	Plants	Prairie wedge grass	US: – CA: – CNPS: 2B.2	Perennial herb. Wet meadows, stream banks, and ponds at 300 to 2,000 m (1,000 to 6,600 ft) in elevation. Widely distributed. In Southern California, known only from San Bernardino, Riverside (Santa Ana River), and perhaps San Diego counties.	HA	Absent. No meadows, streams, banks, or ponds occur in the BSA.
Symphyotrichum defoliatum	Plants	San Bernardino aster	US: – CA: – CNPS: 1B.2	Perennial herb. Vernally wet sites (such as ditches, streams, and springs) in many plant communities below 2,042 m (6,700 ft) in elevation.	HA	Absent. No vernally wet sites occur in the BSA.

Species Scientific Name	Species Type	Species Common Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
Symphyotrichum greatae	Plants	Greata's aster	US: – CA: – CNPS: 1B.3	Perennial rhizomatous herb. Mesic places in canyons in chaparral and woodland habitats at 300 to 2,010 m (1,000 to 6,600 ft) in elevation. Known only from Los Angeles, San Bernardino, and Ventura counties.	HA	Absent. No canyons, chaparral or woodlands occur in the BSA.
Thysanocarpus rigidus	Plants	Rigid fringepod	US: – CA: – CNPS: 1B.2	Annual herb. Dry rocky slopes, in oak, pine, or juniper woodland at 600 to 2,200 m (2,000 to 7,200 ft) in elevation. In California, known from Los Angeles, Riverside, San Bernardino, and San Diego counties. Also occurs in Mexico.	HA	Absent. No suitable habitat is present, and the BSA is outside the elevational range of this species.
Viola pinetorum ssp. *grisea*	Plants	Grey-leaved violet	US: – CA: – CNPS: 1B.2	Perennial herb. Dry mountain peaks and slopes in meadows and upper montane and subalpine coniferous forest at 1,500 to 3,400 m (5,000 to 11,000 ft) in elevation. Known only from Fresno, Inyo, Kern, Los Angeles, Madera, San Bernardino, Tulare, and Ventura counties, California.	HA	Absent. No suitable habitat is present, and the BSA is outside the elevational range of this species.
Bombus crotchii	Invertebrates	Crotch's bumble bee	US: – CA: SA	Inhabits open grassland and scrub habitats primarily in California. Food plant genera include snapdragons (*Antirrhinum* spp.), *Phacelia* spp., *Clarkia* ssp., *Dendromecon* ssp., *Eschscholzia* ssp., and buckwheat (*Eriogonum* ssp.).	HP	Low Probability of Occurrence. The species is known to occur in the vicinity of the BSA, but it was not observed in the BSA during the 2021 focused survey for this species.

Species Scientific Name	Species Type	Species Common Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
Bombus pensylvanicus	Invertebrates	American bumble bee	US: – CA: SA	Inhabits open farmland and fields throughout the U.S. Also occurs in Canada and Mexico. Primarily nests at the ground surface in tall grass, but occasionally underground. Suitable bumble bee habitat requires the continuous availability of flowers on which to forage throughout the duration of the colony (spring through fall), colony nest sites, and overwintering sites for the queens.	HP	Low Probability of Occurrence. Open fields occur in the vicinity of the BSA, but it was not observed in the BSA during the 2021 focused survey for this species.
Danaus plexippus plexippus pop. 1	Invertebrates	*Monarch butterfly (California overwintering population)*	US: FC CA: SA	Winter roosts are located in wind-protected tree groves (Eucalyptus, Monterey Pine, Cypress) with nectar and water sources nearby.	HA	Absent: No tree groves suitable for an overwintering population.
Euphydryas editha quino	Invertebrates	Quino checkerspot	US: FE CA: –	Historically occupied open grassy sites from the vicinity of Los Angeles and Riverside south to northern Baja California, always in the vicinity of the larval food plants, California plantain (*Plantago erecta*) and purple owl's-clover (*Castilleja exserta*). In California, the species is now known from a few sites in San Diego and western Riverside counties.	HA	Absent. The BSA is outside the known range of this species.

Species Scientific Name	Species Type	Species Common Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
Rhaphiomidas terminatus abdominalis	Invertebrates	Delhi Sands flower-loving fly	US: FE CA: –	Open, sandy (Delhi) dune areas commonly supporting buckwheat, croton, telegraph weed, *Camissonia,* and *Oenothera*.	HP	Low Probability of Occurrence. Delhi soils are present in the BSA but are heavily affected by surrounding development and land uses (e.g., weed abatement practices). Marginal CSS and grassland habitats are present in the BSA. However, the habitat is limited and disturbed, reducing the probability of occurrence. No Delhi Sands flower-loving fly was observed during the focused 2021 survey.
Catostomus santaanae	Fish	Santa Ana sucker	US: FE CA: –	The Santa Ana sucker's historical range includes the Los Angeles, San Gabriel, and Santa Ana River drainage systems in Southern California. An introduced population also occurs in the Santa Clara River drainage system in Southern California. Found in shallow, cool, running water.	HA	Absent. No suitable aquatic habitat for this species is present in the BSA.
Gila orcuttii	Fish	Arroyo chub	US: – CA: SSC	Perennial streams or intermittent streams with permanent pools, and slow-water sections of streams with mud or sand substrates. Spawning occurs in pools. Native to Los Angeles, San Gabriel, San Luis Rey, Santa Ana, and Santa Margarita River systems; introduced in Santa Ynez, Santa Maria, Cuyama, and Mojave River systems and smaller coastal streams.	HA	Absent. No suitable aquatic habitat for this species is present in the BSA.
Oncorhynchus mykiss irideus	Fish	Southern California steelhead DPS	US: FE CA: SA	Federal listing refers to runs in coastal basins from the Pajaro River south to, but not including, the Santa Maria River.	HA	Absent. No suitable aquatic habitat for this species is present in the BSA.

Species Scientific Name	Species Type	Species Common Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
Rhinichthys osculus ssp. 8	Fish	Santa Ana speckled dace	US: – CA: SSC	Found in the headwaters of the Santa Ana and San Gabriel River drainages. Found in riffles in small streams and shore areas with abundant gravel and rock.	HA	Absent. No suitable aquatic habitat for this species is present in the BSA.
Anaxyrus californicus	Amphibians	Arroyo toad	US: FE CA: SSC	Washes and arroyos with open water, sand, or gravel beds for breeding, pools with as well as sparse overstory vegetation. Coastal and a few desert streams from Santa Barbara County to Baja California.	HA	Absent. The BSA does not contain adequate water for breeding pools or suitable aquatic habitat.
Rana boylii	Amphibians	Foothill yellow-legged frog	US: – CA: SE	Partly shaded, shallow streams and riffles with a rocky (at least some cobble-sized) substrate for egg-laying, and with water for at least 15 weeks until metamorphosis. Historically occurred in much of Northern and Central California, south along the western foothills of the Sierra Nevada to the edge of the Tehachapi Mountains, and south along the coast ranges to the San Gabriel Mountains (south to the San Gabriel River) in Los Angeles County.	HA	Absent. No suitable habitat for this species is present in the BSA.
Rana muscosa	Amphibians	Southern mountain yellow-legged frog	US: FE CA: SE	Ponds, lakes, and streams at moderate to high elevations; appears to prefer bodies of water with open margins and a gently sloping bottom. Transverse Ranges in Southern California from 370 to 2,290 m (1,200 to 7,500 ft) in elevation. Restricted to streams in ponderosa pine, montane hardwood-conifer, and montane riparian habitats.	HA	Absent. No ponds, lakes, or streams occur in the BSA.

Species Scientific Name	Species Type	Species Common Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
Spea hammondii	Amphibians	Western spadefoot	US: PT CA: SSC	Grasslands and occasionally hardwood woodlands; largely terrestrial but requires rain pools or other ponded water persisting at least 3 weeks for breeding; burrows in loose soils during the dry season. Occurs in the Central Valley and adjacent foothills, the nondesert areas of Southern California, and Baja California.	HA	Absent. The BSA does not contain adequate water for breeding pools or woodlands.
Taricha torosa	Amphibians	Coast range newt	US: – CA: SSC	Breeds in ponds, reservoirs, and slow-moving streams with long-lasting (at least through July), clean water; uses nearby upland areas including grassland, chaparral, and woodland; coastal drainages from Mendocino County south to San Diego County, with populations from San Luis Obispo County south designated as sensitive.	HA	Absent. No ponds, reservoirs, or slow-moving streams are present in the BSA.
Anniella stebbinsi	Reptiles	Southern California legless lizard	US: – CA: SSC	Inhabits coastal dunes, sandy washes, and alluvial fans where there is moist loose soil with sufficient plant cover and/or leaf litter.	HA	Absent. No coastal dunes, sandy washes or alluvial fans occur within the BSA.
Arizona elegans occidentalis	Reptiles	California glossy snake	US: – CA: SSC	Found in a wide variety of habitat types, including open desert, grassland, shrublands, chaparrals, and woodlands. Records show that this species occurs in relatively open patches in a surrounding matrix of denser vegetation.	HP	Not Expected. Marginal CSS and grassland habitats are present in the BSA. However, the habitat is limited and disturbed, reducing the probability of occurrence.

Species Scientific Name	Species Type	Species Common Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
Aspidoscelis hyperythra	Reptiles	Orange-throated whiptail	US: – CA: SA	Prefers washes and other sandy areas with patches of brush and rocks, in chaparral, CSS, juniper woodland, and oak woodland from sea level to 914 m (3,000 ft) in elevation. Perennial plants required.	HP	Low Probability of Occurrence. Marginal CSS habitat is present in the BSA on the slopes of Milliken Avenue and adjacent to commercial development; however, the CSS is not within a wash or sandy area. Furthermore, the habitat is limited and disturbed, reducing the probability of occurrence.
Aspidoscelis tigris stejnegeri	Reptiles	Coastal whiptail	US: – CA: SSC	Found in a wide variety of habitats including CSS, sparse grassland, and riparian woodland; coastal and inland valleys and foothills; Ventura County to Baja California.	HP	Low Probability of Occurrence. Marginal CSS and grassland habitats are present in the BSA. However, the habitat is limited and disturbed, reducing the probability of occurrence.
Coleonyx variegatus abbotti	Reptiles	San Diego banded gecko	US: – CA: SSC	Often associated with rocks. Found in CSS and chaparral, most often on granite or rocky outcrops in these habitats, from interior Ventura County south.	HA	Not Expected. Marginal CSS is present in the BSA on the slopes of Milliken Avenue and adjacent to commercial development, but does not contain rocks, granite or rock outcrops.
Crotalus ruber	Reptiles	Red-diamond rattlesnake	US: – CA: SSC	Desert scrub, thornscrub, open chaparral and woodland; occasional in grassland and cultivated areas. Prefers rocky areas and dense vegetation. Morongo Valley in San Bernardino and Riverside counties to the west and south into Mexico.	HP	Low Probability of Occurrence. Marginal CSS and grassland habitats are present in the BSA. However, the habitat is limited and disturbed, reducing the probability of occurrence.

Species Scientific Name	Species Type	Species Common Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
Emys marmorata (Actinemys) marmorata	Reptiles	Western pond turtle	US: – CA: SSC	Inhabits permanent or nearly permanent water. Absent from desert regions, except in the Mojave Desert along the Mojave River and its tributaries. Requires basking sites such as partially submerged logs, rocks, or open mud banks.	HA	Absent. No permanent aquatic habitat is present in the BSA.
Phrynosoma blainvillii	Reptiles	Coast horned lizard	US: – CA: SSC	Primarily in sandy soil in open areas, especially washes and floodplains, in many plant communities. Requires open areas for sunning, bushes for cover, patches of loose soil for burial, and an abundant supply of ants or other insects. Occurs west of the deserts from northern Baja California north to Shasta County below 2,438 m (8,000 ft) in elevation.	HP	Low Probability of Occurrence. Marginal CSS and grassland habitats are present in the BSA. However, the habitat is limited and disturbed, reducing the probability of occurrence.
Thamnophis hammondii	Reptiles	Two-striped garter snake	US: – CA: SSC	Highly aquatic. Only in or near permanent sources of water. Streams with rocky beds supporting willows or other riparian vegetation. From Monterey County to northwest Baja California.	HA	Absent. No permanent aquatic habitat is present in the BSA.
Accipiter cooperii (nesting)	Birds	Cooper's hawk	US: – CA: SA (breeding)	Forages in a wide range of habitats, but primarily in forests and woodlands. These include natural areas as well as human-created habitats, such as plantations and ornamental trees in urban landscapes. Usually nests in tall trees (6 to 12 m [20 to 60 ft]) in extensive forested areas (generally woodlots of 4 to 8 hectares [10 to 20 acres] with canopy closure of greater than 60 percent). Occasionally nests in isolated trees in more open areas.	HP	Low to Moderate Probability of Nesting. Suitable nesting and foraging habitat is present in ornamental landscaping in the BSA.

Species Scientific Name	Species Type	Species Common Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
Agelaius tricolor	Birds	Tricolored blackbird	US: – CA: ST	Open country. Forages in grassland and cropland habitats. Nests in large groups near fresh water, preferably in emergent wetland with tall, dense cattails or tules, but also in thickets of willow, blackberry, wild rose, or tall herbs. Seeks cover for roosting in emergent wetland vegetation, especially cattails and tules, and also in trees and shrubs. Occurs in western Oregon, California, and northwestern Baja California.	HA	Absent. No freshwater or emergent wetland vegetation is present.
Aimophila ruficeps canescens	Birds	Southern California rufous-crowned sparrow	US: – CA: SA	Steep, rocky, CSS and open chaparral habitats, particularly scrubby areas mixed with grasslands. From Santa Barbara County to northwestern Baja California.	HP	Nesting Not Expected. Marginal CSS and grassland habitats are present in the BSA. The CSS on the slopes of Milliken Avenue and adjacent to commercial development is not located in a steep, rocky area or mixed with grasslands. Furthermore, the habitat is limited and disturbed, reducing the probability of occurrence.
Ammodramus savannarum	Birds	Grasshopper sparrow	US: – CA: SSC	Grasslands, agricultural fields, prairie, old fields, and open savanna. Uncommon and very local summer resident on grassy slopes and mesas west of the deserts. Only rarely in migration and in winter. Coastal Southern California.	HP	Low Probability of Foraging and Nesting. Marginal grassland habitat is present in the BSA.

Species Scientific Name	Species Type	Species Common Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
Aquila chrysaetos	Birds	Golden eagle	US: – CA: CFP	Generally open country of the Temperate Zone worldwide. Nests primarily in rugged mountainous country. Uncommon resident in Southern California.	HP	Low Probability of Foraging, Nesting Not Expected. Marginally suitable foraging habitat is present (grasslands) in the BSA. No cliffs or old growth are present in the BSA that provide suitable nesting habitat.
Amphispiza belli	Birds	Bell's sage sparrow	US: – CA: SA	Nests in chaparral dominated by dense stands of chamise. Found in CSS in south of range. Nest located on the ground beneath a shrub or in a shrub 6–18 inches above ground. Territories about 50 yards apart.	HP	Low Probability of Foraging, Nesting Not Expected. Marginal CSS habitat is present in the BSA on the slopes of Milliken Avenue and adjacent to commercial development; however, the CSS present in the BSA lacks dense stands of chamise. This species may forage in the vicinity of BSA, but the BSA lacks suitable nesting characteristics.
Asio otus	Birds	Long eared owl	US: – CA: SSC	Scarce and local in forests and woodlands throughout much of the Northern Hemisphere. Rare resident in coastal Southern California. Nests and roosts in dense willow-riparian woodland and oak woodland, but forages over wider areas. Breeds from valley foothill hardwood up to ponderosa pine habitat.	HA	Absent. No suitable forest or woodland habitat is present in the BSA.

Species Scientific Name	Species Type	Species Common Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
Athene cunicularia (burrow sites)	Birds	Burrowing owl	US: – CA: SSC (breeding)	Open country in much of North and South America. Usually occupies ground squirrel burrows in open, dry grasslands, agricultural and rangelands, railroad rights-of-way, and margins of highways, golf courses, and airports. Often utilizes human-made structures, such as earthen berms, cement culverts, cement, asphalt, rock, or wood debris piles. Avoids thick, tall vegetation; brush; and trees, but may occur in areas where brush or tree cover is less than 30 percent.	HP	High Probability of Occurrence. Suitable foraging habitats and burrows are present in the grassland habitat. Several suitable burrows were observed during the 2021 survey; however, they did not contain signs of occupancy at the time of the survey.
Buteo swainsoni	Birds	Swainson's hawk	US: – CA: ST	Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands with groves or lines of trees. Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.	HP	Nesting Not Expected, Low Probability of Foraging. Marginally suitable foraging habitat (grassland) is present in the BSA. The BSA lacks suitable nesting sites.
Campylorhynchus brunneicapillus sandiegensis	Birds	Coastal cactus wren	US: – CA: SSC	Inhabits CSS, nesting almost exclusively in thickets of cholla (*Opuntia prolifera*) and prickly pear (*Opuntia littoralis* and *Opuntia oricola*), typically below 150 m (500 ft) in elevation. Found in coastal areas of Orange County and San Diego counties, and extreme northwestern Baja California, Mexico.	HP	Nesting and Foraging Not Expected. Marginal CSS habitat is present in the BSA on the slopes of Milliken Avenue and adjacent to commercial development; however, the CSS does not contain thickets of cholla or prickly pear. Furthermore, the CSS is limited and disturbed, reducing the probability of occurrence.

Species Scientific Name	Species Type	Species Common Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
Coccyzus americanus occidentalis	Birds	Western yellow-billed cuckoo	US: FT CA: SE	Breeds and nests in extensive stands of dense cottonwood/willow riparian forest along broad, lower flood bottoms of larger river systems at scattered locales in western North America; winters in South America.	HA	Absent. No dense riparian habitat is present in the BSA. No suitable foraging and nesting habitat is present in the BSA.
Coturnicops noveboracensis	Birds	Yellow rail	US: – CA: SSC	Inhabits freshwater marshes as a very local breeder in the northeastern interior of California and as a winter visitor (early October to mid-April) on the coast and in the Suisun Marsh region.	HA	Absent. No freshwater marshes are present in the BSA. No suitable foraging and nesting habitat is present in the BSA.
Cypseloides niger	Birds	Black swift	US: – CA: SSC	Most frequently seen in the air feeding on tiny airborne insects. Usually seen near cliffs in mountainous regions; occasionally coastal. Nests in crevices in deep canyon cliffs near waterfalls or in sea cliffs. In California, breeds very locally in the Sierra Nevada and Cascade Range; the San Gabriel, San Bernardino, and San Jacinto Mountains; and coastal bluffs and mountains from San Mateo County south to probably San Luis Obispo County.	HA	Absent. No suitable foraging and nesting habitat is present in the BSA.
Elanus leucurus (nesting)	Birds	White-tailed kite	US: – CA: CFP	Typically nests in riparian trees such as oaks, willows, and cottonwoods at low elevations. Forages in open country. Found in South America and in southern areas and along the western coast of North America.	HP	Nesting Not Expected, Low Probability of Foraging. Marginally suitable foraging habitat (grassland) is present in the BSA. Suitable nesting habitat (riparian trees) is not present in the BSA.

Species Scientific Name	Species Type	Species Common Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
Empidonax traillii extimus	Birds	Southwestern willow flycatcher	US: FE CA: SE	Rare and local breeder in extensive riparian areas of dense willows or (rarely) tamarisk, usually with standing water, in the southwestern United States and possibly extreme northwestern Mexico. Winters in Central and South America. Below 1,829 m (6,000 ft) in elevation.	HA	Absent. No riparian habitat is present in the BSA. No suitable foraging and nesting habitat is present in the BSA.
Icteria virens (nesting)	Birds	Yellow-breasted chat	US: – CA: SSC (breeding)	Riparian thickets of willow, brushy tangles near watercourses. Nests in riparian woodland throughout much of western North America. Winters in Central America.	HA	Absent. No riparian habitat is present in the BSA. No suitable foraging and nesting habitat is present in the BSA.
Laterallus jamaicensis coturniculus	Birds	California black rail	US: – CA: ST, CFP	Requires shallow water in salt marshes, freshwater marshes, wet meadows, or flooded grassy vegetation. Prefers areas of moist soil vegetated by fine-stemmed emergent plants, rushes, grasses, or sedges, with scattered small pools. Known from coastal California, northwestern Baja California, the lower Imperial Valley, and the lower Colorado River of Arizona and California. Now extirpated from virtually all of coastal Southern California.	HA	Absent. No salt marshes, freshwater marshes, wet meadows, or flooded grassy vegetation habitat are present in the BSA.
Polioptila californica	Birds	Coastal California gnatcatcher	US: FT CA: SSC	Inhabits CSS in low-lying foothills and valleys up to about 500 m (1,640 ft) in elevation in cismontane southwestern California and Baja California.	HP	Nesting and Foraging Not Expected. Marginal CSS habitat is present in the BSA on the slopes of Milliken Avenue and adjacent to commercial development; however, the CSS is limited in size and does not contain dense CSS cover that is required for this species.

Species Scientific Name	Species Type	Species Common Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
Setophagia petechia (nesting)	Birds	Yellow warbler	US: – CA: SSC (breeding)	Found in riparian woodland while nesting in the western United States and northwestern Baja California; more widespread in brushy areas and woodlands during migration.	HA	Absent. No riparian woodland habitat is present in the BSA. No suitable foraging and nesting habitat is present in the BSA.
Spinus lawrencei	Birds	Lawrence's goldfinch	US: – CA: SA	Usually inhabits oak woodlands, but also uses chaparral; riparian woodlands; coastal scrub; forests; pinyon-juniper woodlands; plantings of cypress, cedars, or junipers; and tall weedy and adjacent rural residential areas. A water source such as a stream, small lake, or farm pond within 0.5 kilometer (0.3 mile) is probably required. Nests throughout much of the nondesert portion of California and Baja California.	HP	Nesting Not Expected. Marginal CSS habitat is present in the BSA on the slopes of Milliken Avenue and adjacent to commercial development; however, the CSS is limited in size and disturbed, limiting probability of occurrence. May use the BSA during foraging activities.
Vireo bellii pusillus	Birds	Least Bell's vireo	US: FE CA: SE	Found in riparian forests and willow thickets. The most critical structural component of least Bell's vireo habitat in California is a dense shrub layer 0.6 to 3 m (2 to 10 ft) aboveground.	HA	Absent. No riparian forest or willow thickets are present in the BSA. No suitable foraging and nesting habitat is present in the BSA.
Antrozous pallidus	Mammals	Pallid bat	US: – CA: SSC	Most common in open, dry habitats with rocky areas for roosting. Day roosts in caves, crevices, rocky outcrops, tree hollows or crevices, mines, and occasionally buildings, culverts, and bridges. Night roosts may be more open sites, such as porches and open buildings. Grasslands, shrublands, woodlands, and forest in western North America.	HP	Low to Moderate Probability of Roosting. Suitable roosting habitat (palm trees) is present in the BSA.

Species Scientific Name	Species Type	Species Common Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
Chaetodipus fallax	Mammals	Northwestern San Diego pocket mouse	US: – CA: SSC	Found in sandy herbaceous areas, usually associated with rocks or coarse gravel in coastal scrub, chaparral, grasslands, and sagebrush, from Los Angeles County through southwestern San Bernardino, western Riverside, and San Diego counties to northern Baja California.	HP	Low Probability of Occurrence. Marginal grassland habitat is present in the BSA; however, the grasslands are subject to regular disturbance, limiting the probability of occurrence.
Chaetodipus fallax pallidus	Mammals	Pallid San Diego pocket mouse	US: – CA: SSC	Found in sandy herbaceous areas, usually associated with rocks or coarse gravel in desert wash, desert scrub, desert succulent scrub, pinyon-juniper woodlands, etc., in desert border areas of Southern California into Mexico.	HA	Absent. No sandy herbaceous areas, rocks or coarse gravel in desert wash, desert scrub, desert succulent scrub, or pinyon-juniper woodlands occur in the BSA.

Species Scientific Name	Species Type	Species Common Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
Dipodomys merriami parvus	Mammals	San Bernardino kangaroo rat	US: FE CA: SSC	Gravelly and sandy soils of alluvial fans, braided river channels, active channels, and terraces; San Bernardino Valley (San Bernardino County) and San Jacinto Valley (Riverside County). In San Bernardino County, this species occurs primarily in the Santa Ana River and its tributaries north of Interstate 10, with small remnant populations in the Etiwanda alluvial fan, the northern portion of the Jurupa Mountains in the south Bloomington area, and Reche Canyon. In Riverside County, this species occurs along the San Jacinto River east of approximately Sanderson Avenue, and along Bautista Creek. Remnant populations may also occur within Riverside County in Reche Canyon, San Timoteo Canyon, Laborde Canyon, the Jurupa Mountains, and the Santa Ana River Wash north of State Route 60.	HA	Absent. No alluvial fans, braided river channels, or terraces occur in the BSA.

Species Scientific Name	Species Type	Species Common Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
Dipodomys stephensi	Mammals	Stephens' kangaroo rat	US: FE CA: ST	Found in plant communities transitional between grassland and CSS, with perennial vegetation cover of less than 50 percent. Most commonly associated with *Artemisia tridentata, Eriogonum fasciculatum,* and *Erodium* sp. Requires well-drained soils with compaction characteristics suitable for burrow construction (neither sandy nor too hard). Not found in soils that are highly rocky or sandy, less than 20 inches deep, or heavily alkaline or clay, or in areas exceeding 25 percent slope. Occurs only in western Riverside County, northern San Diego County, and extreme southern San Bernardino County, below 914 m (3,000 ft) in elevation. In northwestern Riverside County, known only from east of Interstate 15. Reaches its northwest limit in south Norco, southeast Riverside, and in the Reche Canyon area of Riverside and extreme southern San Bernardino counties.	HP	Not Expected. Marginal CSS habitat is present in the BSA on the slopes of Milliken Avenue and adjacent to commercial development; however, the CSS is on the slopes of Milliken Avenue and adjacent to commercial development. The area is not located in a transitional plant community.
Eumops perotis californicus	Mammals	Western mastiff bat	US: – CA: SSC	Occurs in many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, chaparral, etc.; roosts in crevices in vertical cliff faces, high buildings, and tunnels. Has also been documented roosting in palm trees. Travels widely when foraging.	HP	Low to Moderate Probability of Roosting. Suitable roosting habitat (palm trees) is present in the BSA.

Species Scientific Name	Species Type	Species Common Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
Lasiurus cinereus	Mammals	Hoary bat	US: – CA: SSC	Forages over a wide range of habitats but prefers open habitats with access to trees for roosting, and water. Ranges throughout most of California.	HP	Low to Moderate Probability of Roosting. Suitable roosting habitat (palm trees) is present in the BSA
Lasiurus xanthinus	Mammals	Western yellow bat	US: – CA: SSC	Found mostly in desert and desert riparian areas of the southwest United States but is also expanding its range with the increased usage of native and nonnative ornamental palms in landscaping. Individuals typically roost amid dead fronds of palms in desert oases but has also been documented roosting in cottonwood trees. Forages over many habitats.	HP	Low to Moderate Probability of Roosting. Suitable roosting habitat (palm trees) is present in the BSA
Lepus californicus bennettii	Mammals	San Diego black-tailed jackrabbit	US: – CA: SSC	Found in a variety of habitats, including herbaceous and desert scrub areas, early stages of open forest, and chaparral. Most common in relatively open habitats. Restricted to the cismontane areas of Southern California, extending from the coast to the Santa Monica, San Gabriel, San Bernardino, and Santa Rosa mountain ranges.	HA	Absent. No desert scrub, open forest, or chaparral habitat occur in the BSA.
Neotoma lepida intermedia	Mammals	San Diego desert woodrat	US: – CA: SSC	Found in desert scrub and CSS habitat, especially in association with cactus patches. Builds stick nests around cacti or on rocky crevices. Occurs along the Pacific slope from San Luis Obispo County to northwest Baja California.	HP	Not Expected. Marginal CSS habitat is present in the BSA on the slopes of Milliken Avenue and adjacent to commercial development; however, the habitat lacks cactus and rock crevices. The habitat is limited in size and disturbed, reducing the probability of occurrence.

Species Scientific Name	Species Type	Species Common Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
Nyctinomops femorosaccus	Mammals	Pocketed free-tailed bat	US: – CA: SSC	Usually associated with cliffs, rock outcrops, or slopes. May roost in buildings (including roof tiles) or caves. Rare in California, where it is found in Riverside, San Diego, Imperial, and possibly Los Angeles counties. More common in Mexico.	HA	Absent. No cliffs or rock outcrops occur in the BSA.
Nyctinomops macrotis	Mammals	Big free-tailed bat	US: – CA: SSC	Inhabits rugged, rocky canyon country in southwestern United States. Found from northern South America and the Caribbean Islands northward to the western United States. In the southwestern United States, populations appear to be scattered.	HA	Absent. No rocky canyons occur in the BSA.
Perognathus longimembris brevinasus	Mammals	Los Angeles pocket mouse	US: – CA: SSC	Prefers sandy soil for burrowing but has been found on gravel washes and stony soils. Found in CSS in Los Angeles, Riverside, and San Bernardino counties.	HP	Not Expected. Marginal CSS habitat is present in the BSA; however, the habitat is limited and is not located in a wash.

Source: California Natural Diversity Database. Special Animals List. (CDFW 2022b).

Wildlife corridors are usually bounded by urban land areas or other areas unsuitable for wildlife. The corridor generally contains suitable cover, food, and/or water to support species and facilitate movement while in the corridor. Larger, landscape-level corridors (often referred to as "habitat or landscape linkages") can provide both transitory and resident habitat for a variety of species. Although it is commonly used as a synonym for wildlife corridors, a habitat linkage refers to a more substantial, or wider, land connection between two habitat areas. Habitat linkages allow for the periodic exchange of animals between habitat areas, which is essential to maintain adequate gene pools. This linkage is most notable among populations of medium-sized and larger animals. A travel route is usually a landscape feature (such as a ridgeline, drainage, canyon, or riparian corridor) within a larger natural habitat area that is used frequently by animals to facilitate movement and provide access to necessary resources (e.g., water, food, cover, or den sites). The travel route is generally preferred because it provides the least amount of topographic resistance in moving from one area to another. It provides adequate food, water, or cover or individuals moving between habitat areas and provides a relatively direct link between target habitat areas. Wildlife crossings are small, narrow areas that are relatively short in length. They allow wildlife to bypass an obstacle or barrier. Crossings are typically man-made and include culverts, underpasses, drainage pipes, bridges, and tunnels to provide access past roads, highways, pipelines, or other physical obstacles. Wildlife crossings often represent "choke points" along a movement corridor.

The proposed Project site does not include habitat corridors, linkages, crossings, or travel routes. The proposed Project site does not connect two or more significant wildlife habitats because the surrounding areas are completely developed with urban and industrial uses to the north, south, east, and west of the proposed Project site. In addition, I-10 is located in the middle of the proposed Project site and Interstate 15 (I-15) is located to the west of the proposed Project site, which present a significant barrier to movement.

3.3.3.7 Definitions of Special-Status Biological Resources

3.3.3.7.1 Federal

A federally endangered species is a species facing extinction throughout all or a significant portion of its geographic range. A federally threatened species is a species likely to become endangered within the foreseeable future throughout all or a significant portion of its range. The presence of any federally threatened or endangered species on a site generally imposes severe constraints on development; particularly if development would result in "take" of the species or its habitat. The term "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in such conduct. Harm in this sense can include any disturbance to habitats used by the species during any portion of its life history.

Proposed (or candidate) species are those officially proposed by USFWS for addition to the federal threatened and endangered species list. Because proposed species may soon be listed as threatened or

endangered, these species could become listed prior to or during implementation of a proposed development project.

3.3.3.7.2 State

The State of California considers an endangered species as one whose prospects of survival and reproduction are in immediate jeopardy; a threatened species as one present in such small numbers throughout its range that it is likely to become an endangered species in the near future in the absence of special protection or management; and a rare species as one present in such small numbers throughout its range that it may become endangered if its present environment worsens. The terminology "rare species" applies to California native plants. State threatened and endangered species are fully protected against take.

California Species of Special Concern is an informal designation used by CDFW for some declining wildlife species that are not state candidates for listing as threatened or endangered. This designation does not provide legal protection but signifies that these species are recognized as special status by CDFW and, thus, under CEQA Guidelines Section 15380, potential impacts to these species need to be assessed (CDFW 2022b).

Species that are California fully protected include those protected by special legislation for various reasons, such as the peregrine falcon and white-tailed kite.

Special-status habitats are vegetation communities, associations, or sub-associations designated by the CDFW and/or California Native Plant Society (CNPS) that support concentrations of special-status plant or wildlife species, are of relatively limited distribution, or are of particular value to wildlife. Although special-status habitats are not afforded legal protection unless they support protected species, potential impacts on these habitats may increase concerns and result in mitigation suggestions by resources agencies.

3.3.3.7.3 Local

CNPS is a conservation organization that has developed an inventory of California's special-status plant species (CNPS 2022a). This inventory provides the summary of information on the distribution, rarity, and endangerment of California's vascular plants. This rare plant inventory is composed of four lists. CNPS presumes that List 1A plant species are extinct in California because they have not been seen in the wild for many years. CNPS considers List 1B plant species as rare, threatened, or endangered throughout their range. List 2 plant species are considered rare, threatened, or endangered in California, but more common in other states. Plant species for which CNPS needs additional information are included on List 3. List 4 plant species are those of limited distribution in California whose susceptibility to threat appears low at this time.

3.3.3.8 Sensitive and Special-Status Biological Resources

- Certain wildlife species are recognized by federal and state resource agencies as special-status species. Species are given such recognition due to the documented or perceived decline and/or limitations of their population size, geographic range, and distribution, which typically are a result of habitat loss. Listed special-status wildlife species with suitable habitat present in the BSA, and non-listed special-status wildlife species observed or with a moderate to high potential to occur in the BSA, include DSF, Crotch's bumble bee, burrowing owl, and bats.
- DSF is federally listed as endangered and is a CDFW Special Animal. The habitat assessment conducted for the proposed Project focused on undeveloped areas mapped with Delhi soils within the BSA. Although mapped Delhi soils occur throughout the majority of the BSA, they are almost entirely developed by existing roadways, utility easements, and other infrastructure. Suitable habitat areas identified in the 500-foot buffer occur in areas identified as non-native grasslands along Airport Drive. No DSF species were observed in the BSA during field surveys, and none are anticipated to occur within the proposed Project limits given the absence of suitable habitat and ongoing disturbances within the areas of the proposed Project's aboveground features.
- Crotch's bumble bee is state listed as State Candidate Endangered and a CDFW Special Animal. The habitat assessment focused on undeveloped areas within the BSA with potential to support adequate food resources for Crotch's bumble bee. A visual survey for Crotch's bumble bee was conducted in 2021 in suitable habitat areas. No Crotch's bumble bee was observed within the BSA during the 2021 visual survey. No Crotch's bumble bees were observed in the BSA during field surveys, and none are anticipated to occur within the proposed Project limits given the absence of suitable habitat, ongoing disturbances within the proposed aboveground work areas, and lack of occurrence records in the vicinity of the proposed Project's aboveground features.
- Burrowing owls are found in open, dry grasslands, agricultural and range lands, and desert habitats often associated with burrowing animals. They can also inhabit grass, forb, and shrub stages of pinyon and ponderosa pine habitats. They nest in abandoned burrows of ground squirrels or other animals, in pipes, under piles of rock or debris, and in other similar features. Suitable habitat was determined to be present in the BSA for the burrowing owl; suitable habitat consists of areas vegetated by non-native annual grassland. No burrowing owls were observed in the BSA during the focused surveys; however, the species has potential to establish a nest in the BSA and to occur in the BSA at the time of construction.
- No bats were observed during the habitat assessment, including during the spotlight examination of the bridge crevices at the Union Pacific Railroad bridges over Milliken Avenue, Haven Avenue, and Archibald Avenue. However, because remnant filler material inside of some of these crevices can obscure the presence of bats during a spotlight inspection, individuals or small numbers of bats may have been present that were not observed. No guano or staining was observed that

would indicate a large number of bats or the presence of a maternity colony; however, it should be noted that because this assessment was performed outside of the bat maternity season (April 1 through August 31), it is not possible to confirm the presence or absence of a maternity colony at this time. No aboveground Project features are proposed near any of the structures containing potential bat-roosting habitat.

- Non-listed special-status animal species were not observed during field surveys; however, the following non-listed special-status species have the potential to occur within portions of the proposed Project area:
  - California glossy snake (*Arizona elegans occidentalis*);
  - Orange-throated whiptail (*Aspidoscelis hyperythra*);
  - Coastal whiptail (*Aspidoscelis tigris stejnegeri*);
  - Red-diamond rattlesnake (*Crotalus ruber*);
  - Southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*);
  - Grasshopper sparrow (*Ammodramus savannarum*);
  - Bell's sage sparrow (*Amphispiza belli*);
  - Lawrence's goldfinch (*Spinus lawrencei*);
  - White-tailed kite (*Elanus leucurus*);
  - Cooper's hawk (*Accipiter cooperii*);
  - Golden eagle (*Aquila chrysaetos*);
  - Northwestern San Diego pocket mouse (*Chaetodipus fallax*);
  - San Diego desert woodrat (*Neotoma lepida intermedia*); and
  - Los Angeles pocket mouse (*Perognathus longimembris brevinasus*).

3.3.4 Methodology

Data sources used to prepare this section were taken from the Biological Resources Technical Report (SBCTA 2024; Appendix D), database records maintained by NOAA, USFWS IPaC, CDFW CNDDB, San Bernardino County General Plan (San Bernardino County 2020), City of Rancho Cucamonga General Plan (City of Rancho Cucamonga 2021), and the City of Ontario General Plan (City of Ontario 2022), and other relevant documents related to biological resources.

3.3.5 CEQA Thresholds of Significance

According to Appendix G of the 2024 CEQA Guidelines, implementation of the proposed Project may result in a significant impact if it would:

- 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 Wildlife or U.S. Fish and Wildlife Service;
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service;
- Have a substantially 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;
- 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;
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; and/or
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state Habitat Conservation Plan.

3.3.6 Impact Evaluation

3.3.6.1 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 Wildlife or U.S. Fish and Wildlife Service?

3.3.6.1.1 No Project Alternative

The No Project Alternative includes planned expansion, improvement projects, and routine maintenance activities for the existing roadway system and transit facilities. Sensitive or special status habitat or species are not anticipated to occur within the No Project Alternative limits given the ongoing disturbances within the areas of the existing roadway and transit facilities. The No Project Alternative would be subject to project and site-specific evaluation of biological resources and mitigation would be required to reduce any potential impacts. With adherence to existing regulations, the No Project Alternative would have a less than significant impact.

3.3.6.1.2 Proposed Project

3.3.6.1.2.1 Construction Impacts

Migratory avian species that may use portions of the proposed Project site for nesting during the breeding season are protected under MBTA. Specifically, all native breeding birds (except game birds), regardless of their listing status, are protected under MBTA. In addition, species such as the burrowing owl are identified as species of special concern by CDFW, as well as protected under MBTA. Burrowing owls were not observed during the field survey for the proposed Project. However, given the presence of suitable habitat within the BSA, there is the potential for burrowing owl to occur within the BSA. MM-BIO-1 and MM-BIO-2 would be implemented for the proposed Project and would reduce this impact by ensuring that surveys for MBTA species and other special-status species are performed during the appropriate time of year and, if necessary, buffer zones are established to protect nesting species.

Ground-borne vibration-generating construction activities, activities requiring lights, and tree removal can be disruptive to bats foraging and/or roosting in the proposed Project area. While data for ground-borne vibration-related impacts are lacking for bats, potential construction vibration impacts are assumed for this proposed Project within the ground-borne vibration zone during construction. Therefore, bats roosting in these structures may be affected during tunnel boring activities. Other potential impacts include nighttime lighting from construction and tree removal/tree trimming. Ongoing night-time lighting can be very disruptive to foraging and roosting behaviors. Bright artificial lighting at roost structures has substantial negative effects on bats, including the potential for reduced survivorship in a maternity colony. Because no aboveground construction is proposed near any of the structures containing potential bat roosting habitat, impacts from nighttime lighting or additional light fixtures during construction are not anticipated from the proposed Project. Tree removal and tree trimming during construction have the potential to impact foliage-roosting bats such as western yellow bats and hoary bats, which roost in trees, including non-native palm trees (found on the proposed Project site). Tree removal associated with the proposed Project would be limited to the parking lots where construction of the stations would occur. MM BIO-3 would be implemented for the proposed Project to reduce the potential impacts to bats.

MM BIO-3 would require a qualified bat biologist to conduct a survey during the bat maternity season to determine the presence of specific bat species. In addition, tree trimming/removal would be required to be conducted outside of the bat maternity season (April 1 through August 31), and only directional night lighting use would be required during night construction activities (i.e., between dusk and dawn) within 100 ft of where bat roosting is confirmed.

No permanent or temporary impacts to CSS habitat, jurisdictional waters, special-status plant species, DSF, and Crotch's bumble bee would occur as a result of the proposed Project. However, temporary impacts to burrowing owl, bats, and special-status bird species/other nesting birds may occur during construction of the proposed Project and impacts to these species could be potentially significant. With

implementation of MM-BIO-1, MM-BIO-2 and MM-BIO-3, the proposed Project during construction would have a less than significant impact to migratory avian species, burrowing owls, and bats.

3.3.6.1.2.2 Operational Impacts

Sensitive or special status habitat or species are not anticipated to occur within the proposed Project limits given the absence of suitable habitat, ongoing disturbances within the areas of the proposed aboveground Project features, and lack of occurrence records in the vicinity of proposed aboveground Project features. Therefore, there would be no impact to burrowing owl, bats, and special-status bird species/other nesting birds during operation for the proposed Project.

3.3.6.2 Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

3.3.6.2.1 No Project Alternative

The No Project Alternative includes planned expansion, improvement projects, and routine maintenance activities for the existing roadway system and transit facilities. The No Project Alternative area includes very limited vegetation and is currently developed, and riparian or other sensitive natural community are not anticipated to occur. In addition, the No Project Alternative would be subject to project and site-specific evaluation of biological resources, and mitigation would be required to reduce any potential impacts. Therefore, with adherence to existing regulations, the No Project Alternative would have a less than significant impact.

3.3.6.2.2 Proposed Project

3.3.6.2.2.1 Construction Impacts

The BSA is located in the South Coast subregion of the Southwestern California region of the California Floristic Province. Much of the subregion is extensively developed with urban, suburban, and agricultural uses. The natural vegetation of the subregion consists primarily of chaparral, CSS, non-native annual grassland, and some riparian scrub and woodland. Much of the natural vegetation occurs in scattered, often fragmented patches on hills or in other areas not easily developed and/or protected under regional or local land use plans. During field surveys, no riparian or sensitive natural communities were identified. The proposed Project area includes very limited vegetation and is currently developed. Riparian or other sensitive natural community are not anticipated to occur in the BSA. The proposed Project area is not anticipated to contain any riparian habitat, or other sensitive natural community. With adherence to existing regulations, construction associated with the proposed Project would result in a less than significant impact to riparian habitat or other sensitive natural community.

3.3.6.2.2.2 Operational Impacts

As described in Section 3.3, the BSA is located in the South Coast subregion of the Southwestern California region of the California Floristic Province. Much of the subregion is extensively developed with urban, suburban, and agricultural uses. The natural vegetation of the subregion consists primarily of chaparral, CSS, non-native annual grassland, and some riparian scrub and woodland. Much of the natural vegetation occurs in scattered, often fragmented patches on hills or in other areas not easily developed and/or protected under regional or local land use plans. During field surveys, no riparian or sensitive natural communities were identified.

Given the developed/disturbed nature of the sites proposed for the aboveground proposed Project features, and the lack of riparian or sensitive habitats within the proposed Project area, operation of the proposed Project, including the autonomous vehicles in and out of the tunnel, is anticipated not to have any impacts to non-listed special-status animal species. With adherence to existing regulations, impacts to riparian habitat or other sensitive vegetation communities during operation of the proposed Project would be less than significant.

3.3.6.3 Would the project have a substantially 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?

3.3.6.3.1 No Project Alternative

While the proposed Project would not be constructed under the No Project Alternative, the No Project Alternative includes planned expansion, improvement projects, and routine maintenance activities for the existing roadway system and transit facilities. Construction and operation of these projects may result in a substantial adverse effect on state or federally protected wetlands; however, these planned projects would be subject to separate environmental review and, in an effort to reduce construction-related effects, would be required to comply with existing regulations related to biological resources, similar to those listed in Section 3, Regulatory Setting. Therefore, the No Project Alternative would have a less than significant impact.

3.3.6.3.2 Proposed Project

3.3.6.3.2.1 Construction Impacts

There are no sensitive habitats, such as riparian habitat, wetlands, or other sensitive natural communities identified in local or regional plans, policies, or regulations, or by USFWS in the proposed Project area. Construction of the proposed Project would not result in any discharge of fill or waste material within any delineated jurisdictional aquatic resources. Therefore, impacts to state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means would be less than significant.

3.3.6.3.2.2 Operational Impacts

There are no sensitive habitats, such as riparian habitat, wetlands, or other sensitive natural communities identified in local or regional plans, policies, or regulations, or by USFWS in the BSA. Operation of the proposed Project would not result in any discharge of fill or waste material within any delineated jurisdictional aquatic resources. Therefore, impacts to state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means would be less than significant.

3.3.6.4 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?

3.3.6.4.1 No Project Alternative

The No Project Alternative includes planned expansion, improvement projects, and routine maintenance activities for the existing roadway system and transit facilities. Implementation of the No Project Alternative is not expected to permanently affect wildlife movement or decrease the functionality of any wildlife crossings because a majority of the No Project Alternative site deters wildlife movement due to increased noise and human activity, but wildlife is expected to continue to use corridors outside of construction hours, particularly at dawn and dusk. However, the No Project Alternative would be subject to project and site-specific evaluation of biological resources, and mitigation would be required to reduce any potential impacts. With adherence to existing regulations, the No Project Alternative would have a less than significant impact.

3.3.6.4.2 Proposed Project

3.3.6.4.2.1 Construction Impacts

As discussed in Section 3.3.3.6.1 the proposed Project site does not include habitat corridors, linkages, crossings, or travel routes. The proposed Project site does not connect two or more significant wildlife habitats because the surrounding areas are completely developed with urban and industrial uses to the north, south, east, and west of the proposed Project site. In addition, I-10 is located in the middle of the proposed Project site and I-15 is located to the west of the proposed Project site, which present a significant barrier to movement.

However, construction activities may impact migratory avian species that may use portions of the proposed Project site for nesting during the breeding season. These avian species, specifically all native breeding birds (except game birds), regardless of their listing status, are protected under MBTA. Although most of the trees in the proposed Project area would be retained, construction related activities associated with the proposed Project could potentially result in tree removal, which could result in the disturbance of nesting migratory species covered under MBTA or CDFW code. Implementation of MM-BIO-1 would be implemented for the proposed Project to reduce potential impacts on nesting birds.

Migratory avian species that may use portions of the proposed Project site for nesting during the breeding season are protected under MBTA. Specifically, all native breeding birds (except game birds), regardless of their listing status, are protected under the MBTA. Although most of the trees in the proposed Project area would be retained, construction-related activities associated with the proposed Project area could potentially result in tree removal, which could result in the disturbance of nesting migratory species covered under MBTA or CDFW code. If construction activities occur outside of the breeding season (between August 15 and February 15) no mitigation would be required. However, if construction occurs between February 15 and August 15, implementation of MM-BIO-1 would reduce this impact to a less than significant level by ensuring that surveys for MBTA species and other special-status species are performed during the appropriate time of year and, if necessary, buffer zones are established to protect nesting species. With implementation of MM-BIO-1 and adherence to existing regulations, the proposed Project during construction would have a less than significant impact related to wildlife movement.

3.3.6.4.2.2 Operational Impacts

Wildlife movement within the BSA is limited to those species that occupy urban landscapes. Vegetated areas within the BSA have no connections to contiguous undeveloped lands or open space areas. The BSA does contain a natural vegetation community, CSS; however, this community is surrounded by development and roads with no connection to open space. No other natural vegetation communities, riparian vegetation, or other commonly utilized corridors for wildlife movement occur within the BSA. The BSA does not correspond to any natural landscape blocks or essential connectivity areas as documented in the California Essential Habitat Connectivity Project Report (CDFW 2010).

As previously discussed, the proposed Project site does not include habitat corridors, linkages, crossings, or travel routes. Operation of the proposed Project would primarily occur below ground, and aboveground features would be located in proximity to the Metrolink rail corridor, I-10, and ONT. Additionally, operation of the autonomous vehicles in and out of the tunnel would not result in impacts to wildlife movement. No commonly utilized corridors for wildlife movement are anticipated within the BSA, and operation of the proposed Project would not result in impacts to wildlife movement. Further, operation of the proposed Project is not anticipated to impact or disturb nesting migratory species covered under MBTA or CDFW code. With adherence to existing regulations, the proposed Project during operation would have a less than significant impact related to wildlife movement.

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

3.3.6.5.1 No Project Alternative

The No Project Alternative includes planned expansion, improvement projects, and routine maintenance activities for the existing roadway system and transit facilities. Trees within the No Project Alternative site may be used by migratory avian species protected under the MBTA for nesting during the breeding season. Given the proposed high density of the existing roadways and transit facilities for the No Project

Alternative area, it is likely that existing mature trees on site would be removed at the time of construction, which could result in the loss of nesting habitat for avian species protected by the Migratory Bird Treaty Act. Construction of the No Project Alternative would not result in any potential conflicts with local policies that protect biological resources. With adherence to existing regulations, the No Project Alternative would have a less than significant impact.

3.3.6.5.2 Proposed Project

3.3.6.5.2.1 Construction Impacts

Construction of the proposed Project would not result in any potential conflicts with local policies that protect biological resources. The proposed Project site does not contain trees that fall under the definition of a heritage tree, as noted in the City of Rancho Cucamonga Municipal Code Section 17.16.080, Tree Removal Permit or the City of Ontario Municipal Code, Tree Preservation Policy and Protection Measures. In addition, there are no protected trees within the proposed Project site. However, there could be removal of existing trees within the proposed Project site during construction. The City of Ontario requires prior authorization from the Public Works Agency through a permit process for the removal or relocation of any parkway trees. Compliance with existing local policies that protect biological resources, such as trees, would ensure that the impact for the proposed Project during construction would be less than significant.

3.3.6.5.2.2 Operational Impacts

Operational activities associated with the proposed Project would not result in any potential conflicts with local policies that protect biological resources. The proposed Project site does not contain trees that fall under the definition of a heritage tree and there are no protected trees within the proposed Project site. It is unlikely that existing mature trees on site would be removed at the time of operation. Compliance with existing local policies that protect biological resources, such as trees, would ensure that the impact for the proposed Project during operation would be less than significant.

3.3.6.6 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?

3.3.6.6.1 No Project Alternative

While the proposed Project would not be constructed under the No Project Alternative, the No Project Alternative includes planned expansion, improvement projects, and routine maintenance activities for the existing roadway system and transit facilities. Construction and operation of these projects may conflict with provisions of adopted conservation plans; however, these planned projects would be subject to separate environmental review and, in an effort to reduce construction-related effects, would be required to comply with existing regulations related to biological resources, similar to those listed in Section 3, Regulatory Setting. Therefore, the No Project Alternative would have a less than significant impact.

3.3.6.6.2 Proposed Project

3.3.6.6.2.1 Construction Impacts

There are no adopted Habitat Conservation Plans, Natural Community Conservation Plans, or other approved local, regional, or state habitat conservation plans for the BSA. Therefore, the proposed Project during construction would have no impact.

3.3.6.6.2.2 Operational Impacts

There are no adopted Habitat Conservation Plans, Natural Community Conservation Plans, or other approved local, regional, or state habitat conservation plans for the BSA. Therefore, the proposed Project during operation would have no impact.

3.3.7 Mitigation Measures

The proposed Project would implement the following mitigation measures during construction.

MM-BIO-1 Nesting Habitat for Protected or Sensitive Avian Species:

1. Vegetation removal and construction shall occur between September 1 and January 31 whenever feasible.
2. Prior to any construction or vegetation removal between February 15 and August 31, a nesting survey shall be conducted by a qualified biologist of all habitats within 500 feet of the construction area. Surveys shall be conducted no less than 3 days and no more than 7 days prior to commencement of construction activities and surveys will be conducted in accordance with California Department of Fish and Wildlife protocol as applicable. If no active nests are identified on or within 500 feet of the construction site, no further mitigation is necessary. A copy of the pre-construction survey shall be submitted to the lead agency San Bernardino County Transportation Authority, as well as the California Department of Fish and Wildlife and the United States Fish and Wildlife Service. If an active nest of a Migratory Bird Treaty Act protected species is identified onsite (per established thresholds) the qualified biologist will establish the appropriate exclusionary buffer based on the species and the no-work buffer shall be maintained between the nest and construction activity. This buffer can be reduced in consultation with California Department of Fish and Wildlife and/or United States Fish and Wildlife Service, if applicable.
3. Completion of the nesting cycle shall be determined by qualified ornithologist or biologist.

MM-BIO-2 Burrowing Owl Nesting Habitat:

1. Prior to construction activity, focused pre-construction surveys shall be conducted for burrowing owls where suitable habitat is present within the construction areas. Surveys shall be conducted no less than 14 days prior to commencement of construction activities and surveys shall be conducted in accordance with California Department of Fish and Wildlife burrowing owl survey protocol.
2. If no occupied burrows are found in the survey area, a letter report documenting survey methods and findings shall be submitted to the lead agency San Bernardino Transportation Authority, as well as the California Department of Fish and Wildlife for review and approval, and no further mitigation is necessary.
3. If occupied burrows are found, impacts on the burrows shall be avoided by providing a buffer of 165 feet during the non-breeding season (September 1 through February 14) or 250 feet during the breeding season (February 15 through August 15). The size of the buffer area may be adjusted if a qualified biologist and California Department of Fish and Wildlife determine it would not be likely to have adverse effects on the owls. No project activity shall commence within the buffer area until a qualified biologist confirms that the burrow is no longer occupied. If the burrow is occupied by a nesting pair, a minimum of 7.5 acres of foraging habitat contiguous to the burrow shall be maintained until the breeding season is over.
4. If disturbance of occupied burrows is unavoidable, on-site passive relocation techniques approved by California Department of Fish and Wildlife shall be used to encourage owls to move to alternative burrows outside of the impact area. However, no occupied burrows shall be disturbed during the nesting season unless a qualified biologist verifies through non-invasive methods that juveniles from the occupied burrows are foraging independently and are capable of independent survival. Mitigation for foraging habitat for relocated pairs shall follow guidelines provided in the California Burrowing Owl Consortium's Burrowing Owl Survey Protocol and Mitigation Guidelines, which ranges from 7.5 to 19.5 acres per pair.

MM-BIO-3 Bat Nesting Habitat:

1. During the bat maternity season (April 1–August 31), a qualified biologist shall perform a nighttime acoustic and emergence survey at the Union Pacific Railroad bridge over Milliken Avenue to conclusively determine whether a maternity colony is present and identify any bat species present. This survey shall be performed at least one full calendar year before the start of construction to allow adequate time for mitigation planning if a maternity colony is found. If a maternity colony is found at the Union Pacific Railroad bridge over Milliken Avenue, a California Department

of Fish and Wildlife approved bat biologist will coordinate with the project team and California Department of Fish and Wildlife to determine appropriate species-specific minimization measures because different species respond differently to various construction activities. Upon approval by California Department of Fish and Wildlife, the species-specific minimization measures shall be implemented and developed in consultation with California Department of Fish and Wildlife.

2. To the greatest extent feasible, tree trimming/removal activities shall be performed outside the bat maternity season (April 1–August 31) to avoid direct impacts to nonvolant (flightless) young that may roost in trees within the study area. This period also coincides with the bird nesting season of March 15-September 15.

3. If night work (i.e., between dusk and dawn) is anticipated within 100 feet (ft) of structures where bat roosting is confirmed, night lighting shall be used only in areas of active work and focused on the direct area(s) of work and away from any roost features to the greatest extent practicable.

No mitigation measures are required for the biological resources during operation for the proposed Project.

3.3.8 Impacts After Mitigation

3.3.8.1 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 Wildlife or U.S. Fish and Wildlife Service?

With implementation of MM-BIO-1, MM-BIO-2 and MM-BIO-3, the proposed Project would have a less than significant impact.

3.3.8.2 Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

No mitigation measure would be required and the proposed Project would have a less than significant impact.

3.3.8.3 Would the project have a substantially 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?

No mitigation measure would be required for the proposed Project. During construction and operation, the proposed Project would have a less than significant impact.

3.3.8.4 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?

With adherence to existing regulations and implementation of MM-BIO-1, the proposed Project would have a less than significant impact.

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

No mitigation measure would be required, and the proposed Project would have a less than significant impact.

3.3.8.6 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?

No mitigation measures would be required, and the proposed Project would have no impact.

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3.4 CULTURAL RESOURCES

3.4.1 Introduction

This section of this Draft Environmental Impact Report (EIR) provides a summary of the evaluation of the impacts to cultural resources that are known to occur, or anticipated to be encountered, as a result of implementation of the proposed Ontario International Airport (ONT) Connector Project (Project). Detailed information for cultural resources is included in the Cultural Resources Identification and Eligibility Assessment Technical Report (SBCTA 2024a; Appendix G).

3.4.2 Regulatory Framework

3.4.2.1 Federal

3.4.2.1.1 National Historic Preservation Act

The principal federal law addressing historic properties is National Historic Preservation Act (NHPA), as amended (54 United States Code Section 300101 et seq.), and its implementing regulations (36 Code of Federal Regulations [CFR] Part 800). NHPA Section 106 requires a federal agency with jurisdiction over a proposed federal action (referred to as an "undertaking" under NHPA) to consider the effects of the undertaking on historic properties and to provide Advisory Council on Historic Preservation an opportunity to comment on the undertaking. The term "historic properties" refers to "any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register" (36 CFR Part 800.16[l][1]). The implementing regulations (36 CFR Part 800) describe the process for identifying and evaluating historic properties, for assessing the potential adverse effects of federal undertakings on historic properties, and for developing measures to avoid, minimize, or mitigate adverse effects. The NHPA Section 106 process does not require the preservation of historic properties; instead, it is a procedural requirement mandating that federal agencies consider effects to historic properties from an undertaking prior to approval.

The steps of the NHPA Section 106 process are accomplished through consultation with the State Historic Preservation Officer, federally recognized Native American tribes, local governments, and other interested parties. The goal of consultation is to identify potentially affected historic properties, assess effects to such properties, and seek ways to avoid, minimize, or mitigate any adverse effects on such properties. The agency also must provide an opportunity for public involvement (36 CFR Part 800.1[a]). Consultation with Native American tribes regarding issues related to NHPA Section 106 and other authorities (such as National Environmental Policy Act and Executive Order Number 13007) must recognize the government-to-government relationship between the federal government and Native American tribes, as set forth in Executive Order 13175, 65 Federal Register 87249 of November 9, 2000, and the Presidential Memorandum of November 5, 2009.

3.4.2.1.2 National Register of Historic Places

The National Register of Historic Places (National Register) was established by NHPA as "an authoritative guide to be used by federal, state, and local governments, private groups and citizens to identify the Nation's historic resources and to indicate what properties should be considered for protection from destruction or impairment" (36 CFR Part 60.2; California Office of Historic Preservation [OHP] 2022). The National Register recognizes a broad range of cultural resources that are significant at the national, state, and local levels and can include districts, buildings, structures, objects, prehistoric archaeological sites, historic-period archaeological sites, traditional cultural properties, and cultural landscapes. As previously noted, a resource that is listed in or eligible for listing in the National Register is considered a "historic property" under NHPA Section 106.

To be eligible for listing in the National Register, a property must be significant in American history, architecture, archaeology, engineering, or culture. Properties of potential significance must meet one or more of the following four established criteria:

a. Are associated with events that have made a significant contribution to the broad patterns of our history;

b. Are associated with the lives of persons significant in our past;

c. Embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

d. Have yielded, or may be likely to yield, information important in prehistory or history.

In addition to meeting one or more of the criteria of significance, a property must have integrity. Integrity is defined as "the ability of a property to convey its significance" (OHP 2022). The National Register recognizes seven factors that, in various combinations, define integrity. The seven factors that define integrity are location, design, setting, materials, workmanship, feeling, and association. To retain historic integrity, a property must possess several, and usually most, of these seven factors. Thus, the retention of the specific factors of integrity is paramount for a property to convey its significance.

Ordinarily, religious properties, moved properties, birthplaces or graves, cemeteries, reconstructed properties, commemorative properties, and properties that have achieved significance within the past 50 years are not considered eligible for the National Register unless they meet one of the Criteria Considerations (A through G) in addition to meeting at least one of the four significance criteria and possessing integrity (United States Department of the Interior 1997).

3.4.2.2 State

3.4.2.2.1 California Environmental Quality Act

California Environmental Quality Act (CEQA) (Section 21000 et seq.) and 2024 CEQA Guidelines (Section 15000 et seq.) require state and local agencies to identify the significant environmental impacts of their actions, including potential significant impacts associated with cultural resources, and to avoid or mitigate those impacts, when feasible.

CEQA requires that historical resources and unique archaeological resources be taken into consideration during the CEQA planning process (14 California Code of Regulations [CCR] Section 15064.5; Public Resources Code [PRC] Section 21083.2). If feasible, adverse effects to the significance of historical resources must be avoided or the effects must be mitigated (14 CCR Section 15064.5(b)(4)). CEQA requires that all feasible mitigation be undertaken even if it does not mitigate impacts to a less than significant level (14 CCR Section 15126.4 (a)(1)).

Historical Resources. The term CEQA uses for significant cultural resources is "historical resource," which is defined as any resource that meets one or more of the following criteria:

1. Listed in, or eligible for listing in, the California Register of Historical Resources (California Register);
2. Listed in a local register of historical resources (as defined at PRC Section 5020.1(k));
3. Identified as significant in a historical resource survey meeting the requirements of PRC Section 5024.1(g); or
4. Determined to be a historical resource by a project's lead agency (14 CCR Section 15064.5(a)).

A historical resource consists of "Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California."

Unique Archaeological Resources. Per PRC Section 21083.2(g), a unique archaeological resource is defined as "an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
2. Has a special and particular quality such as being the oldest of its type or the best available example of its type.

3. Is directly associated with a scientifically recognized important precontact or historic event or person."

California Register. The California Register criteria are based on the National Register criteria. For a property to be eligible for inclusion in the California Register, one or more of the following criteria must be met:

1. It is associated with the events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States.
2. It is associated with the lives of persons important to local, California, or national history.
3. It embodies the distinctive characteristics of a type, period, region, or method or construction, or represents the work of a master, or possesses high artistic values; and/or
4. It has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

The California Register requires that a resource possess integrity, which is defined as "the authenticity of a historical resource's physical identity evidenced by the survival of characteristics that existed during the resource's period of significance" (OHP 2022). To retain integrity, a resource should have its original location, design, setting, materials, workmanship, feeling, and association. Which of these factors is most important depends on the particular criterion under which the resource is considered eligible for listing (OHP 2022).

Assembly Bill 52. Assembly Bill (AB) 52 requires local governments to obtain the results of a Sacred Lands File (SLF) search from Native American Heritage Commission (NAHC) and consult with California Native American tribes that request such consultation. Taking into account tribal cultural, scientific, and archaeological values, the consultation process is intended to identify potential impacts to tribal cultural resources and define appropriate mitigation prior to the release of a CEQA document for public review. Pursuant to AB 52, a tribe has 30 days from notification of a project to request consultation. Native American consultation is fully addressed in Section 3.15 (Tribal Cultural Resources) of this Draft EIR.

3.4.2.3 Regional

There are no regional regulations applicable to cultural resources that are relevant to the proposed Project.

3.4.2.4 Local

3.4.2.4.1 San Bernardino County

The San Bernardino County's General Plan, Cultural Resources Element (San Bernardino County 2020) addresses the protection and sustainability of the County's historic, paleontological, and tribal cultural resources. The following applicable goal and policies include:

- Goal CR-2: Historic resources (buildings, structures, or archaeological resources) and paleontological resources that are protected and preserved for their cultural importance to local communities as well as their research and educational potential.
    - Policy CR-2.1: Encourage the preservation of archaeological sites and structures of state or national significance in accordance with the Secretary of Interior's standards.
    - Policy CR-2.3: Protect paleontological and archaeological resources from loss or destruction by requiring that new development include appropriate mitigation to preserve the quality and integrity of these resources. Require new development to avoid paleontological and archeological resources whenever possible. If avoidance is not possible, require the salvage and preservation of paleontological and archeological resources.

3.4.2.4.2 Rancho Cucamonga General Plan

The City of Rancho Cucamonga's General Plan Resource Conservation Element (City of Rancho Cucamonga 2021a) addresses historic, cultural, and tribal cultural resources. The following applicable goal and policies include:

- Goal RC-4: A community rich with historic and cultural resources.
    - Policy RC-4.1: In areas where there is a high chance that human remains may be present, the City will require proposed projects to conduct a survey to establish occurrence of human remains, and measures to prevent impacts to human remains if found.
    - Policy RC-4.2: Require that any human remains discovered during implementation of public and private projects within the city be treated with respect and dignity and fully comply with the California Native American Graves Protection and Repatriation Act and other appropriate laws.
    - Policy RC-4.4: Encourage the preservation of historic resources, buildings, and landscapes.
    - Policy RC-4.6: Encourage the feasible rehabilitation and adaptive reuse of older buildings.

3.4.2.4.3 Ontario General Plan

The City of Ontario's General Plan Community Design Element (City of Ontario 2022a) addresses historic resources. Applicable goal and policies include:

- Goal CD-4: Historic buildings, streets, landscapes, and neighborhoods, as well as the story of Ontario's people, businesses, and social and community organizations, have been preserved and serve as a focal point for civic pride and identity.
    - Policy CD-4.1: Update and maintain an inventory of historic sites and buildings, professional collections, artifacts, manuscripts, photographs, documents, maps, and other archives.
    - Policy CD-4.2: Educate and collaborate with property owners and developers to implement strategies and best practices that preserve the character of historic buildings, streetscapes, and neighborhoods.
    - Policy CD-4.3: Pursue opportunities to team with other agencies, local organizations, and nonprofits in order to preserve and promote Ontario's heritage.
    - Policy CD-4.4: Use the Mills Act and other federal, state, regional and local programs to assist property owners with the preservation of select properties and structures.
    - Policy CD-4.5: Actively promote and support the adaptive reuse of historic sites and buildings to preserve and maintain their viability.
    - Policy CD-4.6: engage in programs to publicize and promote the City's and the public's involvement in preservation efforts.

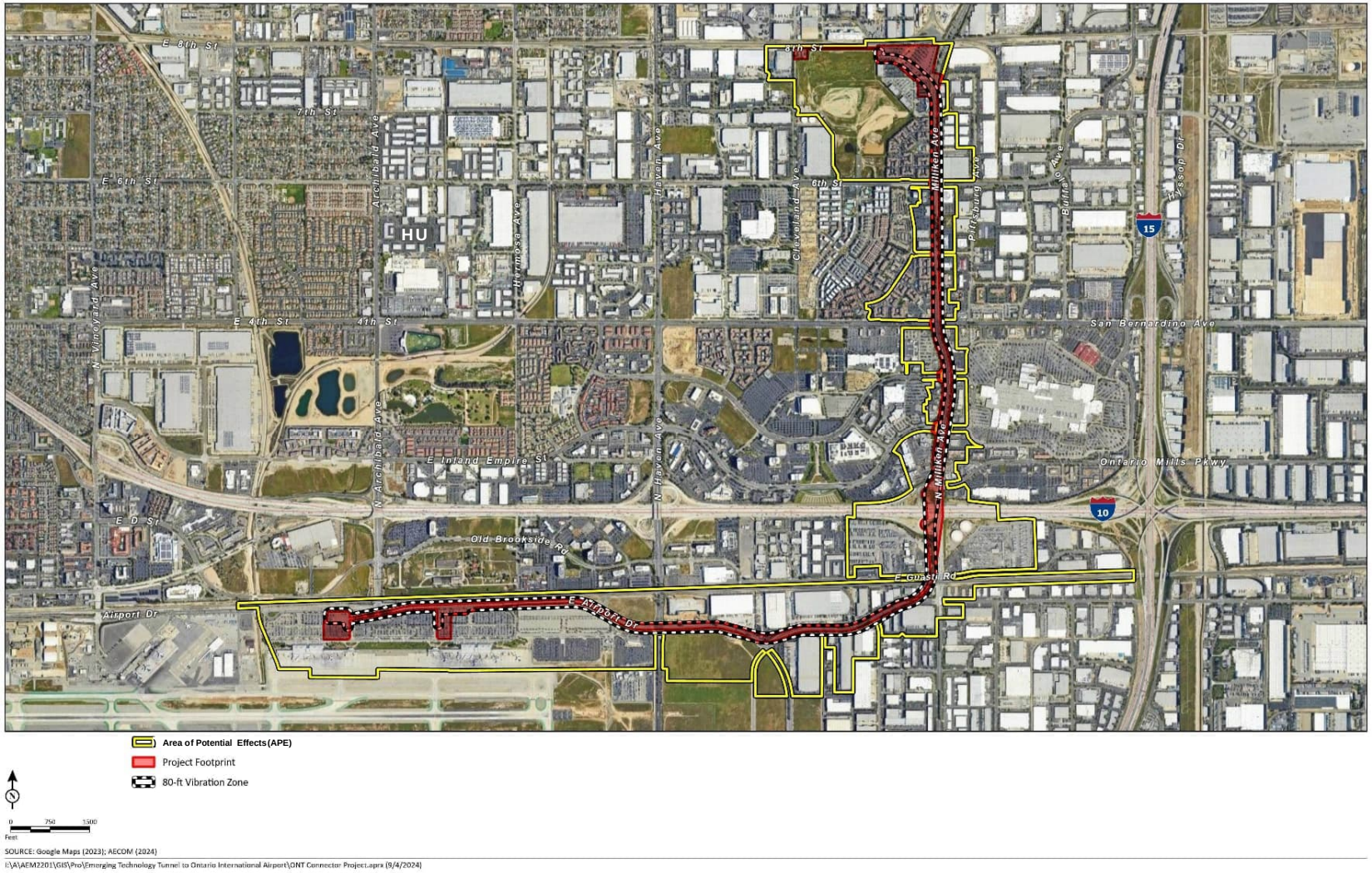
3.4.3 Methodology

Surface examination often cannot reveal whether archaeological resources are present at a specific project location, particularly when fill has been deposited on a site and masks native soils. This analysis is based on the probability (which is based on previous studies and excavations in the vicinity of the proposed Project site) that an archaeological resource or human burial could be affected by activities that disturb the ground surface or subsurface, including grading or excavation.

3.4.3.1 **Area of Potential Effects**

The mapped Area of the Potential Effects (APE) is the combination of the areas of potential direct and indirect effects from the implementation of the proposed Project, as shown on Figure 3.4-1. The APE includes the areas where both direct and indirect physical impacts may occur from both construction and operation of the proposed Project as a result of ground-disturbing activities or other indirect effects such

Figure 3.4-1 APE Map



Source: HNTB 2024

as noise and vibration associated with construction and operation. Based on the Noise and Vibration Technical Report (SBCTA 2024b; Appendix O) prepared for the proposed Project, vibration associated with boring for the tunnel is anticipated to be detectable to fragile buildings located a maximum of 80 feet from the tunneling activities; therefore, this area has been included in the APE.

In addition, parcels adjacent to the vibration area have been included in the APE to allow for potential minor shifts in the alignment of the proposed tunnel during the final design phase. The areas of indirect effects extend beyond those of the direct effects and incorporate areas that may be indirectly affected by visual, noise, or other effects. Properties where there are any potential indirect impacts have been included in their entirety regardless of whether the proposed Project has the potential to impact the whole property. The surface area within the APE that may be subject to direct impacts was surveyed for archaeological resources, and the entire APE was surveyed for historic-period-built environment resources.

3.4.3.2 Archaeological Resources Methodology

A records search provided by the South-Central Coastal Information Center (SCCIC), located at California State University, Fullerton, on July 29, 2022, was used to determine the extent of all recorded historic and prehistoric archaeological sites within a 1-mile radius of the APE, as well as a review of known cultural resource reports.

In addition, on September 16, 2022, a pedestrian survey to identify archaeological resources in the APE was conducted, beginning at Cucamonga Metrolink Station at the northern end of the survey area and ending at ONT in the south. The majority of the survey area is a built environment (paved/developed, surveyed from a vehicle), except for the easement at the northern end adjacent to the western side of Cucamonga Metrolink Station and a small section along East Airport Drive. The easement west of the Metrolink station was inaccessible, but the area consists of an approximately 5- to 10-foot-tall artificial berm, extending the length of the property, indicating the easement has been highly disturbed and there is no need for additional survey.

An SLF search and AB-52 tribal consultation list were requested from NAHC on May 27, 2022. NAHC responded on June 29, 2022, with negative results to the SLF search and provided a tribal consultation list. San Bernardino County Transportation Authority is conducting AB-52 consultation, which is discussed in more detail in Section 3.15 (Tribal Cultural Resources) of this Draft EIR.

As part of this assessment, the proposed Project team reviewed the record search data provided by the SCCIC, conducted a review of historical aerial imagery, and conducted a pedestrian survey of the APE.

3.4.3.3 Historic Resources Methodology

As part of the pre-field research, background research for the APE was conducted by the proposed Project team using published literature in local and regional history, online resources regarding the history and development of the area, the California Department of Transportation (Caltrans) historic bridge inventories, and historic aerial photographs and maps of the proposed Project vicinity. Once resources requiring evaluation were identified, additional research was conducted to develop relevant historical contexts and property-specific chronologies.

Intensive-level, pedestrian surveys of the historic-period resources in the APE were conducted on September 30, 2022. Resources surveyed included the segments of the two railroads in the APE and the property at 4265 East Guasti Road in the City of Ontario, which is developed with a group of modern and historic-period buildings and structures associated with a truck-stop. During the survey, digital photographs were taken of the railroads and their general settings, as well as the exteriors of the buildings at 4265 East Guasti Road. Detailed notations were made regarding the current conditions, integrity levels, physical characteristics, and settings of the resources.

3.4.4 CEQA Thresholds of Significance

According to Appendix G of the 2024 CEQA Guidelines, implementation of the proposed Project may result in a potentially significant impact if it would:

- Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5;
- Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5; and/or
- Disturb any human remains, including those interred outside of formal cemeteries.

3.4.5 Existing Settings

3.4.5.1 **Archaeological Setting**

The proposed Project area is located within the traditional cultural territories of the Gabrielino. Tribal territories were somewhat fluid and changed over time. The first written accounts of the Gabrielino are attributed to the mission fathers, and later to documentation written by Johnston (1962), Blackburn (1962–1963), and Hudson (1971).

The territory of the Gabrielino included portions of Los Angeles, Orange, and San Bernardino counties during ethnohistoric times, and also extended inland into northwestern Riverside County. It encompassed an extremely diverse environment that included coastal beaches, lagoons and marshes, inland river valleys, foothills, and mountains.

3.4.5.2 **Historical Setting**

3.4.5.2.1 City of Rancho Cucamonga

For the bulk of the Spanish and Mexican periods (1769 to 1848) in California history, the entire San Bernardino Valley, including the present-day City of Rancho Cucamonga and City of Ontario areas, was considered part of the land holdings of Mission San Gabriel.

In the 1830s to 1840s, during secularization of the mission system, the Mexican authorities in Alta California made a number of large land grants of former mission properties in the valley. Among them was the Cucamonga Rancho, which was granted to Tiburcio Tapia in 1839 and included the project APE (Beattie and Beattie 1951:143). In the 1880s, a small commercial core sprang up along Archibald Avenue about 2 miles northwest of the proposed Project APE (Snow and McGee 2009). The area was called Cucamonga and was connected to the Santa Fe Railway and North Town (south of Cucamonga) primarily by Archibald Avenue.

With the exceptions of ONT, the small community of Guasti, the railroads, and a few wells, as late as 1966, the proposed Project APE and surrounding area largely remained undeveloped except perhaps as agricultural land (United States Geological Survey [USGS] 1966). By 1972, the only major new development in and around the APE was Ontario Motor Speedway, which was bounded by Milliken Avenue on the east, Interstate 10 on the south, Haven Avenue on the west, and San Bernardino Avenue (now 4th Street) on the north (USGS 1972). In 1977, 59 percent of the people who voted approved combining the three communities of Cucamonga, Etiwanda, and Alta Loma. As a result, the City of Rancho Cucamonga officially became a City (*Daily Report* 1981). Since then, the City of Rancho Cucamonga has continued to be one of the fastest-growing cities in the Inland Empire, with the proposed Project site and surrounding area transitioning from agricultural lands to suburban development beginning in the 1980s.

3.4.5.2.2 City of Ontario

The area that became the City of Ontario was part of the Mission San Gabriel holdings during the Spanish Period and the Cucamonga Rancho during the Mexican Period. It was eventually acquired by a group of Los Angeles investors who experimented with a variety of commercial crops before settling on selling 10-acre plots suitable for farming. From the 1870s to the end of World War II (WWII), land in this area was dominated by agriculture, including vineyards, citrus, and other crops, as well as dairy farms.

The Ontario Model Colony was founded in 1882 by Canadian brothers George, William, and Charles Chaffey. The Chaffey brothers set up an irrigation system that channeled water from the canyons of Mount San Antonio (also known as Mt. Baldy) to the tillable land. They set aside 1 square mile for the town site and reserved half of the land for an agricultural college (Chaffey College), selling the rest parcel by parcel. Between 1882 and 1889, several major companies were established, including Armstrong

Nurseries, C.C. Graber Olive Company, and Hotpoint, which became General Electric. The City of Ontario incorporated in 1891 and, by 1910, had a post office, a library, and a busy downtown.

In the 1920s, the largest business was a forerunner of Sunkist Growers, Inc., a subsidiary of the California Fruit Growers Exchange. Sunkist Growers, Inc. remained the City of Ontario's largest employer through the 1950s. By 1957, a third of the local labor force worked in the manufacturing sector at companies including the massive Kaiser Steel plant and Lockheed. Like most of California, the City of Ontario's population soared in the post-WWII period, and most of the citrus groves and vineyards were quickly replaced with residential development, schools, shopping centers, and other suburban amenities. By the late 1950s, the City of Ontario began to expand to accommodate the growing population that more than doubled between 1951 and 1960.

3.4.5.3 Ontario **International Airport**

In 1929, the City of Ontario purchased 30 acres, located 3 miles east of Latimer Field, and began development of a full-fledged airport at the southwestern corner of the current ONT. The post-war years brought an expansion to accommodate increased passenger traffic as well as industry-leading aviation/aerospace companies. Some of the 1950s improvements included: a new two-story terminal (1950), a control tower (1953), a new terminal replacing the original (late 1950s), and runway expansions. In 1957, the City of Ontario set aside 2,000 acres of land adjacent to the airport for the Ontario Planned Industrial Park, located south of East Mission Boulevard (outside of the APE). By 1960, 640 acres of improved land, including paved streets, curbs, sewers, and water, was in place, and a master plan for the industrial park was being developed.

In 1967, ONT became a part of Los Angeles' regional airport system (Los Angeles/ONT n.d.). In the 1970s, the facility added 300 acres and expanded the terminal by 22,500 square feet. In the 1980s, a new runway was built that could accommodate wide-body jets, the airport was transferred from the City of Ontario to the City of Los Angeles, and a new air traffic control tower was built. In the 1990s, a 270-million-dollar terminal expansion project was completed, and a new ground transportation center housing six on-airport car rental brands opened. In the 2000s, the facility continued to expand, although passenger volume dropped from 6.9 million in 2004 to 3.9 million in 2014 (Ibid.). In 2016, the City of Ontario regained control of ONT, ending an almost 50-year partnership (Wilson 2018).

Portions of ONT are included in the proposed Project APE. These areas consist of parking lots, a car rental building, two terminal buildings, and portions of the apron adjacent to the terminals, all of which were built after 1994 (Historicaerials.com var.).

3.4.5.4 **Descriptions of Cultural Resources**

The APE is generally located south of the San Gabriel Mountains in the San Bernardino Valley and the suburban cities of the City of Rancho Cucamonga and the City of Ontario. The APE is characterized by

vacant land, commercial businesses, an airport, and single-family and multi-family residences. Three historic-period-built environment resources were identified and evaluated within the APE. These resources include two railroad segments dating to the 1800s and a commercial complex built in 1969.

3.4.5.4.1 Atchison Topeka and Santa Fe Railroad Segment

The Atchison Topeka and Santa Fe railroad segment is approximately 1,300 feet long (0.25 miles), oriented east-west, and located at the northern end of the APE (36-006847). The alignment dates to the mid-1880s. The segment begins approximately 200 feet west of the Cucamonga Metrolink Station property line and extends east almost to the station's eastern boundary. Within the APE, there are two sets of parallel railroad tracks and a spur. The spur enters the APE from the northwest, joins the northern track for a short distance, and curves northeast before exiting the APE west of the northern platform. The spur appears to have wooden ties, although some ties are either missing or buried by sand. The northern tracks have wooden ties to the point where the spur travels to the northeast. From that point east, along the northern platform, the ties are concrete. East of the northern platform the ties appear to be wood. The southern track has concrete ties. The setting is dominated by development that includes the Cucamonga Metrolink Station and related parking, large light manufacturing buildings, and a substation on the south, as well as large light manufacturing buildings to the north, east, and west beyond the APE. For these reasons, this segment has impaired integrity of feeling, setting, materials, and workmanship and does not convey a strong association with the historic period. This railroad segment was determined to not be in, or eligible for listing in, the California Register or National Register and is not a historical resource pursuant to Section 15064.5 of the CEQA Guidelines.

3.4.5.4.2 4265 East Guasti Road

Research indicates the 4265 East Guasti Road property was developed in 1969 and has since sustained a number of additions and alterations. The property has a completely modern appearance. It includes two large, freestanding pump island canopies (one for semi-trucks and one for passenger vehicles); a one- and two-story, multitenant commercial building occupied primarily by restaurants (Taco Bell, Pizza Hut, and Country Pride); a freestanding truck service building with six bays; a freestanding metal building with four bays; and a very small park-like area at the southeastern corner of the property. The remainder of the property is used for parking. The commercial complex was determined to not be in, or eligible for listing in, the California Register or National Register and is not a historical resource pursuant to Section 15064.5 of the CEQA Guidelines.

3.4.5.4.3 Southern Pacific Railroad Segment

This approximately 3.25-mile-long railroad segment is oriented east-west and is located near the southern end of the APE (36-010330). The alignment dates back to circa 1880. It extends roughly from Hellman Road (south of the tracks) to the east, adjacent to Interstate 15 (I-15). Beginning at the western

end of the APE, one set of tracks with concrete ties present. Just past Archibald Avenue, the tracks split to the south; from that point heading east, there are two sets of parallel tracks until the southern tracks join the northern tracks near the East Guasti Road cul-de-sac. From this point, there is an approximately 1.15-mile-long segment that is part of a modern grade separation over Milliken Avenue and other streets. This segment is flanked by concrete walls, and the tracks are not visible from ground level. However, based on aerial photographs, this segment has a single track with concrete ties and short spurs at the western and eastern ends. The railroad segment has compromised integrity, primarily because of its modern grade separation and concrete ties. In addition, the setting is now dominated by modern development. The setting includes I-15, numerous commercial and manufacturing buildings, restaurants, a truck stop, ONT, Cucamonga Channel, and a few undeveloped parcels. All of these structures have impaired the integrity of feeling, setting, materials, design, workmanship and, to some extent, location. The segment does not convey a strong association with the historic period. This railroad segment was determined to not be on, or eligible for, listing in the California Register or National Register and is not a historical resource pursuant to Section 15064.6 of the 2024 CEQA Guidelines.

3.4.6 Impact Evaluation

3.4.6.1 Would the project c**ause a substantial adverse change in the significance of a historical** resource pursuant to **Section** 15064.5?

3.4.6.1.1 No Project Alternative

Under the No Build Alternative, there would be no action, and the improvements associated with the proposed Project would not be constructed. There are no resources evaluated in the APE that qualify as "historical resources" pursuant to CEQA. Therefore, the No Project Alternative would result in a less than significant impact to historical resources.

3.4.6.1.2 Proposed Project

3.4.6.1.2.1 Construction Impacts

The proposed Project would include the construction of a tunnel, vent shaft, stations, and maintenance and storage facility. Indirect impacts include ground-borne vibration associated with ground disruption and tunnel construction. The ground-borne vibration associated with boring for the tunnel is anticipated to be detectable to fragile buildings at a maximum of 80 feet from the tunneling activities. As none of the resources evaluated in the APE qualify as "historical resources" pursuant to CEQA, the proposed Project would result in a less than significant impact regarding historical resources pursuant to Section 15064.5 during construction.

3.4.6.1.2.2 Operational Impacts

None of the cultural resources that were evaluated as part of the proposed Project area appear eligible for listing in the National Register or California Register, and none is a historical resource as defined by

CEQA. In addition, due to the use of smaller, rubber-tired vehicles in the stations and tunnels, operation of the proposed Project is not anticipated to generate a level of vibration that would impact any potential historical resources pursuant to Section 15064.5. Therefore, operation of the proposed Project would not cause a substantial adverse change in the significance of a historical resource, and no impact would occur.

3.4.6.2 **Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to Section** 15064.5?

3.4.6.2.1 No Project Alternative

Under the No Project Alternative, there would be no action, and the improvements associated with the proposed Project would not be constructed. The No Project Alternative includes planned construction and operation associated with expansion, improvement, and routine maintenance activities for the existing roadway system and transit facilities. The No Project Alternative area is a built environment and, while no archaeological resources are anticipated, the potential exists that construction and operation activities could impact previously unrecorded archaeological resources. If previously unrecorded archaeological resources are present, that could represent a potential impact to cultural resources. However, the No Project Alternative would be subject to project- and site-specific evaluation of archaeological resources, and mitigation would be required to reduce any potential impacts. Adherence to existing regulations would ensure that the impact to archaeological resources is less than significant.

3.4.6.2.2 Proposed Project

3.4.6.2.2.1 Construction Impacts

On September 16, 2022, the APE was surveyed for archaeological resources. The majority of the survey area is a built environment (paved/developed, surveyed from a vehicle), except for the easement at the northern end adjacent to the western side of Cucamonga Metrolink Station and a small section along East Airport Drive. While no archaeological resources were identified during the field survey, the potential exists that construction would impact previously unrecorded archaeological resources and could represent a potential impact to cultural resources. In order to reduce impacts related to the potential for encountering undocumented archaeological resources within the proposed Project area, MM-CLT-1 would require that a Registered Archaeologist /Registered Professional Archaeologist conduct periodic monitoring of excavation activities. With adherence to existing regulations and implementation of MM-CLT-1, the proposed Project would result in a less than significant impact with mitigation incorporated related to the discovery of unrecorded archaeological resources during construction.

3.4.6.2.2.2 Operational Impacts

No archaeological resources were identified during the field survey. Operational activities associated with the proposed Project would not involve ground disturbance that could potentially impact archaeological

resources. With adherence to existing regulations, the proposed Project during operation would result in a less than significant impact related to the discovery of unrecorded archaeological resources.

3.4.6.3 Would the project disturb any human remains, including those interred outside of formal cemeteries?

3.4.6.3.1 No Project Alternative

The No Project Alternative includes planned construction associated with expansion, improvement, and routine maintenance activities for the existing roadway system and transit facilities. During the construction of the No Project Alternative, there is potential for the discovery of human remains from ground-disturbing activities. Human burials, in addition to being potential archaeological resources, have specific provisions for treatment in Section 5097 of the California PRC. The No Project Alternative area is not known to have burial grounds, graveyards, or dedicated cemeteries. With adherence to existing regulations, the No Project Alternative would have a less than significant impact to human remains.

3.4.6.3.2 Proposed Project

3.4.6.3.2.1 Construction Impacts

During the proposed Project construction, there is potential for the discovery of human remains from ground-disturbing activities. Human burials, in addition to being potential archaeological resources, have specific provisions for treatment in Section 5097 of the California PRC. Disturbing human remains could violate the Health Code and cities' policies, as well as destroy the resource. The proposed Project area is not known to have burial grounds, graveyards, or dedicated cemeteries. However, there could be a potential significant impact if previously unknown human remains are discovered from ground-disturbing activities during construction. MM-CLT-2 would include provisional measures if human remains are discovered on the proposed Project site. Adherence to existing regulations and implementation of MM-CLT-2 would ensure that impacts remain less than significant during construction through appropriate examination, treatment, and protection of human remains.

3.4.6.3.2.2 Operational Impacts

Potential discovery of human remains would be limited to the proposed Project construction because no ground-disturbing activities are anticipated during operation activities. In addition, the proposed Project area is not known to have burial grounds, graveyards, or dedicated cemeteries. Adherence to existing regulations would ensure that the proposed Project during operation would have no impact to human remains.

3.4.7 Mitigation Measures

The following mitigation measures would be implemented for the proposed Project.

MM-CLT-1 During project construction, limited archaeological monitoring (periodic spot-checks) of excavation activities between the east and west ends of East Terminal Way shall be conducted by a Registered Archaeologist/Registered Professional Archaeologist. In the event previously undocumented archaeological resources are identified during earthmoving activities, all work in the immediate vicinity of the find (within a 60-foot buffer) shall cease until the nature and significance of the find can be assessed by the consulting tribes and/or by a Registered Archaeologist/Registered Professional Archaeologist meeting Secretary of Interior standards. Work on the other portions of the project outside of the buffered area may continue during this assessment period. Additionally, the appropriate Native American tribal groups shall be contacted regarding any pre-contact and/or historic era finds and be provided information after the archaeologist makes his/her initial assessment of the nature of the find, so as to provide Tribal input with regards to significance and treatment. If significant pre-contact and/or historic-era cultural resources, as defined by CEQA (as amended, 2015), are discovered and avoidance cannot be ensured, the archaeologist shall develop a Monitoring and Treatment Plan, the drafts of which shall be provided to appropriate Native American tribal groups for review and comment. The archaeologist shall monitor the remainder of the Project and implement the Plan accordingly.

MM-CLT-2 If human remains or funerary objects are encountered during any activities associated with the project, work in the immediate vicinity (within a 100-foot buffer of the find) shall cease and the County Coroner shall be contacted pursuant to State Health and Safety Code §7050.5 and that code enforced for the duration of the project. No further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to California Public Resources Code Section 5097.98. The County Coroner shall be notified of the find immediately. If the remains are determined to be Native American, the County Coroner shall notify the Native American Heritage Commission, which will determine and notify a Most Likely Descendant. With the permission of the landowner or his/her authorized representative, the Most Likely Descendant may inspect the site of the discovery. The Most Likely Descendant shall complete the inspection and make recommendations or preferences for treatment within 48 hours of being granted access to the site.

No mitigation measures are required to reduce the proposed Project impacts during operation of the proposed Project.

3.4.8 Impacts After Mitigation

3.4.8.1 **Would the project cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?**

No mitigation measure would be required, and the proposed Project would have a less than significant impact.

3.4.8.2 **Would the project cause a substantial adverse change in the** signi**fi**cance of an archaeological **resource pursuant to Section** 15064.5?

During construction, with adherence to existing regulations and implementation of MM-CLT-1, the proposed Project would have a less than significant impact. No mitigation measure would be required for operation, and the proposed Project would have a less than significant impact.

3.4.8.3 Would the project disturb any human remains, including those interred outside of formal cemeteries?

During construction, with adherence to existing regulations and implementation of MM-CLT-2, the proposed Project would have a less than significant impact. No mitigation measure would be required for operation, and the proposed Project during operation would have no impact.

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3.5 ENERGY

3.5.1 Introduction

This section of this Draft Environmental Impact Report (EIR) provides a summary of the evaluation of the impacts to energy resources resulting from the implementation of the proposed Ontario International Airport (ONT) Connector Project (Project). Detailed information for energy resources (electricity, natural gas, petroleum fuels, coal, and renewables) is included in the Energy Technical Report (SBCTA 2024a; Appendix I).

3.5.2 Regulatory Framework

3.5.2.1 Federal

3.5.2.1.1 Energy Policy and Conservation Act of 1975 and Corporate Average Fuel Standards

Energy Policy and Conservation Act of 1975 (EPCA) was enacted to increase energy production and supply, reduce energy demand, and provide energy efficiency. EPCA assigned the executive branch additional powers to respond to disruptions in energy supply and established the Strategic Petroleum Reserve, Energy Conservation Program for Consumer Products, and Corporate Average Fuel Economy (CAFE) regulations. EPCA also established fuel economy standards for on-road motor vehicles sold in the United States (U.S.). Compliance with federal fuel economy standards is determined through the Corporate Average Fuel Economy (I) program on the basis of each manufacturer's average fuel economy for the portion of its vehicles produced for sale in the U.S.

3.5.2.1.2 Infrastructure Investment and Jobs Act

The Infrastructure Investment and Jobs Act (IIJA), also known as the Bipartisan Infrastructure Law, (H.R. 3684) was signed into law on November 15, 2021. The law includes $73 billion to overhaul the energy policy of the United States, $105 billion for public transport, $110 billion for fixing roads and bridges and includes measures for climate change mitigation and improving access for cyclists and pedestrians. The law also includes $21 billion for environmental projects, $15 billion for electric vehicles, and $4.7 billion to cap orphan wells abandoned by oil and gas companies.

3.5.2.1.3 Energy Independence and Security Act of 2007

Energy Independence and Security Act of 2007 aims to move the U.S. toward greater energy independence and security; increase the production of clean renewable fuels; protect consumers; increase the efficiency of products, buildings and vehicles; promote greenhouse gas (GHG) research; improve the energy efficiency of the federal government; and improve vehicle fuel economy.

3.5.2.1.4 Energy Policy Act of 2005

Energy Policy Act of 2005 seeks to reduce reliance on nonrenewable energy resources and provide incentives to reduce current demand on these resources. For example, under this Act, consumers and businesses can obtain federal tax credits for purchasing fuel-efficient appliances and products (including hybrid vehicles), building energy-efficient buildings, and improving the energy efficiency of commercial buildings. Additionally, tax credits are available for the installation of qualified fuel cells, stationary microturbine power plants, and solar power equipment.

3.5.2.1.5 Corporate Average Fuel Economy

CAFE standards are federal regulations that are set to reduce energy consumed by on-road motor vehicles. National Highway Traffic Safety Administration (NHTSA) regulates the standards, and U.S. Environmental Protection Agency (USEPA) measures vehicle fuel efficiency. The standards specify minimum fuel consumption efficiency standards for new automobiles sold in the U.S. On March 31, 2022, NHTSA finalized CAFE standards for model years 2024–2026 that require an industry-wide fleet average of approximately 49 miles per gallon for passenger cars and light trucks in model year 2026, by increasing fuel efficiency by 8 percent (%) annually for model years 2024 and 2025 and 10% annually for model year 2026. Figure 3.5-1 (NHTSA CAFE Standards Over Time) shows the CAFE standards from 2020 through 2035.

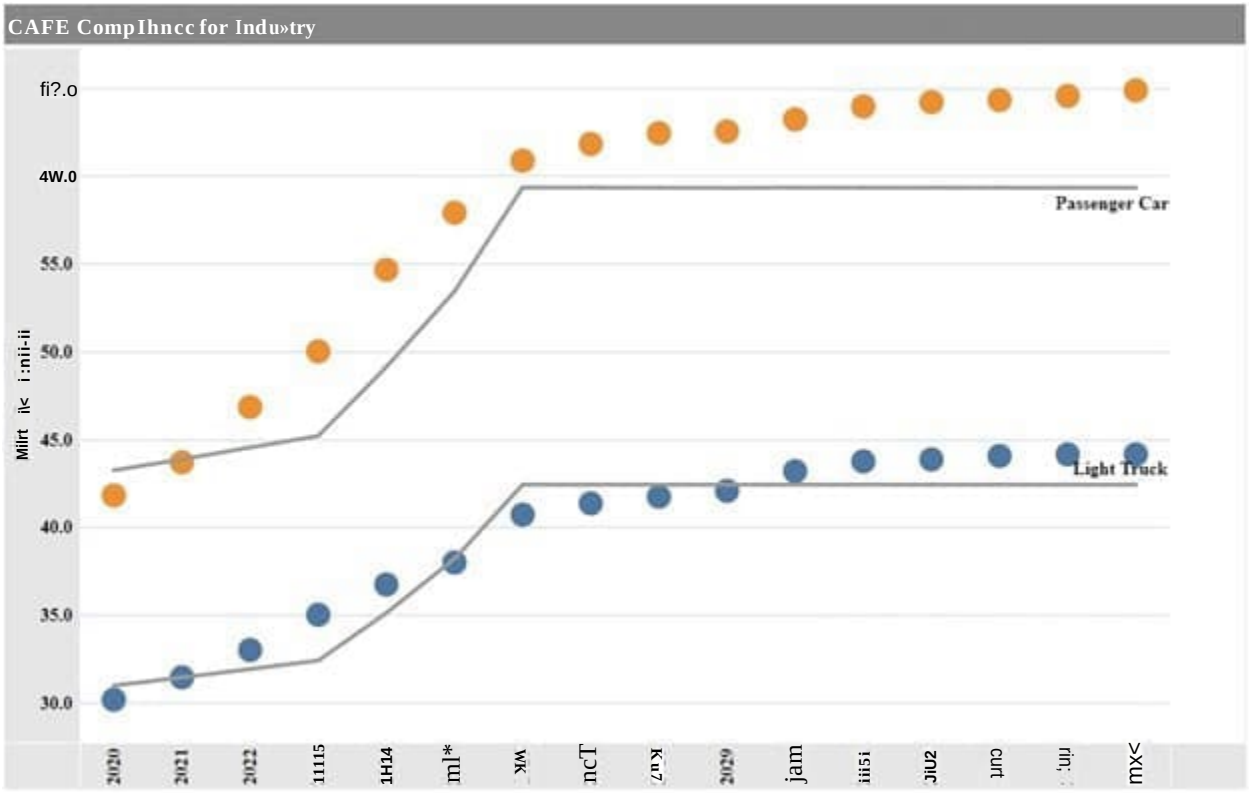
3.5.2.1.6 Intermodal Surface Transportation Efficiency Act of 1991

Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) promoted the development of intermodal transportation systems to maximize mobility as well as address national and local interests in air quality and energy. ISTEA contained factors that Metropolitan Planning Organizations (MPOs) were to address in developing transportation plans and programs, including some energy-related factors. To meet the new ISTEA requirements, MPOs adopted explicit policies defining the social, economic, energy, and environmental values guiding transportation decisions.

3.5.2.1.7 Transportation Equity Act for the 21st Century

Transportation Equity Act for the 21st Century (TEA-21) was signed into law in 1998 and builds upon the initiatives established in the ISTEA legislation. TEA-21 authorizes highway, highway safety, transit, and other efficient surface transportation programs. TEA-21 continues the program structure established for highways and transit under ISTEA, such as flexibility in the use of funds, emphasis on measures to improve the environment, and focus on a strong planning process as the foundation of good transportation decisions. TEA-21 also provides for investment in research and its application to maximize the performance of the transportation system through, for example, deployment of Intelligent Transportation Systems, to help improve operations and management of transportation systems and vehicle safety.

Figure 3.5-1: NHTSA CAFE Standards Over Time



Source: NHSTA 2023

3.5.2.2 State

3.5.2.2.1 California Environmental Quality Act (Section 21000 et seq.) and Guidelines (Section 15000 et seq.)

California Environmental Quality Act (CEQA; California Public Resources Code Section 21000 et seq.), and the CEQA Guidelines (California Code of Regulations [CCR] Section 15000 et seq.) require state and local agencies to identify the significant environmental impacts of their actions, including potential significant energy impacts, and to avoid or mitigate those impacts when feasible.

The CEQA Guidelines, Appendix F, Energy Conservation, state that EIRs are required to include a discussion of the potential energy impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy.

3.5.2.2.2 California Energy Commission

California Energy Commission (CEC) is the state's primary energy policy and planning agency, and it plays a critical role creating a clean and modern energy system. Senate Bill (SB) 1389 (Chapter 568, Statutes of 2002) requires the CEC to prepare an Integrated Energy Policy Report (IEPR) biennially at a minimum. The

report should include a description of the international energy market prospects and an evaluation of its export promotion activities.

3.5.2.2.3 Executive Order S-3-05

Executive Order (EO) S-3-05, enacted in June 2005, sets a target to reduce 2050 GHG emissions to 80% below 1990 levels. Reducing GHG emission would have an associated reduction in energy use.

3.5.2.2.4 Assembly Bill 32, California Global Warming Solutions Act of 2006

Assembly Bill (AB) 32 (California Global Warming Solutions Act of 2006) required California Air Resources Board (CARB) to adopt limits for the statewide GHG emissions to be equivalent to the statewide GHG emissions levels in 1990 by 2020. The Scoping Plan was first approved by CARB in 2008 and is updated at least every 5 years. The 2017 Scoping Plan identified how the state can reach the 2030 climate target to reduce GHG emissions by 40% from 1990 levels and also plans to advance toward the 2050 climate goal to reduce GHG emissions by 80% below 1990 levels. The 2022 Scoping Plan identified how the state can build upon the 2017 Scoping Plan goals by reducing anthropogenic emissions to 85% below 1990 levels by 2045.

3.5.2.2.5 Assembly Bill 2076, Reducing Dependence on Petroleum

AB 2076 (Shelley, Chapter 936, Statutes of 2000), passed in 2000, directs CARB and CEC to develop and adopt recommendations for California's Governor and Legislature on a strategy to reduce California's dependence on petroleum.

3.5.2.2.6 State of California Integrated Energy Policy

In 2002, the State Legislature passed SB 1389, which required CEC to develop an integrated energy plan every 2 years for electricity, natural gas, and transportation fuels for the IEPR. The plan calls for the State to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the least environmental and energy costs. To further this policy, the plan identifies a number of strategies, including assistance to public agencies and fleet operators in implementing incentive programs for zero-emission (ZE) vehicles and their infrastructure needs, and encouragement of urban designs that reduce vehicle miles traveled (VMT) and accommodate pedestrian and bicycle access.

CEC adopted the 2021 IEPR on February 16, 2022. The 2021 IEPR addresses the following four major topics and includes an analysis of the benefits of transitioning to a clean transportation system (CEC 2021):

1. Energy reliability over the next 5 years;
2. Natural gas outlook and assessments;
3. Building decarbonization and energy efficiency; and
4. Energy demand.

To this end, the 2021 IEPR has four volumes and an appendix consisting of: (1) a report on actions needed to reduce the GHGs related to buildings in which Californians live and work, with an emphasis on energy efficiency, and reducing GHGs from the industrial and agricultural sectors; (2) a report on actions needed to increase the reliability and resiliency of California's energy system; (3) an assessment of the evolving role of gas in California's energy system (both the importance of near-term reliability and the need for the system to evolve as California works to achieve carbon neutrality by 2045); (4) an assessment of California's energy demand outlook, including a forecast to 2035 and long-term energy demand scenarios to 2050; and (5) an evaluation of the benefits of California's Clean Transportation Program (CEC 2022).

3.5.2.2.7 Executive Order B-16-12

EO B-16-12 (March 2012) requires state entities under the direction of the Governor, including CARB, CEC, and California Public Utilities Commission, to support the rapid commercialization of ZE vehicles. It directs these entities to achieve various benchmarks related to ZE vehicles.

3.5.2.3 Regional

3.5.2.3.1 Southern California Association of Governments

Southern California Association of Governments (SCAG) is a metropolitan planning organization representing six counties (including San Bernardino County) and 191 cities (including the City of Rancho Cucamonga and the City of Ontario). SCAG's regional council adopted Connect SoCal (the 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy [RTP/SCS]), and the addendum to the Connect SoCal Program EIR on September 3, 2020 (SCAG 2020). The 2020 RTP/SCS is a state- and federally required long-range plan for regional transportation and land use that aims to achieve a more sustainable growth pattern and includes Transportation Demand Management strategies throughout the region to reduce the number of drive-alone trips and overall VMT. Amendment Number (No.) 1 to the 2020 RTP/SCS was approved by SCAG Regional Council on November 4, 2021, and Amendment No. 2 was approved by SCAG Regional Council on October 6, 2022. Amendment No. 1 included the 2021 Federal Transportation Improvement Program (FTIP) Consistency Amendment No. 21-05. Amendment No. 2 serves as a concurrent amendment to the 2023 FTIP, allowing for changes to major state and transit projects in the 2020 RTP/SCS and in the FTIP that will be carried forward as part of the 2023 FTIP.

3.5.2.4 Local

3.5.2.4.1 San Bernardino County Regional Greenhouse Gas Reduction Plan

As part of the San Bernardino County Regional Greenhouse Gas Reduction Plan, San Bernardino Council of Governments (SBCOG) compiled an evaluation of GHG emissions reduction measures that could be adopted by the 25 Partnership Cities of San Bernardino County (SBCOG 2021). The City of Rancho Cucamonga and the City of Ontario are part of the Partnership Cities.

The City of Rancho Cucamonga set a goal to reduce its community GHG emissions to a level that is 40% below its 2016 GHG emissions level by 2030. The City of Rancho Cucamonga will meet and exceed this goal subject to reduction measures that are technologically feasible and cost-effective through a combination of state (approximately 75%) and local (approximately 25%) efforts. The Pavley vehicle standards, the state's low carbon fuel standard, the Renewable Portfolio Standards, and other state measures will reduce GHG emissions in the City of Rancho Cucamonga's on-road and building energy sectors in 2030. An additional reduction of 156,417 metric tons of carbon dioxide equivalent will be achieved primarily through the following local measures, in order of reductions achieved: Solar Installation for Existing Commercial/Industrial (Energy-8); Waste Diversion and Reduction (Waste-2); and Encouraged Use of Mass Transit (OnRoad-2). The City of Rancho Cucamonga's reduction plan has the greatest impacts on GHG emissions in the building energy, waste, and on-road transportation sectors. Using the reduction tools in the San Bernardino County Regional Greenhouse Gas Reduction Plan, the City of Ontario identified similar measures to those measures that form the Climate Action Plan (CAP).

3.5.2.4.2 City of Rancho Cucamonga General Plan

The City of Rancho Cucamonga General Plan, Resource Conservation Element, sets forth goals and policies that provide direction regarding preserving, protecting, conserving, reusing, replenishing, and efficiently using the City of Rancho Cucamonga's limited natural resources (City of Rancho Cucamonga 2021). A brief summary of applicable goal and policies is provided as follows:

- Goal RC-7 encourages an energy-efficient community that relies primarily on renewable and nonpolluting energy sources.
    - Policy RC-7.2 requires charging stations or wiring for them for new developments.
    - Policy RC-7.7 encourages sustainable building and site.
    - Policy RC-7.9 requires energy-efficient building and site design strategies for new developments.
    - Policy RC-7.10 promotes alternative energy generation (e.g., solar, wind, biomass) in public and private development.
    - Policy RC-7.12 addresses and discourages new development and renovations that impair adjacent buildings' solar access.
    - Policy RC-7.15 addresses the transmission, storage, and generation of electricity.

3.5.2.4.3 City of Ontario General Plan

The City of Ontario's General Plan, Environmental Resources Element, includes Goal ER 3 that focuses on creating a cost-effective and reliable energy system sustained through low-impact construction, site and neighborhood energy conservation, and diverse sources of energy generation that collectively help to

minimize the region's carbon footprint (City of Ontario 2022a). A brief summary of applicable goal and policies are provided as follows:

- Goal ER3 addresses cost-effective and reliable energy systems.
    - Policy ER3-1 addresses conservation related to energy-saving standards.
    - Policy ER3-3 addresses energy efficient building and site design for new construction.
    - Policy ER3-5 encourages the purchasing and use of energy efficient vehicles and equipment.
    - Policy ER3-6: promotes the use of renewable energy sources.

3.5.3 Methodology

The energy impacts analysis considers direct energy consumption and indirect energy consumption. Direct energy consumption includes the consumption from operation and construction; indirect energy consumption includes the consumption from maintenance associated with the proposed Project.

The estimate of construction-related energy use was calculated by applying the USEPA-derived carbon dioxide (CO_2) emissions per gallon of fuel to the total CO_2 emissions estimated using the OFFROAD 2021 and Emission FACtors Model (EMFAC) 2021 data documented in the Air Quality Technical Report in (SBCTA 2024b; Appendix C), which includes details on construction equipment and activity assumptions. CO_2 emissions were then converted to million British thermal units (BTUs) using energy unit conversion factors.

The proposed Project provides transit ridership and would not increase roadway capacity. The operations of the electrically powered shuttles, stations, ventilation shaft (vent shaft), tunnel, and maintenance and storage facility (MSF) would consume energy (both electricity and natural gas). Energy consumption estimates for the proposed Project have been estimated using the California Emissions Estimator Model, equipment specifications, and proposed Project plans.

3.5.4 CEQA Thresholds of Significance

According to Appendix G of the 2024 CEQA Guidelines, implementation of the proposed Project may result in a potentially significant impact if it would:

- Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation; and/or
- Conflict with or obstruct a state of local plan for renewable energy or energy efficiency.

3.5.5 Existing Setting

The existing setting for the proposed Project is the energy current consumed in the proposed Project area for the construction of public and private projects; operation of automobiles, trucks, and marine vessels;

and operation of existing land uses. Automobile and truck fueling stations are located throughout the proposed Project area.

The goal of conserving energy implies the wise and efficient use of energy. Achieving this goal would include:

- Decreasing overall per-capita energy consumption,
- Decreasing reliance on natural gas and oil, and
- Increasing reliance on renewable energy sources.

3.5.5.1 Identification of Study Area

The proposed Project would include an underground bi-directional tunnel for direct connection between Cucamonga Metrolink Station and ONT. As such, the proposed Project is estimated to have minimal effect on adjacent surface transportation and roadway systems, excluding the two termini of the proposed Project. Therefore, the Study Area referenced for impacts related to energy resources extends north from Airport Drive to Arrow Route and east from Grove Avenue to Interstate 15.

3.5.5.1.1 Energy Resources and Consumption

California is rich in conventional and renewable energy resources. It has large crude oil and substantial natural gas deposits in six geological basins located in the Central Valley and along the Pacific Coast. Most of those resources are concentrated in the southern San Joaquin Basin. More than a dozen of the nation's 100 largest oil fields are in California, including the Belridge South oil field, the second-largest oil field in the contiguous U.S. In addition, federal assessments indicate that large undiscovered deposits of recoverable oil and gas lie offshore in the federally administered Outer Continental Shelf, although federal law currently prohibits oil and gas leasing in that area. California's renewable energy potential is extensive. The state's hydroelectric power potential ranks second in the nation (behind Washington State), and substantial geothermal and wind power resources are along the coastal mountain ranges and the eastern border with Nevada. Southeastern California's sunny deserts have high solar-energy potential.

California is the most populous state in the nation, and its total energy demand is second only to Texas. Although California is a leader in the energy-intensive chemical, forest products, glass, and petroleum industries, the state has one of the lowest per-capita energy consumption rates in the country (U.S. Energy Information Administration [EIA] 2022). The California government's energy-efficiency programs have contributed to low per-capita energy consumption. Driven by high demand from California's many motorists, major airports, and military bases, the transportation sector is the state's largest energy consumer. More motor vehicles are registered in California than in any other state, and worker commute times are among the longest in the country.

3.5.5.1.2 Petroleum

California is one of the top producers of crude oil in the nation, with output accounting for more than one-tenth of the U.S.'s total production. Drilling operations are concentrated primarily in Kern County and the Los Angeles Basin, although substantial production also takes place offshore in both state and federal waters. Concerns regarding the cumulative impacts of offshore oil and gas development, combined with a number of major marine oil spills throughout the world in recent years, have led to a permanent moratorium on offshore oil and gas leasing in California waters and a deferral of leasing in federal waters. However, development on existing state and federal leases is unaffected and may still occur within offshore areas leased prior to the effective date of the moratorium.

A network of crude oil pipelines connects production areas to refining centers in the Los Angeles area, San Francisco Bay area, and Central Valley. California refineries also process large volumes of Alaskan and foreign crude oil received at ports in Los Angeles, Long Beach, and the Bay Area. Crude oil production in California and Alaska is declining, and California refineries have become increasingly dependent on foreign imports. Led by Saudi Arabia and Ecuador, foreign suppliers now provide more than two-fifths of the crude oil refined in California; however, California's dependence on foreign oil remains less than the national average.

California ranks third in the U.S. in petroleum-refining capacity and accounts for more than one-tenth of the U.S.'s total capacity. California's largest refineries are highly sophisticated; they are capable of processing a wide variety of crude oil types and are designed to yield a high percentage of light products like motor gasoline. To meet strict federal and state environmental regulations, California refineries are configured to produce cleaner fuels, including reformulated motor gasoline and low-sulfur diesel. Most California motorists are required to use a special motor gasoline blend called California Clean Burning Gasoline. In the ozone non-attainment areas of Imperial County and the Los Angeles metropolitan area, motorists are required to use California Oxygenated Clean Burning Gasoline, and the Los Angeles area is also required to use oxygenated motor gasoline during the winter months. By 2004, California completed a transition from methyl tertiary butyl-ether to ethanol as a gasoline oxygenate additive, making California the largest ethanol fuel market in the U.S. Four ethanol production plants are located in central and southern California, but most of California's ethanol supply is transported by rail from corn-based producers in the Midwest. Some supply is also imported from abroad.

3.5.5.1.3 Natural Gas

California's natural gas production typically accounts for less than 2% of the U.S.'s total annual production and satisfies less than one-fifth of the state's demand. Production takes place in basins located in northern and southern California, as well as offshore in the Pacific Ocean. California receives most of its natural gas by pipeline from production regions in the Rocky Mountains, the Southwest, and western Canada. As with crude oil production, the California natural gas production is in decline. However, the state supply has remained relatively stable due to increasing amounts of natural gas shipped from the Rocky Mountains.

California markets are served by two key natural gas trading centers (the Golden Gate Center in northern California and the California Energy Hub in southern California), and the state has nearly a dozen natural gas storage facilities that help stabilize supply. In part to help meet California's demand for natural gas, several companies have proposed building liquefied natural gas (LNG) import terminals in southern California.

3.5.5.1.4 Coal, Electricity, and Renewables

Natural gas-fired power plants typically account for more than one-half of the state's electricity generation. California is one of the largest hydroelectric power producers in the U.S.; with adequate rainfall, hydroelectric power typically accounts for close to one-fifth of the state's electricity generation. California's two nuclear power plants account for almost one-fifth of the total generation. Due to strict emission laws, only a few small coal-fired power plants operate in California.

California leads the nation in electricity generation from nonhydroelectric renewable energy sources. California generates electricity using wind, geothermal, solar, fuel wood, and municipal solid waste/ landfill gas resources. A facility known as "The Geysers," located in the Mayacamas Mountains north of San Francisco, is the largest complex of geothermal-power plants in the world, with more than 750 megawatts of installed capacity. California has numerous wind farms in five major wind-resource areas, and several new projects are currently under construction. The world's largest solar-power facility operates in California's Mojave Desert. Two southern California utilities are planning to build new solar farms, a 500-megawatt facility in the Mojave Desert and a 300-megawatt plant in the Imperial Valley. These proposed plants would dwarf the existing U.S. solar-power generation capacity. To further boost renewable energy use, California's Energy Action Plan includes incentives that encourage Californians to install solar power systems on their rooftops.

Due to high electricity demand, California imports more electricity than any other state. States in the Pacific Northwest deliver power to California markets primarily from hydroelectric sources, while states in the Desert Southwest deliver power primarily from coal- and natural gas-fired sources. Hydroelectric power comes to California primarily through the western U.S. interconnection, which runs from northern Oregon to southern California. The system, also known as the Pacific Intertie, is the largest single electricity transmission program in the U.S. Although the system was originally designed to transmit electricity south during California's peak summer demand season, flow is sometimes reversed overnight and has occasionally been reversed during periods of reduced hydroelectric generation in the Northwest. California restricts the use of coal-fired generation within its boundaries; however, Los Angeles Department of Water and Power (LADWP) operates the coal-fired Intermountain Power Plant in Utah, which delivers three-fourths of its output to LADWP and other California municipal utilities. A recent California law forbids utilities from entering into long-term contracts with conventional coal-fired power producers. Intermountain Power Plant's existing contracts with southern California cities are set to expire in 2027.

In 2000 and 2001, California suffered an energy crisis, characterized by electricity price instability and four major blackouts, that was caused by a supply-and-demand imbalance. Multiple factors contributed to this imbalance, including: a heavy dependence on out-of-state electricity providers, drought conditions in the Pacific Northwest that reduced hydroelectric power generation, a rupture on a major natural-gas pipeline supplying California power plants, strong economic growth leading to increased electricity demand in the western states, an increase in unplanned power plant outages, and unusually high temperatures that increased electricity demand for air conditioning and other cooling uses. Following the energy crisis, the California state government created an Energy Action Plan designed to eliminate outages and excessive price spikes. To achieve these goals, the plan calls for optimizing energy conservation, building sufficient new generation facilities, upgrading and expanding the electricity transmission and distribution infrastructure, and ensuring that generation facilities can quickly come online when needed.

3.5.5.2 **Energy Consumption in California/**San Bernardino County

The following statistics have been provided by CEC. Statistics are provided through 2021.

3.5.5.2.1 Electricity

Fueled by population growth, the demand for electricity in California is increasing. At the same time, the mandate to decrease GHG emissions is looming. California's electricity mix is generated by natural gas (50.3%), coal (0.2%), large hydro (6.2%), nuclear (8.5%), and renewable (33.4%). San Bernardino County's electrical usage in 2021 is shown in Table 3.5-1 (Annual Electric Consumption in San Bernardino County (2021)), with nonresidential consumers using roughly twice as much electricity in San Bernardino County than residential consumers in 2021.

Table 3.5-1. Annual Electric Consumption in San Bernardino County (2021)

Type of Consumer	Millions of kWh
Residential	5,800
Nonresidential	10,381
Total	16,181

Source: CEC 2022
Note: kWh = kilowatt-hours; unit of power equal to 1,000 watts of electricity consumed in 1 hour

California was the fourth-largest electricity producer in the nation and accounted for about 5% of the U.S.'s utility-scale (1-megawatt and larger) electricity net generation in 2021. Renewable energy resources, including hydropower and small-scale (less than 1-megawatt), customer-sited solar photovoltaic systems supplied nearly half of California's total in-state electricity generation despite a decline in hydroelectric generation caused by drought. Natural gas-fired power plants also provided more than two-fifths of the state's total net generation and about half of California's utility-scale generation (EIA 2022).

3.5.5.2.2 Natural Gas Consumption in California/San Bernardino County

Electricity generation is the largest user of natural gas, using about half of all-natural gas in California. The residential sector has 50% of the natural gas consumption in San Bernardino County, as shown in Table 3.5-2 (Natural Gas Consumption in San Bernardino County (2021) in Millions of Therms).

Table 3.5-2. Natural Gas Consumption in San Bernardino County (2021) in Millions of Therms

Land Use	Millions of Therms
Residential	257
Nonresidential	305
Total	562

Source: CEC 2022
Note: Therm = unit of heat containing 100,000 BTUs

3.5.5.2.3 Liquefied Petroleum Gas (Propane)

Liquefied petroleum gas (LPG) is a mixture of gaseous hydrocarbons (mainly propane and butane) that change into liquid form under moderate pressure. LPG (usually called propane) is commonly used as a fuel for rural homes for space and water heating, as a fuel for barbecues and recreational vehicles, and as a transportation fuel. It is normally created as a byproduct of petroleum refining and from natural gas production.

LPG is generally an unregulated fuel in California (except for storage and safety issues, which are regulated). Because it is an unregulated commodity, the state does not collect data on LPG sales or usage. As such, statistics are unavailable for LPG as a fuel for rural homes, for space and water heating, or for barbecues.

3.5.5.2.4 Traditional Transportation Fuels (Fossil Fuels)

Fossil fuels are energy resources that come from the remains of plants and animals that are millions of years old. The three fossil fuels (petroleum oil, natural gas, and coal) are overwhelmingly responsible for providing the energy that powers most lifestyles and economy and fuels transportation systems. They are the bedrock for the U.S.'s energy mix, but they are a limited resource. Once they are gone, they can no longer be part of the U.S.'s energy mix.

Fossil fuels' issue, in addition to their unsustainability, is their negative environmental impact. The burning of fossil fuels is responsible for emissions that contribute to global climate change, acid rain, ozone problems, and unhealthy air. As such, the development of alternatives to traditional transportation fuels is a priority.

3.5.5.2.5 Alternatives to Traditional Transportation Fuels

Alternatives to traditional transportation fuels are being developed and introduced into the consumer marketplace. Alternative fuels in use in the U.S., based on the most recent data available from 2017 (EIA 2017), are:

- Compressed natural gas (CNG),
- Electricity,
- Ethanol, 85% (E85),
- Hydrogen,
- LNG, and
- LPG.

Information on alternatively fueled transportation was prepared by EIA, the independent statistical and analytical agency within U.S. Department of Energy. Each year, EIA collects data on the number of alternative fuel vehicles (AFVs) supplied, and for a limited set of fleet user groups, the number of AFVs in use and the amount of alternative transportation fuel consumed. The user groups surveyed are federal and state governments, alternative fuel providers, and transit companies.

An estimated 436,921 and 42,460 AFVs were in use in the U.S. and California, respectively, during 2017 (the most recent data available), as shown in Table 3.5-3 (Alternative Fuel Vehicles in Use by Fuel Type in 2017).

Table 3.5-3. Alternative Fuel Vehicles in Use by Fuel Type in 2017

Fuel Type	U.S.	California
CNG	25,969	8,474
Electricity	10,574	3,014
E85	393,553	29,705
Hydrogen	59	52
LNG	383	252
LPG	6,383	963
Total	436,921	42,460

Source: EIA 2017

The estimated consumption of alternative fuels (in thousand gasoline-equivalent gallons) in California during 2017 is shown in Table 3.5-4 (Estimated Consumption of Alternative Fuels in California by Fuel Type in 2017 [thousand gasoline-equivalent gallons]).

Table 3.5-4. Estimated Consumption of Alternative Fuels in California by Fuel Type in 2017 (thousand gasoline-equivalent gallons)

CNG	Electricity	E85	Hydrogen	LNG	LPG	Total
73,354	266	1,485	123	2,152	1,233	78,613

Source: EIA 2017

3.5.6 Impact Evaluation

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

3.5.6.1.1 No Project Alternative

The No Project Alternative includes planned expansion, improvement projects, and routine maintenance activities for the existing roadway system and transit facilities. These projects under the No Project Alternative are not anticipated to have potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources. With compliance with applicable design guidelines and policies, San Bernardino Regional Greenhouse Gas Plan, and the City of Rancho Cucamonga's and the City of Ontario's General Plans, the No Project Alternative would not result in wasteful, inefficient, or necessary consumption of energy sources and would result in no impact.

3.5.6.1.2 Proposed Project

3.5.6.1.2.1 Construction Impacts

Estimates of fuel consumption (diesel fuel and gasoline) from construction equipment, construction trucks, and construction worker vehicles were based on default construction equipment assumptions and trip estimates from the California Emissions Estimator Model (CalEEMod) and fuel efficiencies from EMFAC2021 and OFFROAD2021. Fuel consumption estimates are shown in Table 3.5-5.

Table 3.5-5. Proposed Project Energy Consumption Estimates During Construction

Energy Type	Total Energy Consumption	Annual Percentage Increase Countywide
Electricity (kWh)	225,000	<0.01%
Gasoline Fuel (total gallons)	208,307	0.01 %
Diesel (total gallons)	2,601,770	0.20 %

Source: SBCTA 2024a

As indicated in Table 3.5-5, over the entire 4-year construction process, the proposed Project would use approximately 225,000 kWh of electricity and consume approximately 2,601,770 gallons of diesel fuel and approximately 208,307 gallons of gasoline. In 2021, approximately 16,767,235,877 kWh were consumed in San Bernardino County. Therefore, construction of the proposed Project would increase the annual electricity consumption in San Bernardino County by less than 0.01%. As such, construction of the proposed Project would have a negligible effect on local, regional, and State electricity production.

Based on fuel consumption obtained from EMFAC2021, approximately 915.5 million gallons of gasoline and approximately 321.6 million gallons of diesel fuel were consumed from vehicles operating in San Bernardino County in 2022. Therefore, construction of the proposed Project would increase the annual fuel use in San Bernardino County by approximately 0.81% for diesel fuel usage and by approximately 0.02% for gasoline fuel usage. As such, proposed Project construction would have a negligible effect on local, regional, and State energy supplies. The proposed Project would be required to comply with CARB's Airborne Toxics Control Measure, which restricts heavy-duty diesel vehicle idling time to 5 minutes; CARB's Truck and Bus Regulation; and federal fuel efficiency requirements, which would minimize fuel consumption. Therefore, because petroleum use during construction would be temporary and relatively minimal in comparison to overall usage, it would not be wasteful or inefficient.

In addition, the CalEEMod output for energy consumption incorporates proposed Project compliance with CCR Title 13, Section 2449, and with California Department of Resources Recycling and Recovery (CalRecycle) Sustainable (Green) Building Program regulations, which include implementation of standard control measures and Best Available Control Measures for equipment emissions and materials recycling.

Best Available Control Measures include, but are not limited to, requirements that the proposed Project construction contractors utilize only low-sulfur fuel with a sulfur content of 15 parts per million by weight or less; ensure off-road vehicles (i.e., self-propelled diesel-fueled vehicles 25 horsepower and up that were not designed to be driven on the road) limit vehicle idling to 5 minutes or less; register and label vehicles in accordance with the CARB Diesel Off-Road Online Reporting System; restrict the inclusion of older vehicles into fleets; and retire, replace, or repower older engines or install Verified Diesel Emission Control Strategies (i.e., exhaust retrofits). Additionally, the construction contractor would be required to recycle/reuse at least 65% of the nonhazardous construction and demolition waste and will comply with mandatory provisions of Part 6 of the Title 24 Building Energy Efficiency Standards and Part 11 referred to as California Green Building Standards Code, or CALGreen.

In addition, construction activities are not anticipated to result in an inefficient use of energy as gasoline and diesel fuel would be supplied by construction contractors who would conserve the use of their supplies to minimize their costs on the proposed Project. The proposed Project would not cause or result in the need for additional energy facilities or an additional or expanded delivery system. In addition, no unusual proposed Project characteristics would necessitate the use of construction equipment that would be less energy-efficient than at comparable construction sites in the region or the State. For these reasons, fuel consumption during construction would not be inefficient, wasteful, or unnecessary.

Construction of the three passenger stations, tunnel, one of the vent shaft design options (2 or 4), and MSF would occur as part of the proposed Project and potential energy impacts during construction have been analyzed as previously described. Because the proposed Project would not cause or result in the need for additional energy facilities or an additional or expanded delivery system and no unusual proposed Project characteristics would necessitate the use of construction equipment that would be less

energy-efficient than at comparable construction sites in the region or the State, fuel consumption during construction of the proposed Project would not be inefficient, wasteful, or unnecessary.

Therefore, the proposed Project's energy demands during construction would not be inefficient, wasteful, or otherwise unnecessary, and energy impacts from construction would be less than significant.

3.5.6.1.2.2 Operational Impacts

Operational energy use is typically associated with natural gas use, electricity consumption, and fuel used for vehicle trips associated with a project. The proposed Project would result in a reduction in vehicle use, as the proposed Project would encourage mode shift from automobiles to transit. Thus, the energy usage associated with gasoline and diesel fuel consumed would also be reduced with implementation of the proposed Project. However, as reported in the Transportation Technical Report (SBCTA 2024c; Appendix Q), the reduction would be less than 0.01% of the regional VMT.

Operational energy consumption for the proposed Project would primarily be from the MSF operations, shuttle station operations, and electric shuttle charging. Energy use from MSF operations was estimated using default energy intensities by land use type in CalEEMod. Electrical consumption for shuttle station operations was estimated from design parameters supplied by the design engineers at 15 kilowatt-hours (kWh) per year per square foot. Each station is approximately 10,000 square feet, thus total electrical consumption for shuttle station operations would be 450,000 kWh per year. Electrical consumption for electric shuttle charging was estimated at 2.5 kWh per mile from design parameters supplied by the design engineers. Proposed Project plans indicate each shuttle would average 50 miles per day and there would be up to 80 shuttles operating. Thus, assuming 20 hours per day and 365 days per year, total electrical consumption for electric shuttle charging would be 73,584,000 kWh per year.

Operational energy consumption for the proposed Project would primarily be from the MSF operations, shuttle station operations, and electric shuttle charging. Energy use from MSF operations was estimated using default energy intensities by land use type in CalEEMod. Electrical consumption for shuttle station operations was estimated from design parameters supplied by the design engineers at 15 kilowatt-hours (kWh) per year per square foot. Each proposed station is approximately 10,000 square feet, thus total electrical consumption for shuttle station operations would be 450,000 kWh per year. Electrical consumption for electric shuttle charging was estimated at 2.5 kWh per mile from design parameters supplied by the design engineers. Proposed Project plans indicate each shuttle would average 50 miles per day and there would be up to 80 shuttles operating. Thus, assuming 20 hours per day and 365 days per year, total electrical consumption for electric shuttle charging would be 73,584,000 kWh per year.

Electricity and natural gas estimates associated with the proposed Project are shown in Table 3.5-6.

Table 3.5-6. Proposed Project Annual Energy Consumption During Operations

Energy Type	Annual Electricity Consumption (kWh/yr)	Annual Percentage Increase Countywide	Annual Natural Gas Consumption (kBTU/yr)	Annual Percentage Increase Countywide
Maintenance Energy	95,377	0.46%	428,861	<0.01%
Shuttle Charging	73,584,000	0.46%	0	<0.01%
Shuttle Station Operations	450,000	0.46%	0	<0.01%
Total	74,129,377	0.46%	428,861	<0.01%

Source: SBCTA 2024a
Note: kBTU = thousand British thermal units; kWh/yr = kilowatt-hours per year

As identified in Table 3.5-6, proposed uses on the proposed Project site would demand a total of 74,129,377 kWh of electricity per year and 428,861 kBTU of natural gas per year. Based on electricity consumption obtained from the CEC, approximately 16,180,811,158 kWh were consumed in San Bernardino County in 2021. Therefore, operation of the proposed Project would increase the annual electricity consumption in San Bernardino County by less than 0.46%. Based on natural gas consumption obtained from the CEC, approximately 561,360,617 therms were consumed in San Bernardino County in 2021. One therm equals approximately 100,000 BTU. Therefore, operation of the proposed Project would increase annual natural gas consumption in San Bernardino County by less than 0.01%.

The State of California provides a minimum standard for building design and construction standards through Title 24 of the CCR, known as the California Building Code (CBC). The CBC is updated every 3 years, and the current 2022 CBC went into effect in January 2023 and is applicable to the proposed Project. The California Building Standards Commission (CBSC) adopted Part 6 of the Title 24 Building Energy Efficiency Standards and adopted Part 11 (also referred to as the California Green Building Standards Code, or CALGreen Code) in 2010 as part of the State's efforts to reduce GHG emissions and energy consumption from residential and nonresidential buildings. CALGreen covers the following five categories: (1) planning and design; (2) energy efficiency; (3) water efficiency and conservation; (4) material conservation and resource efficiency; and (5) indoor environmental quality. The proposed Project would comply with the current 2022 CALGreen Code requirements and Title 24 efficiency standards, which would further improve energy efficiency during operation. Compliance with applicable Title 24 standards would ensure that the operational energy demands of the proposed Project would not be inefficient, wasteful, or otherwise unnecessary.

As previously discussed, operation of the proposed Project would increase the annual electricity consumption in San Bernardino County by less than 0.46% and annual natural gas consumption in San Bernardino County by less than 0.01%. Further, compliance with applicable Title 24 standards would ensure that operational proposed Project energy demands would not be inefficient, wasteful, or otherwise unnecessary. and the proposed Project would have a less than significant impact.

3.5.6.2 Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

3.5.6.2.1 No Project Alternative

The No Project Alternative includes planned expansion, improvement projects, and routine maintenance activities for the existing roadway system and transit facilities. These projects under the No Project Alternative are not anticipated to conflict with or obstruct a state or local plan for renewable energy or energy efficiency. With compliance with applicable design guidelines and policies, San Bernardino Regional Greenhouse Gas Plan, and the City of Rancho Cucamonga's and the City of Ontario's General Plans, the No Project Alternative would not result in wasteful, inefficient, or necessary consumption of energy resources and would have a less than significant impact.

3.5.6.2.2 Proposed Project

3.5.6.2.2.1 Consistency with the Infrastructure Investment and Jobs Act

Transportation and access to the proposed Project site is provided by the local and regional roadway systems. The purpose of the proposed Project is to reduce VMT by providing a transit system alternative and is an investment in infrastructure. The proposed Project is therefore consistent with, and would not otherwise interfere with or obstruct, implementation of the IIJA and would have a less than significant impact.

3.5.6.3 Consistency with Title 24, California Building Code, Part 6

The California Energy Code is a building code for Building Energy Efficiency Standards for Residential and Nonresidential Buildings that imposes building standards to reduce energy consumption through efficient lighting and heating standards among other requirements. Energy-efficient buildings require less electricity and reduce fossil fuel consumption. Buildings whose permit applications are submitted after January 1, 2023, must comply with the 2022 California Energy Code. Revisions to this code would result in greater energy efficiency. The building efficiency standards are enforced through the local building permit process. The proposed Project would therefore be consistent with the energy-efficiency provisions of Title 24, CBC, Part 6.

3.5.6.3.1.1 Consistency with Title 24, California Building Code, Part 6, Building Energy Efficiency Standards

The Building Energy Efficiency Standards (Energy Code) is included within California's Title 24 Building Standards Code. The Energy Code is a building code for residential and nonresidential buildings implemented to reduce energy consumption through efficient lighting and heating standards among other requirements and would apply to the stations and MSF for the proposed Project. Energy-efficient buildings require less electricity and reduce fossil fuel consumption. Buildings with permit applications submitted after January 1, 2023, must comply with the 2022 California Energy Code. The Energy Code would be enforced by the City of Ontario and the City of Rancho Cucamonga through the permitting

process. Therefore, the proposed Project would be consistent with the energy-efficiency provisions of Title 24, California Building Code (CBC), Part 6.

3.5.6.3.1.2 Consistency with Title 24, California Building Code, Part 11, California Green Building Standards Code

The CALGreen Code establishes mandatory measures for residential and nonresidential building construction and encourages sustainable construction and operations practices to lessen GHGs and increase energy efficiency in the following five categories: (1) planning and design, (2) energy efficiency, (3) water efficiency and conservation, (4) material conservation and resource efficiency, and (5) indoor environmental quality. Although the CALGreen Code was adopted as part of the state's efforts to reduce GHG emissions, the CALGreen Code standards have co-benefits of reducing energy consumption from residential and nonresidential buildings. The most recent update consisting of 2022 CALGreen Code standards became effective on January 1, 2023. The City of Ontario and the City of Rancho Cucamonga have adopted both the CBC and CALGreen Code standards pertaining to energy conservation as part of their municipal codes. Therefore, the proposed Project's stations and MSF would comply with the CBC and CALGreen Code standards pertaining to energy conservation and efficiency in effect at the time of construction, and the proposed Project would be consistent with Title 24, California Building Code's Part 11 CALGreen Code.

3.5.6.3.1.3 Consistency with Southern California Association of Governments' 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy

SCAG's 2020–2045 RTP/SCS establishes GHG emissions goals for automobiles and light-duty trucks and implements an overall VMT reduction target for the region consistent with the statewide VMT reduction targets under SB 375, which integrates land use planning, transportation, and housing to reduce California's GHG emissions (SCAG 2020). By furthering the goal of reducing VMT, the RTS/SCS has the effect of reducing energy consumption. The proposed Project involves the development of an electric shuttle system to reduce VMT and associated emissions. Therefore, the proposed Project would be consistent with, and would not otherwise interfere with or obstruct, implementation of the RTP/SCS.

3.5.6.3.1.4 Consistency Climate Action Plans

As discussed in the Greenhouse Gas Emissions Technical Report (SBCTA 2024d; Appendix K), to demonstrate compliance with the City of Ontario 2022 Community Climate Action Plan (CCAP) (City of Ontario 2022b) and the City of Rancho Cucamonga CAP (City of Rancho Cucamonga 2021), the proposed Project would implement various measures associated with waste reduction and energy and water demand reduction. The energy reduction strategies the proposed Project has committed to are provided in Table 3.5-7 (City of Rancho Cucamonga's CAP GHG Reduction Strategies) and Table 3.5-8 (City of Ontario's CCAP GHG Reduction Strategies). As shown, the proposed Project would be consistent with the City of Rancho Cucamonga's CAP and the City of Ontario's 2022 CCAP, resulting in a more energy-efficient proposed Project.

Table 3.5-7. City of Rancho Cucamonga's CAP GHG Reduction Strategies

Goals and Strategies	Project Consistency
Goal 1: Zero Emissions and Clean Fuels. A community that uses zero-emission vehicles and clean vehicles to move people and goods.	Consistent. The proposed Project is a transit system that uses ZE shuttles.
Goal 8: Water Conservation. A community that conserves and recycles water.	Consistent: The proposed Project would include drought-resistant landscaping.
Goal 11: Regional Mobility Hub. A multimodal transportation hub that connects regional and local destinations through a symbiotic relationship with regional partners.	Consistent. The proposed Project is a transit system that connects local destinations.
Goal 12: Active Transportation. A first-class pedestrian and bicycle network that fosters safe and connected access to non-motorized travel and recreation.	Consistent. Pedestrians and cyclists are anticipated to use the ONT Connector. The proposed Project provides a nonmotorized electric shuttle system within the existing urban environment, which offers opportunities for connectivity to existing pedestrian and bicycle networks.
Goal 13: Sustainable Transportation. A transportation network that adapts to changing mobility needs while preserving sustainable community values.	Consistent. The proposed Project is a transit system that is to adapt to changing mobility needs.

Source: City of Rancho Cucamonga 2021
CAP = Climate Action Plan
EV = electric vehicle
LEED = Leadership in Energy and Environmental Design
PV = photovoltaic
TDM = Transportation Demand Management

3.5.6.3.1.5 Consistency with City of Rancho Cucamonga and City of Ontario General Plans

As discussed in Section 3.5.6.3.1.4, the City of Rancho Cucamonga and the City of Ontario have both developed goals and policies in their General Plans to help reduce energy consumption. The proposed Project would not conflict with the goals and policies of the City of Rancho Cucamonga's and the City of Ontario's General Plans related to the reduction of energy consumption.

Table 3.5-8. City of Ontario's CCAP GHG Reduction Strategies

Strategy Number	Strategy Name	Strategy Language	Project Consistency
10	Increase Transportation Ridership	Ensure a reliable and responsive transit system with dedicated and secure funding and resources to support increased ridership.	Consistent. The proposed Project is a transit system with adequate funding and resources.
12	Community Vehicle Electrification	Promote and incentivize the adoption of electric vehicles (EV) citywide, including light-duty and heavy-duty vehicles, for municipal, commercial, and residential uses.	Consistent. The proposed Project consists of electric shuttles.
13	Active Transportation Networks	Work with transit agencies, school districts, and employers to facilitate an interconnected transportation system that allows a shift in travel from private passenger vehicles to alternative modes, including public transit, ride sharing, car sharing, bicycling, and walking.	Consistent. The proposed Project's purpose is to provide an alternative to private passenger vehicles.
15	Parking Policy and Event Parking	Adopt a comprehensive parking policy that encourages carpooling and the use of alternative transportation, including providing parking spaces for car-share vehicles at convenient locations with access to public transportation.	Consistent: The proposed Project's purpose is to provide alternative transportation to private passenger vehicles, and access to public transportation.
22	Water Efficient Landscapes and Water Recycling	Promote drought-tolerant and fire-wise landscaping. Encourage increased use of reclaimed water for landscape irrigation, agricultural, and industrial use.	Consistent. The proposed Project would include drought-resistant landscaping.

Source: City of Ontario 2022b
$MTCO_2e$ = metric tons of carbon dioxide equivalent

The proposed Project would be required to adhere to, and would be consistent with, all federal, state, and local requirements for energy efficiency, including the Title 24 standards. The Title 24 building energy -efficiency standards establish minimum efficiency standards related to various building features, including appliances, water and space heating and cooling equipment, building insulation and roofing, and lighting, which would reduce energy usage. As such, fuel, electricity, and natural gas demand associated with the proposed Project's construction and operation would not be considered inefficient, wasteful, or unnecessary in comparison to other similar developments in the region. As discussed, the proposed Project would be consistent with, and not conflict with, the applicable state and local energy plans; therefore, the proposed Project would have a less than significant impact.

3.5.6.3.1.6 Construction Impacts

Construction of the proposed Project, including the tunnel, one of the vent shaft design options (2 or 4), three passenger stations and MSF, would be required to adhere to, and would be consistent with, all federal, State, and local requirements for energy efficiency during construction, including the IIJA, TEA-21,

Title 24 standards, SCAG's 2020–2045 RTP/SCS, Climate Action Plans, and the General Plans for the Cities of Ontario and Rancho Cucamonga. Therefore, construction of the proposed Project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency and would result in a less than significant impact.

3.5.6.3.1.7 Operational Impacts

The operation of the proposed Project, including the tunnel, one of the vent shaft design options (2 or 4), three passenger stations and MSF, would be required to adhere to, and would be consistent with, all federal, State, and local requirements for energy efficiency during construction and operation, including the IIJA, TEA-21, Title 24 standards, SCAG's 2020–2045 RTP/SCS, Climate Action Plans, and the General Plans for the Cities of Ontario and Rancho Cucamonga. Therefore, operation of the proposed Project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency and would result in a less than significant impact.

3.5.7 Mitigation Measures

No mitigation measures are required related to energy consumption for the proposed Project.

3.5.8 Impacts After Mitigation

3.5.8.1 **Would the Project Result in a Potentially Significant Environmental Impact Due to Wasteful, Inefficient, or Unnecessary Consumption of Energy Resources During Project Construction or Operation?**

No mitigation measures are required, and the proposed Project would have a less than significant impact.

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

No mitigation measures are required, and the proposed Project would have a less than significant impact.

3.6 GEOLOGY, SOILS, SEISMICITY, AND PALEONTOLOGY

3.6.1 Introduction

This section of this Draft Environmental Impact Report (EIR) provides a summary of the evaluation of the impacts to geology, soils, seismicity and paleontological resources related to implementation of the proposed Ontario International Airport (ONT) Connector Project (Project). Detailed information for geology, soils, seismicity, and paleontological resources are included in the Geology, Soils and Seismicity Technical Report (SBCTA 2024a; Appendix J) and the Paleontological Resources Technical Report (SBCTA 2024b; Appendix P).

3.6.2 Regulatory Framework

3.6.2.1 Federal

3.6.2.1.1 Earthquake Hazards Reduction Act

In October 1977, the United States (U.S.) Congress passed the Earthquake Hazards Reduction Act (EHRA) (42 United States Code [USC] §7702) to "reduce the risks of life and property from future earthquakes in the United States." To accomplish the goal of the EHRA, the act established the National Earthquake Hazards Reduction Program (NEHRP). The NEHRP is an interagency federal program that coordinates with various agencies. While it lacks regulatory authority to dictate or enforce national standards, it strives to influence earthquake-resilient building codes through research, data collection, and analyses. The goal is to produce relevant results and products that will be adopted and used by stakeholders to mitigate public and private earthquake risks.

3.6.2.2 State

3.6.2.2.1 California Environmental Quality Act

California Environmental Quality Act (CEQA) (Sections 21000 et seq.) and CEQA Guidelines (Sections 15000 et seq.) require state and local agencies to identify the significant environmental impacts of their actions, including potential significant impacts on geology, soils, seismicity, and paleontological resources, and to avoid or mitigate those impacts, when feasible.

3.6.2.2.2 California Building Code

California Code of Regulations (CCR), Title 24, Part 2, the California Building Code (CBC), provides minimum standards for building design in the State of California. The 2019 CBC, effective on January 1, 2020, is based on the current (2018) International Building Code (California Building Standards Commission 2019). Each jurisdiction in California may adopt its own building code based on the 2019 CBC. Local codes are permitted to be more stringent than the 2019 CBC, but at a minimum, are required to meet all state standards and enforce the regulations of the 2019 CBC beginning on January 1, 2020.

Chapter 16 of the CBC deals with structural design requirements governing seismically resistant construction (Section 1604) including, but not limited to, factors and coefficients used to establish seismic site class and seismic occupancy category for the soil/rock at the building location and the proposed building design. Chapter 18 includes, but is not limited to, the requirements for foundation and soil investigations (Section 1803A); excavation, grading, and fill (Section 1804A); allowable load-bearing values of soils (Section 1806A); and the design of footings, foundations, and slope clearances (Sections 1808A and 1809A), retaining walls (Section 1807A), and pier, pile, driven, and cast-in-place foundation support systems (Section 1810A). Chapter 33 includes, but is not limited to, requirements for safeguards at work sites to ensure stable excavations and cut or fill slopes (Section 3304). Appendix J includes, but is not limited to, grading requirements for the design of excavations and fills (Sections J106 and J107) and for erosion control (Sections J109 and J110). Construction activities are subject to occupational safety standards for excavation, shoring, and trenching as specified in California Division of Occupational Safety and Health (Cal/OSHA) regulations (CCR Title 8).

3.6.2.2.3 Alquist-Priolo Earthquake Fault Zoning Act

The state legislation protecting the population of California from the effects of fault-line ground-surface rupture is Alquist-Priolo Earthquake Fault Zoning Act. The purpose of Alquist-Priolo Earthquake Fault Zoning Act of 1972 is "to regulate development near active faults so as to mitigate the hazard of surface fault rupture." This state law was passed in response to the 1971 San Fernando Earthquake, which was associated with extensive surface fault ruptures that damaged numerous homes, commercial buildings, and other structures. At the directive of the Act, in 1972 the State Geologist began delineating Earthquake Fault Zones (called Special Studies Zones prior to 1994) around active and potentially active faults to reduce fault-rupture risks to structures for human occupancy (California Public Resources Code [CPRC] Division 2, Chapter 7.5, Sections 2621 through 2630). The Act provides for special seismic design considerations if developments are planned in areas adjacent to active or potentially active faults (CGS 2003). Cities and counties affected by the zones must regulate certain development within the zones. They must withhold development permits for sites within the zones until geologic investigations demonstrate that the sites are not threatened by surface displacement from future faulting. Typically, structures for human occupancy are not allowed within 50 feet of the trace of an active fault.

3.6.2.2.4 Seismic Hazards Mapping Act

The California Geological Survey (CGS) provides guidance with regard to seismic hazards. Under CGS's Seismic Hazards Mapping Act, seismic hazard zones are identified and mapped to assist local governments in land use planning. The intent of this Act is to protect the public from the effects of strong ground-shaking, liquefaction, landslides, ground failure, or other hazards caused by earthquakes. In addition, CGS's Survey's Special Publication 117A, Guidelines for Evaluating and Mitigating Seismic Hazards in California, provides guidance for the evaluation and mitigation of earthquake-related hazards for projects within designated zones of required investigations (CGS 2008).

3.6.2.2.1 California Public Resources Code, Section 5097.5

CPRC protects historic, archaeological, and paleontological resources on public lands in California and establishes criminal and civil penalties for violations. Specifically, CPRC Section 5097.5 states:

> *"(a) No person shall knowingly and willfully excavate upon, or remove, destroy, injure, or deface any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, or any other archaeological, paleontological, or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over such lands. Violation of this section is a misdemeanor.*
>
> *(b) As used in this section, "public lands" means lands owned by, or under the jurisdiction of, the state, or any city, county, district, authority, or public corporation, or any agency thereof."*

Because this proposed Project involves public lands as defined in CPRC Section 5097.5(b), the proposed Project proponents are required to comply with this regulation.

3.6.2.3 Regional and Local

3.6.2.3.1 San Bernardino County

The existing San Bernardino County General Plan – Hazards (HZ) Safety Element and the Cultural Resources (CR) Element (San Bernardino County 2020a; 2020b) sets forth a goal and policies that are applicable to the proposed Project for to the geology, soil, seismicity.

- Goal HZ-1 addresses natural environmental hazards.
  - Policy HZ-1.1 addresses new subdivisions in environmental hazard areas.
  - Policy HZ-1.2 addresses new development in environmental hazard areas.
  - Policy HZ-1.6 addresses critical and essential facility location.
  - Policy HZ-1.7 addresses underground utilities.
  - Policy HZ-1.7 addresses hazard areas maintained as open space.
  - Policy HZ-1.12 addresses local hazard mitigation plan implementation.

The existing San Bernardino County General Plan Cultural Resources Element (San Bernardino County 2020b) sets forth a goal and a policy that are applicable to the proposed Project for paleontological resources.

- Goal CR-2 addresses historic and paleontological Resources.
  - Policy CR-2.3 addresses paleontological and archaeological resources.

3.6.2.3.2 City of Rancho Cucamonga

The City of Rancho Cucamonga General Plan Safety (S) Element (City of Rancho Cucamonga 2021a) sets forth a goal and policies that are applicable to the proposed Project for geology, soil, and seismicity.

- Goal S-2 addresses seismic and geologic hazards.
    - Policy S-2.1 addresses fault setbacks.
    - Policy S-2.2 addresses building functionality.
    - Policy S-2.3 addresses seismically vulnerable buildings.
    - Policy S-2.4 addresses transfer of development rights.
    - Policy S-2.5 addresses hillside hazards.

The City of Rancho Cucamonga General Plan Resource Conservation (RC) Element (City of Rancho Cucamonga 2021a) sets forth a policy that is applicable to the proposed Project for paleontological resources.

- Policy RC-4.6 addresses discovery of any paleontological artifacts found within the City or the Sphere of Influence

3.6.2.3.3 City of Rancho Cucamonga Municipal Code

The City of Rancho Cucamonga Municipal Code (RCMC), Title 15 (Buildings and Construction) sets forth the following policies that are applicable to the proposed Project for geology, soil, and seismicity (City of Rancho Cucamonga 2022).

- Chapter 15.04.010 (Codes Adoption) has adopted the 2019 California Building Code, based on the International Building Code, Volumes 1 and 2, for the City of Rancho Cucamonga.
- Chapter 15.12.065 (Section 1803.5.11 Amended– Seismic Design Categories C though F) requires geotechnical investigation be conducted for all new structures or additions to existing buildings where the addition is more than 50 percent of the existing floor area. The City also requires geotechnical reports that are more than 3 years old to have an updated geotechnical report submitted.
- Chapter15.12.140 (Section J110.3 of Appendix J Amended – Temporary Erosion Control During grading) requires permittee to put into effect and maintain all precautionary measures necessary to protect adjacent watercourses and public or private property from damage by erosion, flooding, and deposition of mud or debris origination form the site during the grading operation regardless of lot size.

3.6.2.3.3.1 City of Rancho Cucamonga Local Hazard Mitigation Plan

The City of Rancho Cucamonga Local Hazard Mitigation Plan (City of Rancho Cucamonga 2021b) evaluates the natural and manmade hazards that could potentially affect the City of Rancho Cucamonga and its

inhabitants. The Local Hazard Mitigation Plan identifies strategies and actions intended to minimize potential hazards that could result from potential projects. The Local Hazard Mitigation Plan was created in conjunction with City of Rancho Cucamonga General Plan and is considered an extension of that document and adopted by resolution. Potential hazards evaluated by the Local Hazard Mitigation Plan include hazards resulting from earthquake, flooding, wildfires, high/straight-line winds, and terrorism.

3.6.2.3.4 City of Ontario General Plan

The existing City of Ontario General Plan Safety Element (City of Ontario 2022) sets forth a goal and policies that are applicable to the proposed Project for geology, soil, and seismicity.

- Goal S-1 seeks to minimized risk of injury, loss of life, property damage, and economic and social disruption caused by earthquake-induced and other geologic hazards.
    - Policy S-1.2 addresses the entitlement and permitting process.
    - Policy S-1.3 requires continual update of technical information.
    - Policy S-1.4 addresses seismically vulnerable structures.

3.6.2.3.5 City of Ontario Municipal Code

The City of Ontario Municipal Code, Volume 2, Title 8 (Building Regulations), Chapter 1 (Building Code), Section 8-1.01 (Adoption of the Building Code) has adopted the 2019 edition of the CBC, which incorporates and amends the 2018 Edition of the International Building Code (City of Ontario 2021).

3.6.2.3.5.1 City of Ontario Hazard Mitigation Plan

In 2018, the City of Ontario prepared a Hazard Mitigation Plan (City of Ontario 2018) to identify the City of Ontario's hazards, review and assess past disaster occurrences, estimate the probability of future occurrences, and set goals to reduce or eliminate long-term risk to people and property from natural and manmade hazards. The multi-hazard mitigation plan goals are to minimize loss of life property from natural and man-made hazard events, protect public health and safety, increase public awareness of risk from natural and man-made hazards, and to enhance emergency systems including warning systems.

3.6.3 Methodology

Data used to prepare this section were taken from the maps and reports published by CGS, the United States Geological Survey (USGS), the Caltech Southern California Earthquake Data Center (SCEDC), the San Bernardino County General Plan, the City of Rancho Cucamonga General Plan, the City of Ontario General Plan, and other data sources. Data used to prepare this section were also taken from the Geotechnical Exploration Data Report, by Leighton and Associates, Inc. (Leighton 2021) and other relevant documents related to geology, soils, seismicity and paleontological resources (see Appendices J and P).

The Resource Study Area (RSA) for paleontological resources includes the horizontal and vertical extent of the proposed Project activities within the proposed Project site. To determine the potential for fossils

to be present within the proposed Project site, background research on the geologic units within the proposed Project site was conducted. Paleontological subsurface exploration (i.e., geotechnical borings, logs, and other subsurface sampling) was conducted for the proposed Project design under evaluation in this Draft EIR.

3.6.4 CEQA Thresholds of Significance

According to Appendix G of the 2024 CEQA Guidelines, implementation of the proposed Project may result in a potentially significant impact if it would:

- 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 (refer to Division of Mines and Geology Special Publication 42),
    - strong seismic ground shaking,
    - seismic-related ground failure, including liquefaction,
    - landslides;
- Result in substantial soil erosion or the loss of topsoil;
- Be located on a 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;
- 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;
- 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;
- Directly or indirectly destroy a unique paleontological resources or site or unique geologic feature.

3.6.5 Existing Settings

3.6.5.1 **Geological Settings**

The proposed Project site is within the geologic formations belonging to the Peninsular Ranges Geomorphic Provinces. The Peninsular Ranges are coastal mountains that run from Los Angeles to Baja California. The proposed Project site is in the San Bernardino Valley area in the Peninsular Ranges Geomorphic Province of Southern California. The San Bernardino Valley is a large, irregular structural

depression that is bounded on the northwest by the San Gabriel Mountains, on the north and east by the San Bernardino Mountains, and on the south by an irregular group of hills.

3.6.5.2 Soil and Groundwater Conditions

As shown on Figure 3.6-1, the proposed Project site is underlain by Younger Alluvium ("Q-type soils") generally consisting of unconsolidated gravel, sand, and silt eroded from the San Gabriel Mountains and deposited in the Chino Basin by flooding streams and debris flows. The Geotechnical Exploration Data Report (Leighton 2021) included five hollow-stem auger borings drilled to depths of 66.5 to 86.5 feet below ground surface (bgs), all within the proposed Project alignment. Below thin asphalt, the borings penetrated Undocumented Artificial Fill ("fill soil"), Young Eolian Deposits, and Young Alluvial Fan Deposits to the total depth of the borings. Standard Penetration Test (SPT) soil samples were obtained at selected intervals within the borings. SPT "blow counts" were recorded to help differentiate soil types. Fill soils were up to 5 feet thick consisting of sand and silt. Young Eolian Deposits were encountered to depths up to 44 feet bgs, consisting of silty sand (SM), sandy silt (ML), and poorly graded sand with gravel (SP) soil types (Leighton 2021).

3.6.5.3 Regional and Local Fault Locations

Numerous faults have been mapped within the San Bernardino Valley region of Southern California. Table 3.6-1 identifies the faults near the proposed Project site. Figure 3.6-2 illustrates the regional faults in the vicinity of the proposed Project site.

Table 3.6-1 Summary of the Faults Near the Proposed Project Site

Fault Name	Distance from Proposed Project Site (miles)	Maximum Moment Magnitude (M_W)
Cucamonga Fault	5	6.0 to 7.0
Etiwanda Avenue Fault	4.5	6.0 to 7.0
Red Hill Fault	3	6.0 to 7.0
Chino Hill Fault	8.7	6.0 to 7.0
Central Avenue Fault	8.5	6.7
Sierra Madera Fault	6.5	6.0 to 7.0
San Jacinto Fault	6.8	6.5 to 7.5
San Jose Fault	8.23	6.0 to 6.5
San Andreas Fault	13.5	6.8 to 8.0

Source: SCEDC 2022a; 2022b; 2022c; 2022d; 2022e; 2022f, City of Pomona 2012

The San Bernardino and San Gabriel Mountains are separated by the San Andreas Fault, which forms the southwestern margin of the San Bernardino Mountains and the northeastern margin of the San Gabriel Mountains. The rocks that make up these two mountains are of different composition, indicating that

these regions formed at a considerable distance from each other and have since been juxtaposed by lateral movement along the San Andreas Fault. The San Andreas Fault is widely recognized as the most extensive fault in California. Its activity is known from historic earthquakes, which have caused rupture of the ground surface, and from many fault studies that show that the San Andreas Fault offsets or displaces recently deposited sediments. The last major rupture was on January 9, 1957, at the Mojave segment and on April 18, 1906, at the northern segment (SCEDC 2022f). The proposed Project site is approximately 13.5 miles northeast of the San Andreas Fault.

The San Jacinto Fault joins the San Andreas Fault at the eastern end near Wrightwood, which is approximately 18 miles north of the proposed Project site. The fault is made up of numerous individual fault strands with a slip rate of approximately 7 to 17 millimeters (mm) per year. The most recent surface rupture was on April 9, 1968, of maximum moment magnitude (M_W) 6.5 on the Coyote Creek segment of the San Jacinto Fault (SCEDC 2022e). The San Jacinto Fault is approximately 6.8 miles northwest of the proposed Project site.

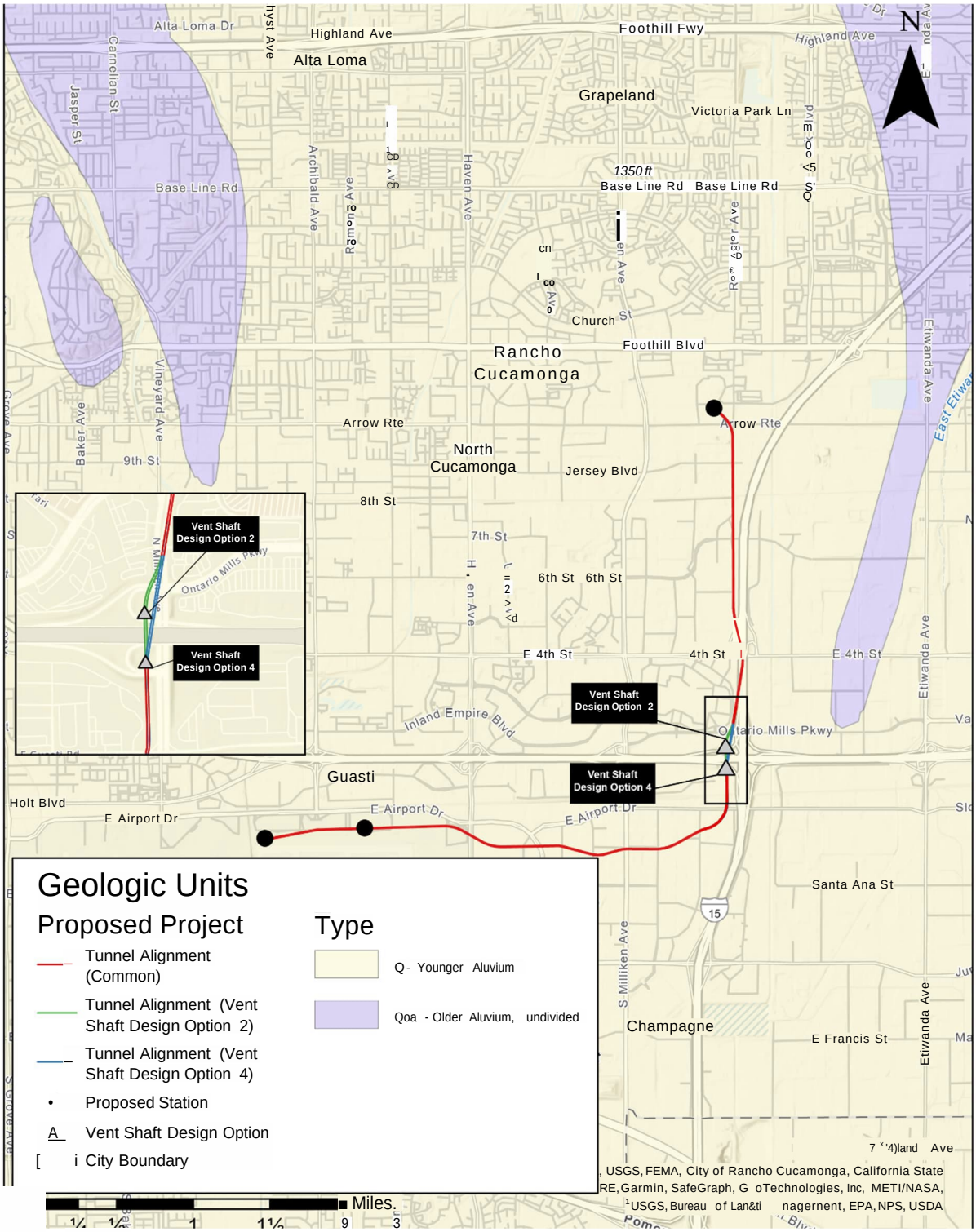
The Cucamonga Fault is identified as an Alquist-Priolo Special Study Zone area within the City of Rancho Cucamonga General Plan (City of Rancho Cucamonga 2021a). The Cucamonga Fault is an Alquist-Priolo fault with an east-west-trending thrust fault that separates the basement rock of the San Gabriel Mountains from the alluvial fan deposits at the base of the mountain range. The Cucamonga Fault has a probable magnitude rate of M_W 6.0 to 7.0. The length of the Cucamonga Fault is approximately 18.6 miles, and the slip rate is between 5 and 14 mm per year (SCEDC 2022a). The Cucamonga Fault is located approximately 5 miles north of the proposed Project site.

The Etiwanda Avenue Fault is located approximately 4.5 miles north of the proposed Project site. The Etiwanda Avenue Fault is identified as an Alquist-Priolo Special Study Zone area within the City of Rancho Cucamonga General Plan (City of Rancho Cucamonga 2021a). The length of the Etiwanda Avenue Fault is approximately 15.5 miles and has a probable magnitude rate of M_W 6.0 to 7.0 (SCEDC 2022b). Etiwanda Avenue Fault Line is a northeast-southwest-trending thrust fault found in the northern portion of the City of Rancho Cucamonga. Etiwanda Avenue Fault Line is thought to be active; however, its slip rate is currently unknown.

The Red Hill Fault has been designated by the City of Rancho Cucamonga as a fault hazard zone within the City's General Plan (City of Rancho Cucamonga 2021a). The Red Hill fault requires the same level of analysis required by CGS in compliance with the Alquist-Priolo Earthquake Zoning Act. The length of the Red Hill Fault is approximately 15.5 miles and has a probable magnitude rate of M_W 6.0 to 7.0 (SCEDC 2022c). The Red Hill Fault is located approximately 3 miles north of the proposed Project site.

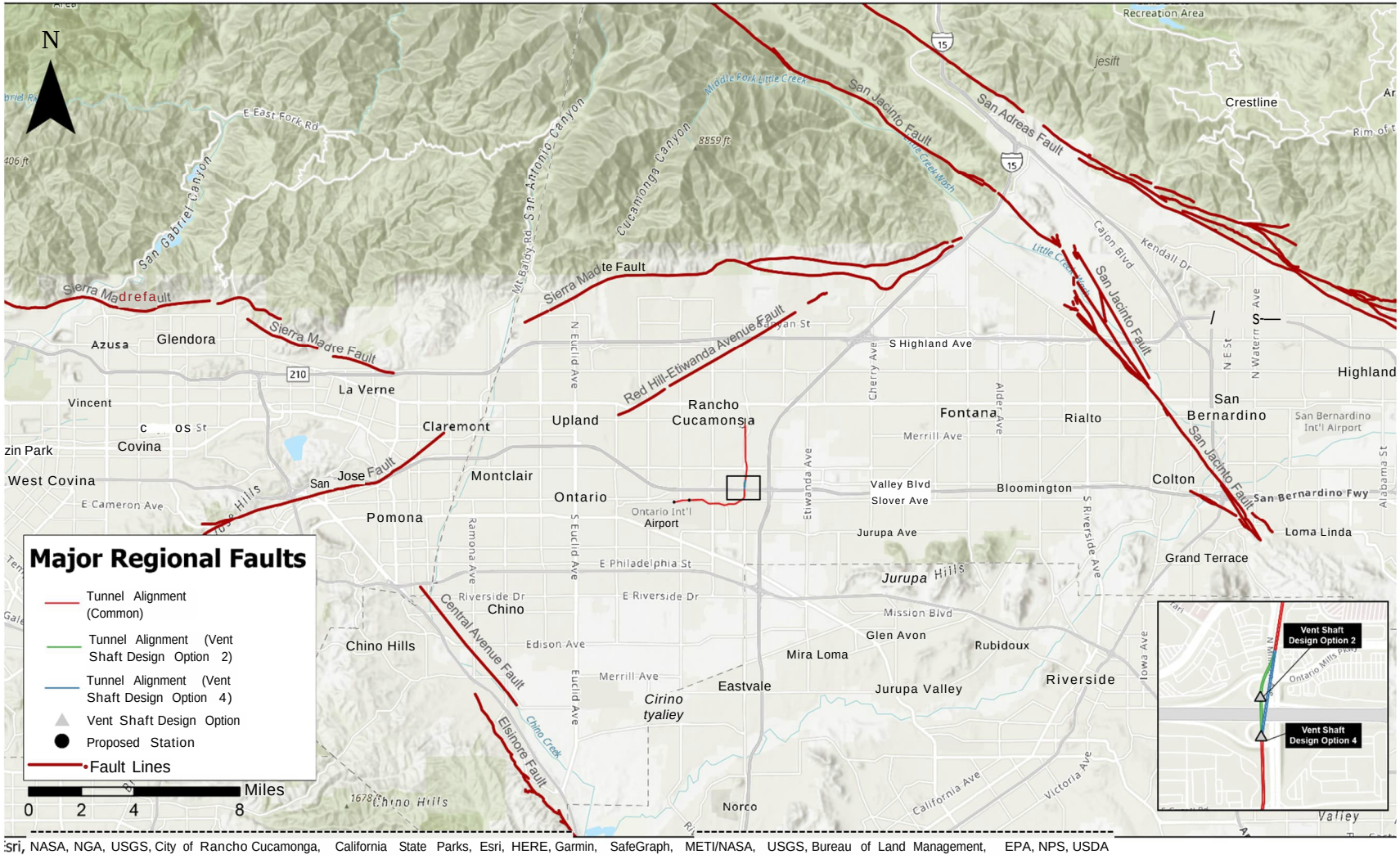
The Chino Fault is located approximately 8.7 miles southeast of the proposed Project site. The Chino Fault section is northern fault strands that merge into the Elsinore Fault Zone near Corona. The Chino Fault is a high-angle reverse fault with some strike-slip displacement (Mira Costa College 2022). The Chino Fault is approximately 13 miles in length, and the slip rate is approximately 1.0 mm per year (SCEDC 2022d).

Figure 3.6-1 Geologic Units



Qoa - Older Alluvium, undivided
Source: CGS 2022

Figure 3.6-2 Major Regional Faults



The Central Avenue Fault branches off of the Chino Fault in the southeastern corner of the City of Pomona near State Route 60, about 8.5 miles southeast of the proposed Project site, and extends about 5 miles into the City of Chino for a total length of 8 miles. The Central Avenue Fault is believed to be a single strand that is sub-parallel to the Chino Fault. It exhibits displacement on the Quaternary- and Holocene-age deposits but has no surface expression. The fault is capable of generating an earthquake up to M_W 6.7 (City of Pomona 2012).

The San Jose Fault is approximately 11.2 miles in length, and the slip rate is approximately 0.2 to 2 mm per year. The last significant earthquake was on February 28, 1990, of Local Magnitude (M_L) 5.4, and no surface ruptures were found (SCEDC 2022g). The San Jose Fault is located approximately 8.23 miles west of the proposed Project site.

The Sierra Madre Fault is located approximately 6.5 miles northwest of the proposed Project site. The Sierra Madre Fault is approximately46.6 miles long, and the slip rate is approximately 0.36 to 4 mm per year. It has a probable magnitude rate of M_W 6.0 to 7.0 (SCEDC 2022h).

3.6.5.4 Historic and Future Seismicity

The entire Southern California region is seismically active. The region is crisscrossed by a network of major regional faults and minor local faults. This faulting and seismicity are dominated by the San Andreas Fault System, which separates two of the major tectonic plates that comprise the earth's crust. The Pacific Plate lies west of the San Andreas Fault System. This plate is moving in a northwesterly direction relative to the North American Plate, which lies east of the San Andreas Fault System. This relative movement between the two plates is the driving force of fault ruptures in western California. The San Andreas Fault generally trends northwest/southeast; however, north of the Transverse Ranges Province, the fault trends more in an east/west direction, causing a north/south compression between the two plates. North/south compression in Southern California has been estimated from 5 to 20 mm per year. This compression has produced rapid uplift of many of the mountain ranges in southern California.

In addition to the San Andreas Fault, there are numerous faults in Southern California that are categorized as active, potentially active, and inactive. A fault is classified as active if it has either moved during the Holocene epoch (during the last 11,000 years) or is included in an Alquist-Priolo Earthquake Fault Zone (as established by CGS). A fault is classified as potentially active if it has experienced movement within the Quaternary period (during the last 1.6 million years). Faults that have not moved in the last 1.8 million years generally are considered inactive. Surface displacement can be recognized by the existence of cliffs in alluvium, terraces, offset stream courses, fault troughs and saddles, the alignment of depressions, sag ponds, and the existence of steep mountain fronts.

Generally defined, an earthquake is an abrupt release of accumulated energy in the form of seismic waves created when movement occurs along a fault plane. The severity of an earthquake generally is expressed in two ways: magnitude and intensity. The energy released, measured on the M_W scale, represents the

"size" of an earthquake. The Richter Magnitude (M) scale has been replaced in most modern building codes by the M_W scale because the M_W scale provides more useful information to design engineers. The proposed Project site is subject to earthquakes of M_W 6.0 to 8 by the surrounding faults.

The intensity of an earthquake is measured by the Modified Mercalli Intensity (MMI) scale, which emphasizes the current seismic environment at a particular site and measures ground-shaking severity according to damage done to structures, changes in the earth surface, and personal accounts. Table 3.6-2 identifies the level of intensity according to the MMI scale and describes that intensity with respect to how it would be received or sensed by its receptors.

Table 3.6-2 Modified Mercalli Intensity Scale

Intensity	Shaking	Description/Damage
I	Not Felt	Not felt except by a very few under especially favorable conditions.
II	Weak	Felt only by a few persons at rest, especially on upper floors of buildings.
III	Weak	Felt quite noticeably by persons indoors, especially on upper floors of buildings. Many people do not recognize it as an earthquake. Standing motor cars may rock slightly. Vibration is similar to the passing of a truck. Duration is estimated.
IV	Light	Felt indoors by many, outdoors by few during the day. At night, some are awakened. Dishes, windows, doors are disturbed; walls make cracking sound. Sensation is like a heavy truck striking a building. Standing motor cars are rocked noticeably.
V	Moderate	Felt by nearly everyone; many are awakened. Some dishes and windows are broken. Unstable objects are overturned. Pendulum clocks may stop.
VI	Strong	Felt by all; many are frightened. Some heavy furniture is moved; there are a few instances of fallen plaster. Damage is slight.
VII	Very Strong	Damage is negligible in building of good design and construction, slight to moderate in well-built ordinary structures, considerable in poorly built structures; some chimneys are broken.
VIII	Severe	Damage is slight in specially designed structures, considerable in ordinary substantial budlings with partial collapse, great in poorly built structures. Chimneys, factory stacks, columns, monuments, walls fall. Heavy furniture is overturned.
IX	Violent	Damage is considerable in specially designed structures; well-designed frame structures are thrown out of plumb. Damage is great in substantial buildings, with partial collapse. Buildings are shifted off of foundations.
X	Extreme	Some well-built wooden structures are destroyed; most masonry and frame structures are destroyed with foundations. Rails are bent.

Source: USGS 2022

Ground motions also are reported in terms of a percentage of the acceleration of gravity (percent g, where g equals 32 feet per second). One hundred percent of gravity (1 g) is the acceleration a skydiver would experience during free-fall. An acceleration of 0.4 g is equivalent to accelerating from 0 to 60 miles per hour in about 7 seconds.

Over the past 51 years, southern California has experienced three significant earthquakes: the 1971 San Fernando earthquake (also known as the Sylmar earthquake, on the Sierra Madre Fault), which registered as M_W 6.6; the 1987 Whittier Narrows earthquake, which registered as M_W 5.9; and the Northridge earthquake, which occurred in January 1994 and registered as M_W 6.7.

3.6.5.5 Geological Hazards

3.6.5.5.1 Fault Rupture

The Cucamonga, Etiwanda Avenue, San Andreas, and San Jacinto faults are within the Alquist-Priolo Earthquake Fault Zone and are in proximity to the proposed Project site. However, the faults do not extend into any portion of the proposed Project site. Specifically, the Cucamonga Fault runs east/west, approximately 5 miles north of the proposed Project site. The Etiwanda Avenue Fault runs northeast-southwest, approximately 4.5 miles north of the proposed Project site. The San Andreas Fault runs northwest-southeast, approximately 13.5 miles northeast of the proposed Project area; the San Jacinto fault runs in a similar direction, approximately 6.8 miles northeast of the proposed Project site. The proposed Project site is outside of the nearest Alquist-Priolo Earthquake Fault Zone. There are no known active or potentially active faults trending through the proposed Project site. Because the proposed Project site is not in an Alquist-Priolo Earthquake Fault Zone, the potential for damage at the proposed Project site from direct rupture is remote.

3.6.5.5.2 Ground-shaking

The major cause of structural damage from earthquakes is ground-shaking. The intensity of ground motion expected at a particular site depends upon the magnitude of the earthquake, the distance to the epicenter, and the geology of the area between the epicenter and the property. Greater movement can be expected at sites on poorly consolidated material, such as loose alluvium, in close proximity to the causative fault, or in response to an event of great magnitude. The proposed Project site could experience earthquakes of M_W 6.0 to 8.0. Because of the proximity of known active faults, the hazard posed by seismic shaking is potentially high.

3.6.5.5.3 Liquefaction

Liquefaction involves a sudden loss in strength of a saturated, cohesionless, uniformly particle-sized soil, typically caused by ground-shaking activities, that causes temporary transformation of the soil to a fluid mass. In rare instances, ground-borne vibrations can cause liquefaction from activities such as pile driving

or tunnel boring. If the liquefying layer is near the ground surface, the effects may resemble those of quicksand. If the layer is deep below the ground surface, it may provide a sliding surface for the material above it and/or cause differential settlement of the ground surface, which may damage building foundations by altering weight-bearing characteristics.

Liquefaction typically occurs when loose, cohesionless, water-saturated soils (generally uniformly sized fine-grained sand) are subjected to strong seismic ground motion of significant duration. These soils essentially behave similarly to liquids, losing bearing strength. Structures built on these soils may tilt or settle when the soils liquefy. Liquefaction more often occurs in earthquake-prone areas underlain by young sandy alluvium where the groundwater table is less than 50 feet bgs.

The proposed Project site in the City of Rancho Cucamonga and the City of Ontario has not been identified as being in an area subject to potentially susceptible liquefaction by California Department of Conservation (CGS 2022) or San Bernardino County (San Bernardino County 2022a; 2022b). Due to lack of shallow groundwater, liquefaction potential can be ruled out, and the potential for lateral spreading to occur at the site is also considered low (Leighton 2021). As such, the potential for liquefaction to occur on site is very low.

3.6.5.5.4 Seismically Induced Settlement

Settlement is defined as areas that are prone to rates of ground surface collapse and densification (soil particle compaction) that are greater than those of the surrounding area. Such areas often are underlain by sediments that differ laterally in composition or degree of existing compaction. Differential settlement refers to areas that have more than one rate of settlement. Settlement can damage structures, pipelines, and other subsurface entities.

Strong ground-shaking can cause soil settlement by vibrating sediment particles into more tightly compacted configurations, thereby reducing pore space. Unconsolidated, loosely packed alluvial deposits and sand are especially susceptible to this phenomenon. Poorly compacted artificial fills may experience seismically induced settlement. Fill soils were up to 5 feet thick consisting of sand and silt. Young Eolian Deposits were encountered to depths up to 44 feet bgs, consisting of silty sand, sandy silt, and poorly graded sand with gravel (SM, ML, and SP soil types, respectively) (Leighton 2021).

3.6.5.5.5 Landslides

Landslides are the downhill movement of a mass of earth and rock. Landsliding is a geological phenomenon that includes a wide range of ground movements, such as rock falls, deep failure of slopes, and shallow debris flows. Although gravity acting on an over-steepened slope is the primary cause of landsliding, there are other contributing factors, such as (1) erosion by rivers, glaciers, or ocean waves; (2) rock and soil slopes that are weakened through saturation by snowmelt or heavy rains; (3) earthquakes that create stresses such that weak slopes fail; (4) volcanic eruptions that produce loose ash deposits,

heavy rain, and/or debris flows; (5) vibrations from machinery, traffic, blasting, and even thunder; and (6) excess weight from accumulation of rain or snow, stockpiling of rock or ore from waste piles, or from man-made structures. The proposed area of development is outside of any Landslide Hazard Zone defined by the state (CGS 2022).

The proposed Project site is not located within a mapped earthquake-induced landslide zone according to the San Bernardino County General Plan (San Bernardino County 2021b). In general, surface topography within the proposed Project Footprint is relatively flat, sloping gently down to the south-southwest (Leighton 2021). There are significant artificial grade changes along Milliken Avenue for the Metrolink railway grade separation, at the Interstate 10 (I-10)/Milliken Avenue overcrossing, and the Union Pacific Railroad (UPRR) grade separation. These artificial grade changes create some variation within surface topography and thus make the surface more susceptible to landslides than the area's natural topography. However, even with artificial grade changes, the potential for landslides hazards within the proposed Project Footprint is considered low.

3.6.5.5.6 Soil Erosion

Soil erosion is the process by which soil particles are removed from a land surface by wind, water, or gravity. Most natural erosion occurs at slow rates; however, the rate of erosion increases when land is cleared of vegetation or structures, or otherwise altered and left in a disturbed condition. Erosion can occur as a result of, and can be accelerated by, site preparation activities associated with development. Vegetation removal in pervious landscaped areas could reduce soil cohesion, as well as the buffer provided by vegetation from wind, water, and surface disturbance, which could render the exposed soils more susceptible to erosive forces.

Excavation or grading may result in erosion during construction activities, irrespective of whether hardscape previously existed at the construction site, because bare soils would be exposed and could be eroded by wind or water. The effects of erosion are intensified with an increase in slope (as water moves faster, it gains momentum to carry more debris), and the narrowing of runoff channels (which increases the velocity of water). Surface structures, such as paved roads and buildings, decrease the potential for erosion. Once covered, soil is no longer exposed to the elements, and erosion generally does not occur. Based on the current built-out conditions, the proposed Project site is not considered to be susceptible to water erosion and wind erosion.

3.6.5.6 Paleontological Resources

Paleontological resources include fossil remains and rock or soil formations that have produced fossil material. Fossils are the remains or traces of prehistoric animals and plants. Fossils are important scientific and educational resources because of their use in (1) documenting the presence and evolutionary history of particular groups of now extinct organisms, (2) reconstructing the environments in which these organisms lived, and (3) determining the relative ages of the strata in which they occur and of the geologic

events that resulted in the deposition of the sediments that formed these strata and in their subsequent deformation.

According to the fossil locality searches conducted by the National History Museum of Los Angeles County (NHMLAC) and the San Bernardino County Museum (SBCM), there are no known fossil localities within the proposed Project site. However, both museums have records of several fossil localities at the surface and to varying depths near the proposed Project site from geologic units similar to those found within the proposed Project site.

The NHMLAC noted six fossil localities approximately 11 to 36 miles from the proposed Project site, all of which are from unnamed sediments of Pleistocene age. The closest of these localities, Los Angeles County Museum vertebrate paleontology (LACM VP) 4619, 4619 is on Wineville Avenue in Eastvale and produced remains of mammoth (*Mammuthus*) at a depth of 100 feet below the surface. The next closest locality, LACM VP 7811, is west of Orchard Park in Chino Valley and yielded remains of whip snake (*Masticophis*) at a depth of 9 to 11 feet below the surface. LACM VP 7268 and LACM VP 7271, located at Sundance Condominiums south of Los Serranos Golf Course, produced remains of horse (*Equus*). From a hill on the eastern side of a sewage disposal plant one mile north-northwest of Corona, LACM VP 1207 produced remains from the cattle family (Bovidae). Finally, LACM VP 4540, located at the junction of Jackrabbit Trail and Gilman Springs Road in the San Jacinto Valley, yielded remains from the horse family (Equidae).

The SBCM noted nine fossil localities near the proposed Project site, all of which are from unnamed sediments of Pleistocene age. The closest fossil locality, SBCM 5.1.8, is 1.6 miles south-southeast of the proposed Project site and produced remains of Columbian mammoth (*Mammuthus columbi*) at a depth of 6 feet below the surface. The remaining eight localities, SBCM 5.1.14 through SBCM 5.1.21, are located in a flood control basin 2.8 to 3.3 miles southeast of the proposed Project site and were found at depths ranging from the surface to 21 feet below the surface. These sites yielded invertebrate remains of gastropods and bivalves, as well as mammal remains including rabbit (*Sylvilagus*), gopher (*Thomomys*), packrat (*Neotoma*), vole (*Microtus californicus*), mastodon (*Mammut americanum*), bison (*Bison*), camel (*Camelops hesternus*), and horse (*Equus*).

A review of fossil locality searches conducted for previous paleontological resource assessments for nearby projects identified one additional fossil locality from the SBCM near the proposed Project site. SBCM 5.1.11, located in the City of Jurupa Valley near the other SBCM localities noted above from within unnamed sediments of Pleistocene age, yielded remains of saber-tooth cat (*Smilodon*) at a depth of 5 feet below the surface.

3.6.6 Impact Evaluation

3.6.6.1 D**irectly 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? Refer to Division of Mines and Geology Special Publication 42**.

3.6.6.1.1 No Project Alternative

Alquist-Priolo Earthquake Fault Zoning Act prohibits the construction of structures for human occupancy (i.e., residential homes, office buildings, warehouses, etc.) on the surface trace of active faults within an Alquist-Priolo Earthquake Fault Zone. The No Project Alternative includes planned expansion, improvement projects, and routine maintenance activities for the existing roadway system and transit facilities. No habitable structures would be involved within the Alquist-Priolo Earthquake Fault Zone for the No Project Alternative. Therefore, there would be no impact associated with loss, injury, or death involving the Alquist-Priolo Earthquake Fault Zone for the No Project Alternative.

3.6.6.1.2 Proposed Project

3.6.6.1.2.1 Construction Impacts

The Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist indicates that the proposed Project is not located within a designated Alquist-Priolo Earthquake Zone. However, some active faults located within the City of Rancho Cucamonga are designated as an Alquist-Priolo Special Study Zone by the City of Rancho Cucamonga. The Cucamonga, Etiwanda, San Andreas, and San Jacinto faults are in proximity to the proposed Project site but do not extend into any portion of the proposed Project site. Specifically, the Cucamonga Fault runs east-west, approximately 5 miles north of the proposed Project site. The Etiwanda Avenue Fault runs northeast-southwest, approximately 4.5 miles north of the proposed Project site. The San Andreas Fault runs in a northwest-southeast direction, approximately 13.5 miles northeast of the proposed Project area; the San Jacinto Fault runs in a similar direction, approximately 6.8 miles northeast of the proposed Project site. Because the proposed Project would not be located within an Alquist-Priolo Earthquake Fault Zone, the potential for damage caused by surface fault rupture is not considered an impact. There are no known active or potentially active faults trending toward or through the proposed Project area. Consequently, the proposed Project during construction would have no impact associated with loss, injury, or death involving the Alquist-Priolo Earthquake Fault Zone.

3.6.6.1.2.2 Operational Impacts

The Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist indicates that the proposed Project is not located within a designated Alquist-Priolo Earthquake Zone. However, some active faults located within the City of Rancho Cucamonga are designated as Alquist-Priolo Special Study Zone by the City of Rancho Cucamonga. The Cucamonga, Etiwanda, San Andreas, and San Jacinto faults are in

proximity to the proposed Project site but do not extend into any portion of the proposed Project site. There are no known active or potentially active faults trending toward or through the proposed Project area. Consequently, the proposed Project during operation would have no impact associated with loss, injury, or death involving the Alquist-Priolo Earthquake Fault Zone.

3.6.6.2 **Directly or indirectly cause potential substantial adverse effects, including the risk of loss,** injury, or death involving strong seismic ground shaking and/or seismic-related ground failure, **including liquefaction**?

3.6.6.2.1 No Project Alternative

The No Project Alternative is in a seismically active area. Active and potentially active faults in Southern California are capable of producing seismic ground-shaking, and the No Project Alternative site would be anticipated to experience ground acceleration caused by these earthquakes. There are faults capable of generating a characteristic earthquake between M_W 6.0 and 8.0 within the vicinity of the No Project Alternative site. Because the No Project Alternative is in a seismically active region, structures would be required to be designed in accordance with applicable parameters of current CBC. With adherence to existing regulations, the No Project Alternative would result in a less than significant impact related to seismic ground-shaking, seismic-related ground failure, and liquefaction.

3.6.6.2.2 Proposed Project

3.6.6.2.2.1 Construction Impacts

The proposed Project site is in a seismically active area. Active and potentially active faults in Southern California are capable of producing seismic ground-shaking in the proposed Project vicinity, and the area would be anticipated to experience ground acceleration caused by these earthquakes. As stated previously, the proposed Project site would be southwest, south, and east of faults capable of generating a characteristic earthquake between M_W 6.0 and 8.0. To reduce the risks associated with seismically induced ground-shaking, which could include the risk of loss, injury, or death, the design of foundations and structures must consider the location and type of subsurface materials underlying the proposed Project site. The proposed Project would also require tunnel boring machines (TBMs) that are large-diameter horizontal drills that continuously excavate circular tunnel sections. Both Earth Pressure Balance and slurry TBMs apply a balancing pressure to the excavation face to stabilize the ground and balance the groundwater pressure in front of the excavation face. The invert of the tunnel would be up to approximately 70 feet in depth. The proposed Project site is in a seismically active region and would be required to be designed in accordance with applicable parameters of the current CBC. The proposed Project could include the risk of loss, injury, or death involving strong seismic ground shaking and/or seismic-related ground failure and the impact is potentially significant. With implementation of MM-GEO-1 and adherence to existing regulations, the proposed Project during construction would result in a less than significant impact to seismic ground-shaking and seismic-related ground failure.

The proposed Project site within the City of Rancho Cucamonga and the City of Ontario has not been identified as being in an area subject to potentially susceptible liquefaction by California Department of Conservation (CGS 2022) or by San Bernardino County (San Bernardino County 2022a; 2022b). The proposed Project area is not in an area of known liquefaction potential. Therefore, the proposed Project would have a less than significant impact during construction associated with the exposure of people or structures to liquefaction.

3.6.6.2.2.2 Operational Impacts

During operation, the proposed Project area would experience earthquake-induced ground-shaking activity because of its proximity to known active faults. The proposed Project site is located in a seismically active region and may be subject to the effects of ground-shaking. The proposed Project site lies in close proximity to several active faults. Therefore, during the life of the proposed development, the proposed Project site would probably experience moderate to high ground-shaking from these fault zones, as well as some background shaking from other seismically active areas of the Southern California region.

Earthquakes are prevalent within Southern California, and there is no practicable way to avoid ground-shaking when it occurs. Measures to minimize the risk of loss, injury, and death from the effects of earthquakes and ground-shaking on buildings are included within 2019 CBC, with specific provisions for seismic design. All buildings proposed as part of the proposed Project are required to resist seismic ground-shaking in accordance with the Zone 4 design parameters identified in CBC. With adherence to existing regulations, the proposed Project during operation would result in a less than significant impact to seismic ground-shaking and seismic-related ground failure.

During severe ground-shaking, loose granular soils below the groundwater table may liquefy. The proposed Project has not been identified as being in an area subject to potentially susceptible liquefaction by California Department of Conservation (CGS 2022) or San Bernardino County (San Bernardino County 2022a; 2022b). Therefore, under CEQA, the proposed Project during operation would have no impact associated with the exposure of people or structures to liquefaction.

3.6.6.3 **Directly or indirectly cause potential substantial adverse effects, including the risk of loss,** injury, or death involving landslides?

3.6.6.3.1 No Project Alternative

The No Project Alternative includes planned expansion, improvement projects, and routine maintenance activities for the existing roadway system and transit facilities. The No Project Alternative site and surrounding vicinity are relatively flat. In addition, the No Project Alternative site is outside of any Landslide Hazard Zone defined by the state (CGS 2022). The possibility for landslides to occur at the No Project Alternative site is considered remote. The No Project Alternative site is not in a designated seismic hazard zone for seismic slope instability as defined by either the state or county. Consequently, there is

minimal potential for landslides to occur in the No Project Alternative site and the impact would be less than significant.

3.6.6.3.2 Proposed Project

3.6.6.3.2.1 Construction Impacts

According to the Landslide Hazard Zone defined by the state, the proposed Project site is not located within a landslide hazard zone (CGS 2022). The proposed Project site is not in a designated seismic hazard zone for seismic slope instability as defined by either the State or San Bernardino County.

The proposed Project includes construction of a tunnel at a depth of approximately 70-feet bgs. The proposed Project would require a site-specific slope-stability design to ensure adherence to the standards contained in 2019 CBC and any City of Rancho Cucamonga and City of Ontario and/or San Bernardino County guidelines, as well as by Cal/OSHA requirements for stabilization during construction. The proposed Project would include excavation construction activities for the tunnel component, which would occur on the perimeter of the proposed Project site. The proposed Project would be required to comply with CBC guidelines to stabilize any temporary constructed slopes created during construction activities. Consequently, impacts associated with constructed-slope instability are considered less than significant.

In terms of temporary slopes, excavation activities at the proposed Project site could occur in unstable soil. In general, the risk of slope failure is considered higher for temporary slopes due to generally steeper gradients versus permanent, manufactured slopes. Similar to the construction of permanent slopes, temporary slopes would be required to adhere to the Cal/OSHA requirements for stabilization. The proposed Project has the potential to include the risk of loss, injury, or death involving landslides during construction activities associated with temporary slopes. MM-GEO-2 would be implemented to address stability of temporary slopes for the proposed Project. With adherence to state and local requirements and compliance with MM-GEO-2, the proposed Project during construction would have a less than significant impact related to landslides and/or slope instability.

3.6.6.3.2.2 Operational Impacts

The proposed Project site and surrounding vicinity are relatively flat. In addition, the proposed area of development is outside of any Landslide Hazard Zone defined by the state (CGS 2022). Landslides are a type of erosion in which masses of earth and rock move down slope as a single unit. Susceptibility of slopes to landslides and other forms of slope failure depend on several factors including steep slopes, condition of rock and soil materials, presence of water, formational contacts, geologic shear zones, and seismic activity. As described in Section 3.6.5, the soil conditions and relatively flat nature of the proposed Project site and its vicinity result in a low potential for landslides hazards within the proposed Project site. With adherence to state and local requirements, the proposed Project during operation would have a less than significant impact related to landslides and/or slope instability.

3.6.6.4 **Project result in substantial soil erosion or the loss of topsoil**?

3.6.6.4.1 No Project Alternative

Developers would submit a site specific Standard Urban Storm Water Mitigation Plan (SUSMP) prior to the initiation of grading activities associated with implementation of No Project Alternative. The SUSMP is part of the National Pollutant Discharge Elimination System (NPDES) Municipal General Permit which aims to reduce the discharge of pollutants to the maximum extent practical using best management practices, control techniques and systems, design and engineering methods, and other provisions that are appropriate during construction activities. All development activities associated with the No Project Alternative would comply with the site-specific SUSMP. Preparation of a site-specific SUSMP and adherence to existing regulations would ensure the maximum practicable protection available for soils excavated during the construction activities. Compliance with existing regulations would minimize effects from erosion and ensure consistency with the Regional Water Quality Control Board (RWQCB) Water Quality Control Plan. In view of these requirements, the No Project Alternative would have a less than significant impact associated with soil erosion or loss of topsoil.

3.6.6.4.2 Proposed Project

3.6.6.4.2.1 Construction Impacts

Soils at the proposed Project site have a low to moderate susceptibility to erosion. However, these soils would be susceptible to erosion during construction activities, such as excavation. As part of the City of Rancho Cucamonga and the City of Ontario permitting process, a site-specific SUSMP, which is part of the NPDES Municipal General Permit, would be prepared for the proposed Project. Additional information on NPDES is provided in the Section 3.9 (Hydrology and Water Quality) of this Draft EIR.

Preparation of the site-specific SUSMP would describe the minimum required best management practices to be incorporated into the proposed Project design and ongoing operation of the facilities. Prior to the initiation of grading activities, San Bernardino County Transportation Authority (SBCTA) would submit a site-specific SUSMP that would aim to reduce the discharge of pollutants to the maximum extent practicable using best management practices, control techniques and systems, design and engineering methods, and other provisions that are appropriate during operational activities. All construction activities associated with the proposed Project shall comply with the site-specific SUSMP. Preparation of a site-specific SUSMP, and adherence with existing regulations, would ensure maximum practicable protection available for soils excavated during the construction of buildings and associated infrastructure. Compliance with existing regulations would minimize effects from erosion and ensure consistency with the RWQCB Water Quality Control Plan. In view of these requirements, the proposed Project during construction would have a less than significant impact associated with soil erosion or loss of topsoil.

3.6.6.4.2.2 Operational Impacts

The proposed Project would not result in substantial soil erosion or the loss of topsoil during operational activities. Topsoil is the uppermost layer of soil, usually the top 6 to 8 inches. It has the highest concentration of organic matter and micro-organisms, and is where most biological soil activity occurs. Plants generally concentrate their roots in, and obtain most of their nutrients from, this layer. Topsoil erosion is of concern when the topsoil layer is blown or washed away, which makes plant life or agricultural production impossible. In addition, significant erosion typically occurs on steep slopes where stormwater and high winds can carry topsoil down hillsides. The proposed Project would include landscaping; however, the proposed Project would not be susceptible to topsoil erosion. The relatively flat nature of the proposed Project site precludes it from being highly susceptible to erosion. The proposed Project during operation would result in a less than significant impact to soil erosion.

3.6.6.5 Be located on a geologic unit or soil that is unstable, or that would become unstable as a result **of the project, and potentially result in on**- or o**ff**-site landslide, lateral spreading, subsidence, **liquefaction, or collapse**?

3.6.6.5.1 No Project Alternative

Using unsuitable materials for fill and/or foundation support would have the potential to create future heaving, subsidence, spreading, or collapse problems leading to building settlement and/or utility line and pavement disruption. An acceptable degree of soil stability can be achieved for expansive or compressible material by the incorporation of soil treatment programs (replacement, grouting, compaction, drainage control, etc.) in the excavation and construction plans that would be prepared to address site-specific soil conditions. A site-specific evaluation of soil conditions is required and must contain recommendations for ground preparation and earthwork specific to the site. Adherence to existing regulations and policies would ensure the maximum practicable protection available for users of buildings and infrastructure and associated trenches, slopes, and foundations. Therefore, construction or operation of the No Project Alternative would have a less than significant impact associated with the exposure of people or structures to hazards associated with unstable geologic units or soils.

3.6.6.5.2 Proposed Project

3.6.6.5.2.1 Construction Impacts

Using unsuitable materials for fill and/or foundation support could have a potentially significant impact by having the potential to create future heaving, subsidence, spreading, or collapse problems leading to building settlement and/or utility line and pavement disruption. Using such materials exclusively for landscaping would not cause these problems. An acceptable degree of soil stability can be achieved for expansive or compressible material by the incorporation of soil treatment programs (replacement, grouting, compaction, drainage control, etc.) in the excavation and construction plans that would be prepared to address site-specific soil conditions. A site-specific evaluation of soil conditions is required and must contain recommendations for ground preparation and earthwork specific to the site.

Implementation of MM-GEO-3 through MM-GEO-5 would require the maximum practicable protection available for users of buildings and infrastructure and associated trenches, slopes, and foundations. Adherence to the City of Rancho Cucamonga and the City of Ontario's codes and policies and implementation of MM-GEO-3 through MM-GEO-5 would reduce the impacts associated with the exposure of people or structures to hazards associated with unstable geologic units or soils to a less than significant level.

3.6.6.5.2.2 Operational Impacts

Using unsuitable materials for fill and/or foundation support would have the potential to create future heaving, subsidence, spreading, or collapse problems leading to building settlement and/or utility line and pavement disruption. Operation activities for the proposed Project include landscaping that could use unsuitable materials. Using such materials exclusively for landscaping would not cause these problems. The proposed Project during operation would have a less than significant impact associated with the exposure of people or structures to hazards associated with unstable geologic units or soils.

3.6.6.6 Be located on expansive soil, as de**fi**ned in Table 18-1-B of the Uniform Building Code (1994), **creating substantial** direct or indirect risks to life or property?

3.6.6.6.1 No Project Alternative

The No Project Alternative would be required to comply with applicable provisions of the CBC with regard to soil hazard-related design. The City of Rancho Cucamonga's and City of Ontario's Building Codes require a site-specific foundation investigation and report for each construction site that identifies potentially unsuitable soil conditions and contains appropriate recommendations for foundation type and design criteria that conform to the analysis and implementation criteria described in the City of Rancho Cucamonga's and City of Ontario's Building Codes. Regulations exist to address weak soils issues, including expansion. With adherence to existing regulations, the No Project Alternative would have a less than significant impact regarding the exposure of people or structures to hazards related to expansive soils.

3.6.6.6.2 Proposed Project

3.6.6.6.2.1 Construction Impacts

Adhering to existing CBC regulations, the proposed Project would have a less than significant impact regarding the exposure of people or structures to hazards related to expansive soil during construction. The soils underlying the proposed Project area generally consist of Young Eolian Deposits. The proposed Project would be required to comply with applicable provisions of the 2019 CBC with regard to soil hazard related design. Even the slight potential for the existence of expansive soil at the proposed Project site raises the possibility that foundation stability for buildings, roads, and utilities would be compromised. The City of Rancho Cucamonga's and City of Ontario's Building Codes require a site-specific foundation investigation and report for each construction site that identifies potentially unsuitable soil conditions and contains appropriate recommendations for foundation type and design criteria that conform to the

analysis and implementation criteria described in the City of Rancho Cucamonga's and City of Ontario's Building Codes. Regulations exist to address weak soils issues, including expansion. With implementation of MM-GEO-6 and adherence to existing regulations, the proposed Project during construction would have a less than significant impact regarding the exposure of people or structures to hazards related to expansive soils.

3.6.6.6.2.2 Operational Impacts

The soils underlying the proposed Project area generally consist of Young Eolian Deposits. The expansive soil potential is considered low for the proposed Project site. The proposed Project features would be designed in accordance with all standard requirements for improvements on expansive soil, reducing the potential effects from and resulting impacts due to expansive soil. With adherence to existing regulation and with implementation of MM-GEO-6, the operational impacts related to expansive soils would be less than significant.

3.6.6.7 **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?

3.6.6.7.1 No Project Alternative

The No Project Alternative includes planned expansion, improvement projects, and routine maintenance activities for the existing roadway system and transit facilities. There are no septic systems or alternative wastewater disposal systems proposed for the No Project Alternative. The No Project Alternative would have no impact associated with soil incapable of adequately supporting such systems.

3.6.6.7.2 Proposed Project

3.6.6.7.2.1 Construction Impacts

No septic tanks or alternative wastewater systems are proposed as part of the proposed Project. Consequently, the proposed Project would have no impact associated with soil incapable of adequately supporting such systems during construction, and no further analysis is required.

3.6.6.7.2.2 Operational Impacts

The proposed Project would include one maintenance and storage facility (MSF) located at the proposed Cucamonga Station. The MSF would include a restroom facility to serve the staff. The potential wastewater would discharge into the local sanitary sewer system maintained by Cucamonga Valley Water District which serves the City of Rancho Cucamonga. No septic tanks or alternative wastewater systems are proposed as part of the proposed Project. Consequently, the proposed Project would have no impact associated with soil incapable of adequately supporting such systems during operation, and no further analysis is required.

3.6.6.8 Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

3.6.6.8.1 No Project Alternative

The No Project Alternative includes planned expansion, improvement projects, and routine maintenance activities for the existing roadway system and transit facilities. The No Project Alternative would be required to include project site-specific measures to mitigate impacts related to paleontological resources. With adherence to existing regulations and implementation of its own project site-specific measures to mitigate any potential impacts to paleontological resources, the No Project Alternative would have a less than significant impact.

3.6.6.8.2 Proposed Project

3.6.6.8.2.1 Construction Impacts

Excavation for the three stations, including the at-grade station plaza and vehicle maintenance and storage facility at the Rancho Cucamonga Metrolink Station, would extend to depths of less than 5 feet. None of the excavation activities for the stations are expected to extend deep enough to reach paleontologically sensitive geologic units and, therefore, would not impact scientifically significant paleontological resources. Construction of the stations would result in no impact to paleontological resources.

Tunnel boring for the 24-foot inner diameter tunnel would take place a minimum of 30 feet and up to 70 feet bgs through the use of a TBM. This boring would occur at depths that may potentially affect the paleontologically sensitive Young Alluvial Fan Deposits, Unit 4, below a depth of 5 feet; Young Alluvial Fan Deposits, Undivided, below a depth of 5 feet; and Young Eolian Deposits below a depth of 5 feet. As such, boring for the main tunnel would have the potential to impact scientifically significant paleontological resources. Boring activities would have the potential to result in a significant impact to paleontological resources.

The portals at the Metrolink and ONT station ends of the bored tunnel would be constructed as cut-and-cover tunnels. These cut-and-cover tunnels would be excavated from the surface to the ends of the bored tunnel, approximately 30 feet below the surface using traditional excavation equipment (e.g., scrapers, trackhoes, bulldozers). Cut-and-cover for the Metrolink Station portal would occur at depths that may potentially impact the Young Eolian Deposits below a depth of 5 feet. Cut-and-cover activities for the ONT stations would occur at depths that may potentially impact the Young Alluvial Fan Deposits, undivided, below a depth of 5 feet. Therefore, there is a potential for these activities to impact scientifically significant paleontological resources. Cut-and-cover activities would have the potential to result in a significant impact to paleontological resources.

The ventilation shaft (vent shaft) would reach to the depth of the bored tunnel at that location, approximately 50 feet below the surface, through drilled piles followed by traditional excavation. Excavation for the vent shaft would occur at depths that would affect the paleontologically sensitive Young Alluvial Fan Deposits, Undivided, below a depth of 5 feet and Young Eolian Deposits below a depth of 5 feet. Therefore, there is a potential for this activity to affect scientifically significant paleontological resources. Construction of the vent shaft would have the potential to result in a significant impact to paleontological resources.

Overhead Southern California Edison (SCE) lines would be relocated underground to accommodate the Rancho Cucamonga Metrolink Station maintenance facility requiring excavation to a depth of less than 5 feet. A number of other utility lines would also be relocated to accommodate the vent shaft, requiring excavation to a depth of less than 5 feet. Excavation required for relocation of the utility lines is not expected to reach paleontologically sensitive geologic units and, therefore, would not affect scientifically significant paleontological resources. Utility relocation would result in no impact to paleontological resources.

As previously described, construction activities associated with the tunnel boring, stations, and vent shafts would include excavation at depths that may destroy paleontological resources, resulting in potentially significant impacts. MM-PAL-1, MM-PAL-2, MM-PAL-3, and MM-PAL-4 would be implemented for the proposed Project requiring hiring a paleontological resource specialist, conducting construction worker training, monitoring, and preparing a mitigation plan during construction in the event of discovery of paleontological resources; however, even with implementation of MM-PAL-1, MM-PAL-2, MM-PAL-3 and MM-PAL-4, avoidance is not feasible, and the impact would remain significant and unavoidable.

3.6.6.8.2.2 Operational Impacts

Operational activities associated with the proposed Project would not involve ground disturbance in geologic units sensitive to paleontological resources. Therefore, they would not impact scientifically significant paleontological resources. Operation of the proposed Project would result in no impact to paleontological resources.

3.6.7 Mitigation Measures

The following mitigation measures would be implemented for the proposed Project.

MM-GEO-1 San Bernardino County Transportation Authority shall demonstrate to the City of Rancho Cucamonga and the City of Ontario that the design of the Project complies with all applicable provisions of the California Building Code with respect to seismic design for Zone 4. Compliance would include the following:

- The use of California Building Code Seismic Zone 4 Standards as the minimum seismic-resistant design for all proposed facilities.

- Additional seismic-resistant earthwork and construction design criteria (i.e., for the construction of the tunnel approximately up to 70 feet underground and etc.), based on the site-specific recommendations of a California Certified Engineering Geologist in cooperation with the Project's California-registered geotechnical and structural engineers.
- An engineering analysis that demonstrates satisfactory performance of alluvium or fill where either forms part or all of the support.
- An analysis of soil conditions and appropriate remediation (compaction, removal/replacement, etc.) prior to using any expansive soils for foundation support.

MM-GEO-2 Where excavations are made for the construction of the 4.2-mile tunnel approximately up to 70 feet underground, the construction contractor shall either shore excavation walls, with shoring designed to withstand additional loads, or flatten or "lay back" the excavation walls to a shallower gradient. Excavation spoils shall not be placed immediately adjacent to excavation walls unless the excavation is shored to support the added load.

MM-GEO-3 A California-licensed Civil Engineer (Geotechnical) shall prepare and submit to the San Bernardino County Transportation Authority a detailed soils and geotechnical analysis. This evaluation may require subsurface exploration.

MM-GEO-4 A registered soil professional shall submit to and have approval by the San Bernardino County Transportation Authority a site-specific evaluation of unstable soil conditions, including recommendations for ground preparation and earthwork activities specific to the site and in conformance to City of Rancho Cucamonga and City of Ontario Building Codes.

MM-GEO-5 The proposed Project shall comply with the recommendations of the final soils and geotechnical report. These recommendations shall be implemented in the design of the project, including but not limited to measures associated with site preparation, fill placement, temporary shoring and permanent dewatering, groundwater seismic design features, excavation stability, foundations, soil stabilization, establishment of deep foundations, concrete slabs and pavements, surface drainage, cement type and corrosion measures, erosion control, shoring and internal bracing, and plan review.

MM-GEO-6 San Bernardino County Transportation Authority shall demonstrate that the design of the proposed Project complies with all applicable provisions of the City of Rancho Cucamonga and City of Ontario's Building Codes.

MM-PAL-1 Engage a qualified paleontological resources specialist. Prior to construction (any ground-disturbing activities), the contractor shall designate a qualified Paleontological Resources Specialist for the Project (approved by San Bernardino County Transportation Authority). The Paleontological Resources Specialist will be responsible for developing a detailed Paleontological Resources Impact Mitigation Plan as well as implementing the Paleontological Resources Impact Mitigation Plan, including development and delivery of Worker Environmental Awareness Program training, evaluation and treatment of finds, if any, and preparation of a final paleontological mitigation report, per the Paleontological Resources Impact Mitigation Plan. Paleontological Resources Monitors will be selected by the Paleontological Resources Specialist based on their qualifications, and the scope and nature of their monitoring will be determined and directed by the Paleontological Resources Specialist based on the Paleontological Resources Impact Mitigation Plan. The Paleontological Resources Specialist will document, evaluate, and assess any discoveries, as needed.

MM-PAL-2 Prepare and implement a Paleontological Resources Impact Mitigation Plan. The Paleontological Resources Impact Mitigation Plan would be consistent with the Society of Vertebrate Paleontology. Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources, the Society of Vertebrate Paleontology Conditions of Receivership for Paleontological Salvage Collections, and relevant guidance from Chapter 8 of the current California Department of Transportation (Caltrans) Standard Environmental Reference. As such, the Paleontological Resources Impact Mitigation Plan would provide for at least the following:

- Implementation of the Paleontological Resources Impact Mitigation Plan by qualified personnel, including the following positions:
    - Paleontological Resources Specialist – The paleontological resources specialist will be required to meet or exceed Principal Paleontologist qualifications per Chapter 8 of the current Caltrans Standard Environmental Reference.
    - Paleontological Resources Monitors – The Paleontological Resources Monitors would be required to meet or exceed Paleontological Monitor qualifications per Chapter 8 of the current Caltrans Standard Environmental Reference.
- Requirements for paleontological monitoring by qualified Paleontological Resources Monitors of all ground-disturbing activities known to affect, or potentially affect, paleontologically sensitive geologic units. Based on more detailed information on the methods, equipment, and procedures involved in

ground disturbance, including the Tunnel Boring Machine, available at the time of preparation, the Paleontological Resources Monitors would provide details of the corresponding levels of paleontological monitoring. The Paleontological Resources Monitors would allow for monitoring frequency in any given location to be increased or decreased as appropriate based on the Paleontological Resources Specialist's professional judgment in consideration of actual site conditions, geologic units encountered, and fossil discoveries made.

- Provisions for the content development and delivery of paleontological resources Worker Environmental Awareness Program training.
- Provisions for in-progress documentation of monitoring (and, if applicable, salvage/recovery operations) via "daily logs" or a similar approved means.
- Provisions for a "stop work, evaluate, and treat appropriately" response in the event of a known or potential paleontological discovery, including finds in highly sensitive geologic units as well as finds, if any, in geologic units identified as less sensitive, or non-sensitive, for paleontological resources.
- Provisions for sampling and recovery of unearthed fossils consistent with Society of Vertebrate Paleontology Standard Procedures and the Society of Vertebrate Paleontology Conditions of Receivership. Recovery procedures would provide for recovery of both macrofossils and microfossils.
- Provisions for acquiring a repository agreement from an approved regional repository for curation, care, and storage of recovered materials, consistent with the Society of Vertebrate Paleontology Conditions of Receivership. If more than one repository institution is designated, separate repository agreements must be provided.
- Provisions for preparation of a final monitoring and mitigation report that meets the requirements of the Caltrans Standard Environmental Reference Chapter 8 provisions for the Paleontological Monitoring Report and Paleontological Stewardship Summary.
- Provisions for the preparation, identification, analysis, and curation of fossil specimens and data recovered, consistent with the Society of Vertebrate Paleontology Conditions of Receivership and any specific requirements of the designated repository institution(s).

MM-PAL-3 Provide Worker Environmental Awareness Program Training for Paleontological Resources. Prior to groundbreaking within the Project, the contractor would provide

paleontological resources Worker Environmental Awareness Program training delivered by the Paleontological Resources Specialist. All management and supervisory personnel and construction workers involved with ground-disturbing activities would be required to take this training before beginning work on the Project. Refresher training would also be made available to management and supervisory personnel and workers as needed, based on the judgment of the Paleontological Resources Specialist.

At a minimum, paleontological resources Worker Environmental Awareness Program training would include information on:

- The coordination between construction staff and paleontological staff;
- The construction and paleontological staff roles and responsibilities in implementing the Paleontological Resources Impact Mitigation Plan;
- The possibility of encountering fossils during construction;
- The types of fossils that may be seen and how to recognize them; and
- The proper procedures in the event fossils are encountered, including the requirement to halt work in the vicinity of the find and procedures for notifying responsible parties in the event of a find.

Training materials and formats may include, but are not necessarily limited to, in-person training, prerecorded videos, posters, and informational brochures that provide contacts and summarize procedures in the event paleontological resources are encountered. Worker Environmental Awareness Program training contents would be subject to review and approval by San Bernardino County Transportation Authority. Paleontological resources Worker Environmental Awareness Program training may be provided concurrently with cultural resources Worker Environmental Awareness Program training.

Upon completion of any Worker Environmental Awareness Program training, the contractor would require workers to sign a form stating that they attended the training and understand and would comply with the information presented. Verification of paleontological resources Worker Environmental Awareness Program training will be provided to San Bernardino County Transportation Authority by the contractor.

MM-PAL-4 Requires to halt construction, evaluate, and treat if Paleontological Resources are found. Consistent with the Paleontological Resources Impact Mitigation Plan, if fossil materials are discovered during construction, regardless of the individual making the

discovery, all activity within 50 feet of the discovery would halt and the find would be protected from further disturbance. If the discovery is made by someone other than the Paleontological Resources Specialist or Paleontological Resources Monitors, the person who made the discovery would immediately notify construction supervisory personnel, who would in turn notify the Paleontological Resources Specialist. Notification to the paleontological resources specialist would take place promptly (prior to the close of work the same day as the find), and the paleontological resources specialist would evaluate the find and prescribe appropriate treatment as soon as feasible. Work may continue on other portions of the Project while evaluation (and, if needed, treatment) takes place, as long as the find can be adequately protected in the judgment of the paleontological resources specialist.

If the Paleontological Resources Specialist determines that treatment (i.e., recovery and documentation of unearthed fossil[s]) is warranted, such treatment, and any required reporting, would proceed consistent with the Paleontological Resources Impact Mitigation Plan. The contractor would be responsible for ensuring prompt and accurate implementation, subject to verification by San Bernardino County Transportation Authority.

The stop work requirement does not apply to drilling or boring since these operations typically cannot be suspended in mid-course. However, if finds are made during drilling or boring, the same notification and other follow-up requirements would apply. The paleontological resources specialist would coordinate with construction supervisory and drilling/boring staff regarding the handling of recovered fossils.

The requirements of this mitigation measure would be detailed in the Paleontological Resources Impact Mitigation Plan and presented as part of the paleontological resources Worker Environmental Awareness Program training.

3.6.8 Impacts After Mitigation

3.6.8.1 **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? Refer to Division of Mines and Geology Special Publication 42**.

Mitigation measures would not be required, and the proposed Project would have no impact.

3.6.8.2 **Directly or indirectly cause potential substantial adverse effects, including the risk of loss,** injury, or death involving strong seismic ground-shaking and/or seismic-related ground failure, **including liquefaction**?

With adherence to existing regulations and implementation of MM-GEO-1, the proposed Project would have a less than significant impact. Mitigation measures related to liquefaction would not be required for the proposed Project.

3.6.8.3 **Directly or indirectly cause potential substantial adverse effects, including the risk of loss,** injury, or death involving landslides?

With adherence to state and local requirements and compliance with MM-GEO-2, the proposed Project would have a less than significant impact.

3.6.8.4 **Project result in substantial soil erosion or the loss of topsoil**?

Mitigation measures would not be required, and the proposed Project would have a less than significant impact.

3.6.8.5 Be located on a geologic unit or soil that is unstable, or that would become unstable as a result **of the project, and potentially result in on**- or o**ff**-site landslide, lateral spreading, subsidence, **liquefaction, or collapse**?

With adherence to the City of Rancho Cucamonga's and the City of Ontario's codes and policies and implementation of MM-GEO-3 through MM-GEO-5, the proposed Project would have a less than significant impact.

3.6.9 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?

With adherence to existing regulation and with implementation of MM-GEO-6, the proposed Project would have a less than significant impact.

3.6.10 Have soil incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

No mitigation measures would be required, and the proposed Project would have no impact.

3.6.11 Directly or indirectly destroys a unique paleontological resource or site?

With mitigation measures MM-PAL-1 through MM-PAL-4 incorporated into the proposed Project, most impacts to paleontological resources associated with construction of the proposed Project would be reduced to less than significant with the exception of impacts related to boring of the main tunnel.

No known fossil localities currently occur within the proposed Project site, and only previously unknown paleontological resources may be discovered. Therefore, avoidance is unlikely to be a viable approach for mitigation of impacts to paleontological resources, as Project designs would need to be revised during construction if and when paleontological resources are discovered. However, implementation of MM-PAL-1, MM-PAL-2, MM-PAL-3, and MM-PAL-4 would reduce the impacts associated with construction of the stations, MSF, the cut-and-cover portions of the tunnel, vent shaft design options, and the utility relocations on scientifically significant, nonrenewable paleontological resources to a less than significant level. Implementation of MM-PAL-2, which calls for preparation and implementation of a Paleontological Resources Impact Mitigation Plan, and MM-PAL-4, which stipulates a "stop work, evaluate, and treat appropriately" response in the event of a paleontological discovery, would reduce impacts to paleontological resources through monitoring and salvage.

The aforementioned mitigation measures may allow for some recovery of small fossils and some fossil material if safe access to spoils is available; however, the TBM used to excavate the tunnel prevents access to the rock face, produces fragmented material, precludes the recovery of larger fossils, and limits the amount of contextual information that may be collected for scientific purposes. Additionally, because the locations of potential paleontological resources are unknown, movement of the proposed Project alignment to avoid paleontologically sensitive geologic units, and thus avoid impacts on paleontological resources, is not a viable approach for mitigation. Because avoidance is not feasible mitigation and the potentially significant impact must occur for the proposed Project to be constructed, impacts to the majority of scientifically significant, nonrenewable paleontological resources from boring of the tunnel would remain significant and unavoidable.

Operation of the proposed Project would result in no impact to paleontological resources.

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3.7 GREENHOUSE GAS EMISSIONS

3.7.1 Introduction

This section of this Draft Environmental Impact Report (EIR) provides a summary of the evaluation of the impacts to greenhouse gas (GHG) emissions resulting from the implementation of the proposed Ontario International Airport (ONT) Connector Project (Project). Detailed information for GHG emissions is included in the Greenhouse Gas Emissions Technical Report (SBCTA 2024a; Appendix K).

3.7.2 Regulatory Framework

3.7.2.1 Federal

3.7.2.1.1 Federal Transit Administration Climate Considerations Program

The Federal Transit Administration (FTA) has established a Climate Considerations program that includes resources on transit and climate change mitigation and adaptation. The FTA recognizes that public transportation can facilitate compact development, conserving land and decreasing travel demand, as well as reducing fuel use and GHG emissions that contribute to climate change. Included as part of the program is the FTA's Greenhouse Gas Emissions for Transit Projects: Programmatic Assessment (FTA 2017) that serves to: (1) report on whether certain types of proposed transit projects merit detailed analysis of their GHG emissions at the project level, and (2) be a source of data and analysis for the FTA and its grantees to reference in future environmental documents for projects in which detailed, project-level GHG analysis is not vital. Additional resources include the FTA's Transit GHG Emission Estimator spreadsheet (FTA 2016) and two reports (FTA 2011; 2014) related to potential future impacts of climate change on transit systems and adaptation strategies.

3.7.2.1.2 Fuel Economy and Energy Efficiency

Various efforts have been promulgated at the federal level to improve fuel economy and energy efficiency to address climate change and its associated effects.

- Energy Policy Act of 1992 (102nd Congress H.R.776.ENR [1991-1992]): Energy Policy Act of 1992) was passed by Congress and set goals, created mandates, and amended utility laws to increase clean energy use and improve overall energy efficiency in the United States (U.S.). Energy Policy Act of 1992 consists of 27 titles detailing various measures designed to lessen the nation's dependence on imported energy, provide incentives for clean and renewable energy, and promote energy conservation in buildings. Title III of Energy Policy Act of 1992 addresses alternative fuels. It gave the U.S. Department of Energy administrative power to regulate the minimum number of light-duty alternative-fuel vehicles required in certain federal fleets

beginning in fiscal year 1993. The primary goal of the program was to cut petroleum use in the U.S. by 2.5 billion gallons per year by 2020.

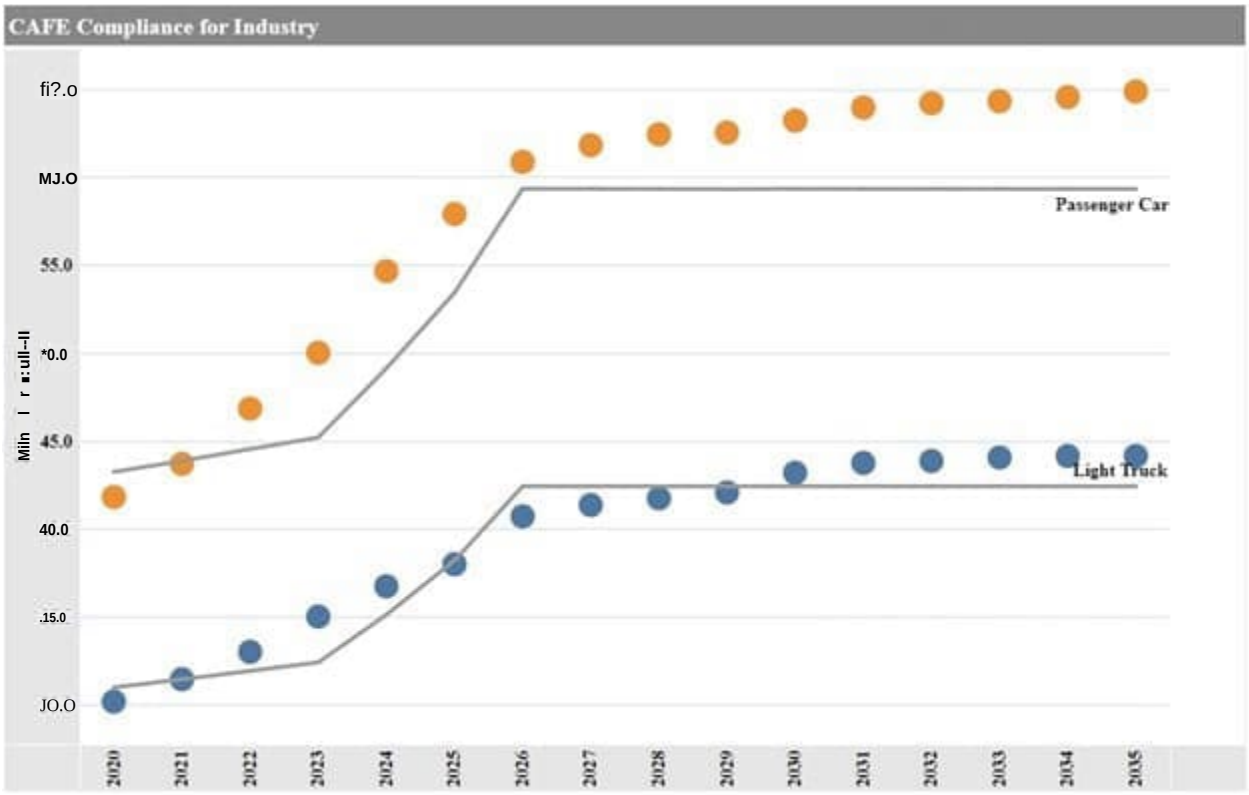
- Energy Policy Act of 2005 (109th Congress H.R.6 [2005–2006]): The Energy Policy Act of 2005 set forth an energy research and development program covering: (1) energy efficiency; (2) renewable energy; (3) oil and gas; (4) coal; (5) Indian energy; (6) nuclear matters and security; (7) vehicles and motor fuels, including ethanol; (8) hydrogen; (9) electricity; (10) energy tax incentives; (11) hydropower and geothermal energy; and (12) climate change technology.
- Energy Policy and Conservation Action of 1975 and Corporate Average Fuel Standards: The Energy Policy and Conservation Act of 1975 (42 United States Code Section 6201 [1975]) establishes fuel economy standards for on-road motor vehicles sold in the U.S. Compliance with federal fuel economy standards is determined through the Corporate Average Fuel Economy (CAFE) program on the basis of each manufacturer's average fuel economy for the portion of its vehicles produced for sale in the U.S.
- Executive Order (EO) 13514, Federal Leadership in Environmental, Energy, and Economic Performance, 74 Federal Register 52117 (October 8, 2009): This federal EO set sustainability goals for federal agencies and focuses on making improvements in their environmental, energy, and economic performance. It instituted as policy of the U.S. that federal agencies measure, report, and reduce their GHG emissions from direct and indirect activities.
- EO 13693, Planning for Federal Sustainability, 80 Federal Register 15869 (March 2015): This EO reaffirmed the policy of the U.S. that federal agencies measure, report, and reduce their GHG emissions from direct and indirect activities. It set sustainability goals for all agencies to promote energy conservation, efficiency, and management by reducing energy consumption and GHG emissions. It builds on the adaptation and resiliency goals in EO 13693 to ensure agency operations and facilities prepare for the impacts of climate change. This EO revoked EO 13514.

The U.S. Environmental Protection Agency's (USEPA's) authority to regulate GHG emissions stems from the U.S. Supreme Court decision in Massachusetts v. USEPA (2007). The Supreme Court ruled that GHGs meet the definition of air pollutants under the existing Clean Air Act and must be regulated if these gases could be reasonably anticipated to endanger public health or welfare. Responding to the Court's ruling, USEPA finalized an endangerment finding in December 2009. Based on scientific evidence, it found that six GHGs constitute a threat to public health and welfare. Thus, it is the Supreme Court's interpretation of the existing Act and USEPA's assessment of the scientific evidence that form the basis for USEPA's regulatory actions.

USEPA, in conjunction with the National Highway Traffic Safety Administration (NHTSA), issued the first of a series of GHG emission standards for new cars and light-duty vehicles in April 2010 and significantly increased the fuel economy of all new passenger cars and light trucks sold in the U.S. The standards

required these vehicles to meet an average fuel economy of 34.1 miles per gallon (mpg) by 2016. In August 2012, the federal government adopted the second rule that increases fuel economy for the fleet of passenger cars, light-duty trucks, and medium-duty passenger vehicles for model years 2017 and beyond to average fuel economy of 54.5 mpg by 2025. On March 31, 2022, the NHTSA finalized the CAFE standards for model years 2024–2026, which require an industry-wide fleet average of approximately 49 mpg for passenger cars and light trucks in model year 2026, by increasing fuel efficiency by 8 percent (%) annually for model years 2024 and 2025, and 10% annually for model year 2026. Figure 3.7-1 shows the CAFE standards from 2020 through 2035.

Figure 3.7-1 NHTSA CAFE Standards Over Time



Source: NHTSA Corporate Average Fuel Economy (2022)

Presidential EO 13783, Promoting Energy Independence and Economic Growth, as of March 28, 2017, orders all federal agencies to apply cost-benefit analyses to regulations of GHG emissions and evaluations of the social cost of carbon dioxide (CO_2), nitrous oxide (N_2O), and methane (CH_4).

3.7.2.2 State

3.7.2.2.1 California Environmental Quality Act

California Environmental Quality Act (CEQA; California Public Resources Code Sections 21000 et seq.) and the 2024 CEQA Guidelines (California Code of Regulations Sections 15000 et seq.) require state and local agencies to identify the significant environmental impacts of their actions, including potential significant air quality and climate change impacts, and to avoid or mitigate those impacts when feasible. The CEQA Amendments of December 30, 2009, specifically require lead agencies to address GHG emissions in determining the significance of environmental impacts caused by a project and to consider feasible means to mitigate the significant impacts of GHG emissions (South Coast Air Quality Management District [SCAQMD] 2008a).

3.7.2.2.2 California Legislation

With the passage of legislation including Senate Bills (SBs), Assembly Bills (ABs), and EOs, California has been innovative and proactive in addressing GHG emissions and climate change.

- AB 1493, Pavley Vehicular Emissions: Greenhouse Gases, 2002: This bill requires the California Air Resources Board (CARB) to develop and implement regulations to reduce automobile and light truck GHG emissions. These stricter emissions standards were designed to apply to automobiles and light trucks beginning with the 2009 model year.
- EO S-3-05 (June 1, 2005): The goal of this EO is to reduce California's GHG emissions to: (1) 2000 levels by 2010, (2) 1990 levels by 2020, and (3) 80% below 1990 levels by 2050. This goal was further reinforced with the passage of AB 32 in 2006 and SB 32 in 2016.
- AB 32, Chapter 488, 2006: Núñez and Pavley, The Global Warming Solutions Act of 2006: AB 32 codified the 2020 GHG emissions reduction goals as outlined in EO S-3-05 while further mandating that CARB create a scoping plan and implement rules to achieve "real, quantifiable, cost-effective reductions of greenhouse gases." The state legislature also intended that the statewide GHG emissions limit continue in existence and be used to maintain and continue reductions in emissions of GHGs beyond 2020 (Health and Safety Code Section 38551([b]). The law requires CARB to adopt rules and regulations in an open public process to achieve the maximum technologically feasible and cost-effective GHG reductions.

  AB 32 required CARB to develop a Scoping Plan that describes the approach California will take to achieve the goal of reducing GHG emissions to 1990 levels by 2020. The Scoping Plan was first approved by CARB in 2008 and must be updated every five years. CARB approved the first update to the Climate Change Scoping Plan on May 22, 2014; the second on December 14, 2017; and the third on December 15, 2022. The 2022 Scoping Plan sets a target of a 48 % reduction of GHG

emissions below 1990 levels by 2030. By 2045, it sets targets of reducing fossil fuel consumption (liquid petroleum) to less than one-tenth of current consumption, cuts GHG emissions to 85% below 1990 levels, and reduces smog-forming air pollution by 71% (CARB 2022a).

The AB 32 Scoping Plan and the subsequent updates contain the main strategies California will use to reduce GHG emissions. CARB is responsible for maintaining and updating California's GHG inventory per Health and Safety Code Section 39607.4.

- EO S-20-06 (October 18, 2006): This order establishes the responsibilities and roles of the Secretary of the California Environmental Protection Agency (CAL/EPA) and state agencies with regard to climate change.
- EO S-01-07 (January 18, 2007): This order sets forth the low carbon fuel standard (LCFS) for California. Under this EO, the carbon intensity of California's transportation fuels is reduced by at least 10% by the year 2020. CARB re-adopted the LCFS regulation in September 2015, and the changes went into effect on January 1, 2016. The program establishes a strong framework to promote the low-carbon fuel adoption necessary to achieve the Governor's 2030 and 2050 GHG reduction goals (CARB 2011).
- SB 97, Chapter 185, 2007, Greenhouse Gas Emissions: This bill requires the Governor's Office of Planning and Research to develop recommended amendments to the CEQA Guidelines for addressing GHG emissions. The amendments became effective on March 18, 2010.
- AB 197: A condition of approval for SB 32 was the passage of AB 197. AB 197 requires that CARB considers the social costs of GHG emissions and prioritize direct reductions in GHG emissions at mobile sources and large stationary sources. AB 197 also gives the California legislature more oversight over CARB through the addition of two legislatively appointed members to the CARB and the establishment of a legislative committee to make recommendations about CARB programs to the legislature.
- AB 75: AB 75 was passed in 1999 and mandates that state agencies develop and implement an integrated waste management plan to reduce GHG emissions related to solid waste disposal. In addition, the bill mandates that community service districts providing solid waste services report the disposal and diversion information to the appropriate city, county, or regional jurisdiction. The bill requires diversion of at least 50% of the solid waste from landfills and transformation facilities, and submission to the California Department of Resources Recycling and Recovery (formerly known as the California Integrated Waste Management Board) of an annual report describing the diversion rates.
- AB 341: The state legislature enacted AB 341 (California Public Resources Code Section 42649.2), increasing the diversion target to 75% statewide. AB 341 requires all businesses and public entities

that generate four cubic yards or more of waste per week to have a recycling program in place. The final regulation was approved by the Office of Administrative Law on May 7, 2012 and went into effect on July 1, 2012.

- SB 375, Chapter 728, 2008, Sustainable Communities and Climate Protection: This bill requires CARB to set regional emissions reduction targets for passenger vehicles. The Metropolitan Planning Organization (MPO) for each region must then develop a "Sustainable Communities Strategy" (SCS) that integrates transportation, land-use, and housing policies to plan how it will achieve the emissions target for its region.
- SB 391, Chapter 585, 2009, California Transportation Plan: This bill requires the state's long-range transportation plan to meet California's climate change goals under AB 32.
- EO B-16-12 (March 2012): This EO orders state entities under the direction of the Governor, including CARB, the California Energy Commission, and the California Public Utilities Commission, to support the rapid commercialization of zero-emission (ZE) vehicles. It directs these entities to achieve various benchmarks related to ZE vehicles.
- EO B-30-15 (April 2015): This EO establishes an interim statewide GHG emissions reduction target of 40% below 1990 levels by 2030 in order to ensure California meets its target of reducing GHG emissions to 80% below 1990 levels by 2050. It further orders all state agencies with jurisdiction over sources of GHG emissions to implement measures, pursuant to statutory authority, to achieve reductions of GHG emissions to meet the 2030 and 2050 GHG emissions reduction targets. It also directs CARB to update the Climate Change Scoping Plan to express the 2030 target in terms of million metric tons of carbon dioxide equivalent ($MMTCO_2e$) (CARB, 2022a). Finally, it requires the Natural Resources Agency to update the state's climate adaptation strategy, Safeguarding California, every three years, and to ensure that its provisions are fully implemented.
- SB 32, Chapter 249, 2016: SB 32 codifies the GHG reduction targets established in EO B-30-15 to achieve a mid-range goal of 40% below 1990 levels by 2030.
- AB 1279: AB 1279 was signed in September of 2022, and codifies the State goals of achieving net carbon neutrality by 2045 and maintaining net negative GHG emissions thereafter. This bill also requires California to reduce statewide GHG emissions by 85 %compared to 1990 levels by 2045 and directs CARB to work with relevant state agencies to achieve these goals.

3.7.2.3 Regional

3.7.2.4 **Regional Transportation Plan/Sustainable Communities Strategy**

The Southern California Association of Governments (SCAG) is an MPO representing six counties (including San Bernardino County) and 191 cities (including the City of Rancho Cucamonga and the City of Ontario).

SCAG's regional council adopted the 2020–2045 Regional Transportation Plan (RTP)/SCS, also referred to as Connect SoCal (2020 RTP/SCS), and the addendum to the Connect SoCal Program EIR on September 3, 2020 (SCAG, 2020). The 2020 RTP/SCS is a state- and federally required long-range plan for regional transportation and land use that aims to achieve a more sustainable growth pattern and includes Transportation Demand Management (TDM) strategies throughout the region to reduce the number of drive-alone trips and overall vehicle miles traveled (VMT). The 2020 RTP/SCS plans for more than $639 billion in transportation system investments through 2045. It is anticipated that implementation of the 2020 RTP/SCS would result in a 19% reduction in GHG emissions per capita by 2035, compared with 2005 levels (SCAG, 2020). Amendment Number (#) 1 to the 2020 RTP/SCS was approved by the SCAG Regional Council on November 4, 2021, and Amendment #2 was approved by the SCAG Regional Council on October 6, 2022. Amendment #1 included the 2021 Federal Transportation Improvement Program (FTIP) Consistency Amendment #21-05. Amendment #2 serves as a concurrent amendment to the 2023 FTIP, allowing for changes to major state and transit projects in the RTP/SCS and in the FTIP that will be carried forward as part of the 2023 FTIP.

3.7.2.5 Local

A list of relevant local goals and polices are discussed in the Greenhouse Gas Emissions Technical Report (SBCTA 2024a; Appendix K). A summary of local goals and policies is provided in the following section.

3.7.2.5.1 San Bernardino County General Plan

The San Bernardino County General Plan, Natural Resources Element, sets forth goals and policies that provide direction regarding preserving, protecting, conserving, reusing, replenishing, and efficiently using the San Bernardino County's natural resources (San Bernardino County 2020) The following goal and policies are applicable to the proposed Project:

- Goal NR-1 addresses improvements in locally-generated emissions.
    - Policy NR-1.1 encourages compact and transit-oriented development to minimize vehicle miles traveled and greenhouse gas emissions.
    - Policy NR-1.7 sets greenhouse gas reduction targets.

3.7.2.5.2 San Bernardino County Transportation Authority Regional Greenhouse Gas Reduction Plan

As a response to the 2006 AB 32 law, a project partnership led by San Bernardino Associated Governments (SANBAG), the predecessor agency to the San Bernardino County Transportation Authority (SBCTA), has compiled an inventory of GHG emissions and developed reduction measures that was adopted by the 25 partnership cities of San Bernardino County. Reduction measures in the Regional Greenhouse Gas Reduction Plan targeted GHG goals for the year 2020, and the plan was updated in March 2021. The Regional Greenhouse Gas Reduction Plan serves as a plan for how the cities within the San Bernardino

County can reduce its environmental footprint. The policies listed in the Regional Greenhouse Gas Reduction Plan range from broadly supporting energy efficiency and sustainability to policies closely tied to specific GHG reduction measures.

3.7.2.5.3 City of Rancho Cucamonga General Plan

The City of Rancho Cucamonga General Plan, Resource Conservation Element, sets forth goals and policies that provide direction regarding preserving, protecting, conserving, reusing, replenishing, and efficiently using the City of Rancho Cucamonga's limited natural resources (City of Rancho Cucamonga, 2021a). A brief summary of applicable goal and policies are provided below:

- Goal RC-6 strives for a resilient community that addresses and prepares for the health and safety risks of climate change.
    - Policy RC-6.9 requires pedestrian, vehicle, and transit connectivity of streets, trails, and sidewalks.
    - Policy RC-6.10 addresses sustainable building and site design.
    - Policy RC-6.11 encourages alternative building types that are more sensitive to and designed for passive heating and cooling within the arid environment found in Rancho Cucamonga.
    - Policy RC-6.14 addresses stormwater control strategies and systems
    - Policy RC-6.15 requires heat island reduction strategies in new developments
    - Policy RC-6.17 addresses creative mitigation efforts for reducing project-specific GHG emissions.

3.7.2.5.4 City of Rancho Cucamonga Climate Action Plan

The City of Rancho Cucamonga adopted its Climate Action Plan (CAP) in December 2021 (City of Rancho Cucamonga, 2021b). It is a companion to the City of Rancho Cucamonga's General Plan, which articulates the City of Rancho Cucamonga's vision and lays out a set of strategies to achieve the community's vision for the future. The General Plan envisions a community, in part, as one that reduces its contributions to a changing climate and commits the City of Rancho Cucamonga to doing so through preparing, maintaining, and implementing the CAP. The City of Rancho Cucamonga's CAP is consistent with the San Bernardino County Regional Greenhouse Gas Reduction Plan.

3.7.2.5.5 City of Ontario General Plan

The City of Ontario General Plan, Air Quality Element sets forth goals and policies which aims to reduce GHG within the City of Ontario (City of Ontario 2022a). The following goal and policies are applicable to the proposed Project:

- Policy ER-4.1: addresses pollutant emissions reductions through compact, mixed use, and transit-oriented development.
- Policy ER-4.3 addresses GHG emission in accordance with regional, state, and federal regulations.

3.7.2.5.6 City of Ontario Community Climate Action Plan

The City of Ontario adopted its original Community Climate Action Plan (CCAP) in November 2014 and an updated CCAP in August 2022. The primary purpose of the City of Ontario's CCAP is to design a feasible strategy is to establish the long-term framework for action on climate change to ensure GHG pollution is reduced while boosting low-carbon innovation.

The updated CCAP includes specific targets for GHG reductions for 2030, 2040, and 2050. The targets are consistent with broader state and federal reduction targets and reflect contemporary scientific understanding of GHG reductions required by 2050. The 2022 City of Ontario CCAP is consistent with the San Bernardino County Regional Greenhouse Gas Reduction Plan.

3.7.3 Existing Settings

3.7.3.1 Greenhouse Gas Overview

Parts of the Earth's atmosphere act as an insulating blanket of just the right thickness, trapping sufficient solar energy to keep the global average temperature in a suitable range. The "blanket" is a collection of atmospheric gases called "greenhouse gases" based on the idea that these gases trap heat like the glass walls of a greenhouse. These gases, mainly water vapor, CO_2, CH_4, N_2O, and chlorofluorocarbons (CFCs), all act as effective global insulators, reflecting visible light and infrared radiation back to earth.

A growing body of research attributes long-term changes in temperature, precipitation, and other elements of the Earth's climate to large increases in GHG emissions since the mid-19th century. Growth in anthropogenic (human-emitted) emissions has persisted across all major groups of GHGs since 1990, albeit at different rates. By 2019, the largest growth in absolute emissions occurred in CO_2 from fossil fuels and industry followed by CH4, whereas the highest relative growth occurred in fluorinated gases, starting from low levels in 1990 (IPCC 2022).

3.7.3.1.1 Carbon Dioxide

CO_2 is the primary GHG emitted through human activities and in 2020, CO_2 accounted for about 79% of all U.S. GHG from human activities (USEPA 2022). The natural production and absorption of CO_2occurs through the burning of fossil fuels (e.g., oil, natural gas, and coal), solid waste, trees, and wood products, and from other chemical reactions, such as those required to manufacture cement. Globally, the largest source of CO_2 emissions is the combustion of fossil fuels such as coal, oil, and gas in power plants,

automobiles, and industrial facilities. Several specialized industrial production processes and product uses, such as mineral or metal production, and the use of petroleum-based products, leads to CO_2 emissions.

CO_2 is removed from the atmosphere (or sequestered) when it is absorbed by plants as part of the biological carbon cycle (USEPA 2022). Natural sources of CO_2 occur within the carbon cycle where billions of tons of atmospheric CO_2 are removed by oceans and growing plants and are emitted back into the atmosphere through natural processes. When in balance, total CO_2 emissions and removals from the entire carbon cycle are roughly equal. Since the Industrial Revolution in the 1700s, human activities (including the burning of oil, coal, and gas, as well as deforestation) have increased CO_2 concentrations in the atmosphere.

3.7.3.1.2 Methane

Globally, 50-65% of total CH_4 emissions come from human activities and in 2020, CH_4 accounted for about 11% of all U.S. GHG from human activities. (USEPA 2022). CH_4 emitted from a variety of both human-related (anthropogenic) and natural sources. Anthropogenic sources include the production and transport of coal, natural gas, and oil, from livestock and other agricultural practices, and from the decay of organic waste in municipal solid waste landfills. Natural sources of CH_4 include wetlands, permafrost, termites, oceans, freshwater bodies, non-wetland soils, wildfires, and gas hydrates. Gas hydrates are crystalline solids that consist of a gas molecule, usually methane, surrounded by a “cage” of water molecules (United States Geological Survey [USGS] 2018).

CH_4 emission levels from a particular source can vary significantly from one country or region to another. These variances depend on many factors, such as climate, industrial and agricultural production characteristics, energy types and usage, and waste management practices. For example, temperature and moisture have a significant effect on the anaerobic digestion process, which is one of the key biological processes resulting in CH_4 emissions from both human and natural sources. Also, the implementation of technologies to capture and utilize CH_4 from sources such as landfills, coal mines, and manure management systems affects the emission levels from these sources.

3.7.3.1.3 Nitrous Oxide

Globally, about 40% of total N_2O emissions come from human activities and in 2020, N_2O accounted for about 7% of all U.S. GHG emissions from human activities (USEPA 2022). Concentrations of N_2O also began to rise at the beginning of the Industrial Revolution. Microbial processes in soil and water, including those reactions that occur in fertilizer containing nitrogen, produce N_2O. In addition to agricultural sources, some industrial processes (fossil fuel-fired power plants, nylon production, nitric acid production, and vehicle emissions) also contribute to the atmospheric load of N_2O.

3.7.3.1.4 Chlorofluorocarbons

CFCs have no natural source and come almost entirely from human-related activities. CFCs were synthesized for uses as refrigerants, aerosol propellants, and cleaning solvents and have very high global warming potential (GWP). Since their creation in 1928, the concentrations of CFCs in the atmosphere have been rising. Due to the discovery that CFCs can destroy stratospheric ozone, a global effort to halt their production was undertaken, and levels of the major CFCs are now remaining static or declining. However, their long atmospheric lifetimes mean that some of the CFCs will remain in the atmosphere for over 100 years. Since they are also a GHG, along with other long-lived synthesized gases such as CF_4 (carbontetrafluoride) and SF_6 (sulfurhexafluoride), they are of concern. Another set of synthesized compounds called HFCs (hydrofluorocarbons) are also considered GHGs, though they are less stable in the atmosphere, and therefore, have a shorter lifetime and lower GWP (USEPA 2022). CFCs, CF_4, SF_6, and HFCs have been banned and are no longer available. Therefore, these GHGs are not included in this analysis.

3.7.3.2 **Potential Effects of** Climate Change and Greenhouse Gas

Human activities, such as producing electricity and driving internal combustion vehicles, have contributed to the elevated concentration of these gases in the atmosphere. This in turn is contributing to climate change. Climate change could have a number of adverse effects. Although these effects would have global consequences, in most cases they would not disproportionately affect any one site or activity. In other words, many of the effects of climate change are not site-specific. Emission of GHGs would contribute to changes in the global climate, which would in turn, have a number of physical and environmental effects. Some general effects of climate change are discussed below.

- Sea Level Rise and Flooding. The National Oceanic and Atmospheric Administration (NOAA) has reported that on a pathway with high GHG emissions and rapid ice sheet collapse, models project that average sea level rise for the U.S. could be 2.2 meters (7.2 feet) by 2100 and 3.9 meters (13 feet) by 2150 (NOAA 2022). NOAA also reported that even if GHG emissions were significantly reduced, U.S. sea level in 2100 is projected to be around 0.6 meters (2 feet) higher on average than it was in 2000 (NOAA 2022). The existing rate of sea level rise, and when combined with astronomical tides, would result in high-tide peak related flooding. High-tide flooding is now 300% to more than 900% more frequent than it was 50 years ago (NOAA 2022).
- Other Flooding. In the future, precipitation events are predicted to vary in terms of timing, intensity, and volume, and extreme storm events may occur with greater frequency. Changes in rainfall and runoff could affect flows in surface water bodies, causing increased flooding and runoff to the storm drain system.
- Water Supply. Most of the scientific models addressing climate change show that the primary effect on California's climate would be a reduced snowpack and a shift in stream-flow seasonality.

A higher percentage of the winter precipitation in the mountains would likely fall as rain rather than as snow, reducing the overall snowpack. Further, as temperatures rise, snowmelt is expected to occur earlier in the year. As a result, peak runoff would likely come a month or so earlier. The end result of this would be that the state may not have sufficient surface storage to capture the early runoff, and so, absent construction of additional water storage projects, a portion of the current supplies would flow to the oceans and be unavailable for use in the state's water delivery systems.

- Water Quality. Climate change could have adverse effects on water quality, which would in turn affect the beneficial uses (habitat, water supply, etc.) of surface water bodies and groundwater. The changes in precipitation previously discussed could result in increased sedimentation, higher concentration of pollutants, higher dissolved oxygen levels, increased temperatures, and an increase in the amount of runoff constituents reaching surface water bodies. Sea level rise could result in the encroachment of saline water into freshwater bodies.

3.7.3.3 Greenhouse Gas Emissions Inventory

The effect each GHG has on climate change is measured as a combination of the volume of its emissions and its GWP and is expressed as a function of how much warming would be caused by the same mass of CO_2. CO_2 is the leading contributor to global warming, and therefore the amounts of other gases are expressed relative to CO_2, using a metric called "carbon dioxide equivalent" (CO_2e). The GWP of CO_2 is assigned a value of 1, and the GWP of other gases is assessed as multiples of CO_2. For example, the 2021 Intergovernmental Panel on Climate Change (IPCC) Sixth Assessment Report calculates the GWP of CH_4 as ranging from 27 to 30 and the GWP of N_2O as 273 over a 100-year time horizon (IPCC 2021). Generally, estimates of all GHGs are summed to obtain total CO_2e emissions for a project or a given time period, usually expressed in metric tons of carbon dioxide equivalent ($MTCO_2e$), or $MMTCO_2e$.

In the U.S., approximately 28% of GHG emissions were associated with transportation and about 25% were associated with electricity generation in 2020 (USEPA 2021). CARB performs statewide GHG inventories, which have been divided into seven broad sectors: agriculture, commercial and residential, electric power, industrial, high GWP, recycling and waste, and transportation. Emissions are quantified in $MMTCO_2e$. Table 3.7-1 shows the estimated statewide GHG emissions for the years 2000, 2010, and 2021.

Table 3.7-1 California Greenhouse Gas Inventory by Sector ($MMTCO_2e$)

Sector	2000	2010	2021
Transportation	175.7 (38%)	162.91 (37%)	145.7 (38%)
Electric Power	104.7 (23%)	90.3 (20%)	62.5 (16%)
Industrial	93.0 (20%)	87.8 (20%)	73.5 (19%)
Commercial and Residential	44.2 (10%)	46.0 (10%)	38.93 (10%)
Agriculture	30.8 (7%)	33.6 (8%)	30.9 (8%)
High GWP	6.3 (1%)	13.5 (3%)	21.4 (6%)
Recycling and Waste	7.1 (2%)	8.1 (2%)	8.4 (2%)
TOTAL	461.8	442.2	381.3

Source: California Air Resources Board 2022b

As shown in Table 3.7-1, statewide GHG emissions totaled 461.8 $MMTCO_2e$ in 2000, 442.2 $MMTCO_2e$ in 2010, and 381.3 $MMTCO_2e$ in 2021. Transportation-related emissions consistently contribute the most GHG emissions, followed by industrial emissions and electric power.

A San Bernardino County regional emissions inventory was prepared as part of the Regional Greenhouse Gas Reduction Plan. The 2016 emissions inventory for the City of Rancho Cucamonga and the City of Ontario is shown in Table 3.7-2. The largest portions of the City of Rancho Cucamonga's 2016 emissions were from transportation (47%), building energy (natural gas and electricity) (45%), and waste (5%). The largest portions of the City of Ontario's 2016 emissions were from transportation (41%), building energy (natural gas and electricity) (34%), and agriculture/off-road equipment (18%). Similar to the statewide emissions, transportation-related GHG emissions contributed the most in the City of Rancho Cucamonga and the City of Ontario.

Table 3.7-2 Cities of Rancho Cucamonga and Ontario 2016 Community Greenhouse Gas Emissions Inventory ($MTCO_2e$)

Sector	City of Rancho Cucamonga	City of Ontario
Natural Gas	307,321 (21%)	267,637 (13%)
Transportation	707,753 (47%)	858,558 (41%)
Agriculture/Off-Road Equipment	21,227 (1%)	378,492 (18%)
Electricity	360,734 (24%)	449,056 (21%)
Waste	79,716 (5%)	118,949 (6%)
Water (Transport, Distribution, and Treatment)	18,935 (1%)	19,274 (1%)
TOTAL	1,495,686	2,091,966

Source: San Bernardino County Transportation Authority 2021

Various aspects of constructing, operating, and eventually discontinuing the use of industrial, commercial, and residential development would result in GHG emissions. Operational GHG emissions result from energy use associated with heating, lighting, and powering buildings (typically through natural gas and electricity consumption), pumping and processing water (which consumes electricity), as well as fuel used for transportation and decomposition of waste associated with building occupants. New development can also create GHG emissions in its construction and demolition phases in connection with the use of fuels in construction equipment, creation and decomposition of building materials, vegetation clearing, and other activities. However, it is noted that new development does not necessarily create entirely new GHG emissions. Occupants and patrons of new developments are often relocating and shifting their operational-phase emissions from other locations.

3.7.4 Methodology

The impact analysis for the proposed Project is based on a GHG emissions analysis, which is presented below. Direct and indirect GHG emissions associated with the implementation of the proposed Project were estimated using the California Emissions Estimator Model (CalEEMod), version 2022.1.1.5 software, trip generation data from the Transportation Technical Report (SBCTA 2024b; Appendix Q), and other sources. The methodology and assumptions used in this analysis are detailed in the following section for construction and operation activities. Refer to Appendix A of the Greenhouse Gas Technical Report (SBCTA 2024a; Appendix K) for model output and detailed calculations.

Because the impact each GHG has on climate change varies, a common metric of CO_2e is used to report a combined impact from all the GHGs. The effect each GHG has on climate change is measured as a combination of the volume of its emissions and its GWP and is expressed as a function of how much warming would be caused by the same mass of CO_2. Thus, GHG emissions in this analysis are measured in terms of $MTCO_2e$, or $MMTCO_2e$.

To provide guidance to local Lead Agencies on determining significance for GHG emissions in their CEQA documents, SCAQMD convened a GHG CEQA Significance Threshold Working Group (Working Group) in 2008. This Working Group proposed a tiered approach for evaluating GHG emissions for development projects where the SCAQMD is not the Lead Agency (SCAQMD 2008b). Tier 1 is for projects exempt from GHG impact analysis requirements and Tier 2 is for projects covered by a qualified CAP, neither of which apply to the proposed Project. Thus, the applicable tier for the proposed Project is Tier 3, which states that if GHG emissions are less than 3,000 $MTCO_2e$ per year, project level and cumulative GHG emissions would be less than significant.

While SCAQMD's Tier 3 threshold of 3,000 $MTCO_2e$ per year was proposed by SCAQMD more than a decade ago and was adopted as an interim policy, it is based on substantial evidence as provided in the *Draft Guidance Document – Interim CEQA Greenhouse* Gas *Significance Threshold* (2008b) document and

subsequent Working Group meetings (latest of which occurred in 2010). Currently, SCAQMD has not withdrawn its support of the interim threshold, and all documentation supporting the interim threshold remains on the SCAQMD website. SCAQMD has stated this threshold "uses the Executive Order S-3-05 goal [80 % below 1990 levels by 2050] as the basis for deriving the screening level." The SCAQMD threshold is also considered for the analysis of the proposed Project.

3.7.4.1 **Construction**

Construction activities can alter the carbon cycle in many different ways. Construction equipment typically utilizes fossil fuels, which generates GHGs such as CO_2, CH_4, and N_2O. Vehicle truck trips generated for off-hauling of materials during construction of the proposed Project would result in direct GHG emissions. CH_4 may also be emitted during the fueling of heavy equipment. Since the exact nature of the origin or make-up of construction materials are unknown, construction-related emissions are typically based on the operation of vehicles and equipment during construction. In addition, to direct GHG emissions, the GHG emissions impact analysis also considers indirect GHG emissions from construction activities, including emissions from the production of electricity used, the conveyance and treatment of water used, and the disposal of solid waste associated with the proposed Project.

Construction-related GHG emissions were estimated using the planned construction information (e.g., schedule, equipment) combined with OFFROAD 2021 and EMFAC 2021 data documented in the Air Quality Technical Report (SBCTA 2024c; Appendix C) prepared for the proposed Project. The Air Quality Technical Report (SBCTA 2024c; Appendix C) includes details on construction equipment and activity assumptions that were used to estimate GHG emissions.

Construction emissions were estimated for each year of construction activity based on the annual construction equipment profile and other factors determined as needed to complete all phases of construction by the target completion year. As such, each year of construction activity has varying quantities of GHG emissions. Per SCAQMD guidance, total construction GHG emissions resulting from the proposed Project are amortized over 30 years and added to operational GHG emissions.

3.7.4.2 **Operation**

The proposed Project would result in nominal area-source emissions. While providing transit ridership, the proposed Project would not increase roadway capacity. A qualitative discussion of GHG emissions has been prepared to analyze the proposed Project's operational GHG emissions. The GHG analysis includes estimating emissions associated with long-term operation of the proposed Project. Traffic changes based on the proposed Project operations would be based on the Transportation Technical Report (SBCTA 2024b; Appendix Q). The following activities are typically associated with the proposed Project operational uses that would contribute to the generation of GHG emissions:

- Vehicular trips. Vehicle trips generated by the proposed Project would result in direct GHG emissions during operational activities. The GHG emissions with vehicular trips would result through combustion of fossil fuels such as oil in automobiles which is a source of CO_2 emissions.

  The proposed Project operation would require long-term maintenance of the transit service that connects the airport and regional rail (i.e. Metrolink). The CalEEMod was used to estimate the GHG emissions associated with the proposed maintenance and storage facility (MSF). The proposed Project's land use type is not currently available in the current version of CalEEMod. As such, the CalEEMod land use of "Automobile Care Center" was used as the best representative land use type included in CalEEMod to estimate the proposed Project's GHG emissions, as the proposed Project would provide repair and servicing for the electric shuttles. The MSF would be approximately 11,000 square feet, with an additional 5,000 square feet second story without any landscaping. It is estimated that there would be 30 employees who would each drive two trips per day (home-to-work), and that there would be five deliveries of supplies per day. The default CalEEMod trip lengths of 24.2 miles for home-to-work, 9.9 miles for work-to-other, and 7 miles for other-to-other trips, along with the default trip type percentages, were used.

- Electricity use. Electricity is generated by a combination of methods, which include combustion of fossil fuels. By using electricity, the proposed Project would contribute to the indirect emissions associated with electricity production. Energy consumption emissions would occur at the various electrical generating stations from which the proposed Project would consume electricity.

- Water use and wastewater generation. California's water conveyance system is energy-intensive, with electricity used to pump and treat water. The proposed Project would contribute to indirect emissions by consuming water and generating wastewater. Water use emissions would occur at the various water supply and processing facilities the proposed Project would utilize.

- Solid waste. Disposal of organic waste in landfills can lead to the generation of methane, a potent GHG. Associated waste materials can result in the gradual release of the carbon stored in waste materials as those materials decompose in landfills. By generating solid wastes, the proposed Project would contribute to the emission of fugitive methane from landfills, as well as CO_2, CH_4 and N_2O from the operation of trash collection vehicles. Solid waste emissions would occur for the disposal of solid waste at the Mid-Valley landfill, El Sobrante landfill, or Badlands landfill.

3.7.5 CEQA Thresholds of Significance

According to Appendix G of the 2024 CEQA Guidelines, implementation of the proposed Project may result in a potentially significant impact if it would:

- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; and

- Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHG.

3.7.6 Impact Evaluation

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

3.7.6.1.1 No Project Alternative

The No Project Alternative includes planned construction associated with expansion, improvement, and routine maintenance activities for the existing roadway system and transit facilities. The No Project Alternative would not result in a net decrease in GHG emissions associated with the proposed Project because the GHG-emitting vehicles during the last portion of their route would not be replaced with electric shuttles between the Cucamonga Metrolink Station and ONT. Under the No Project Alternative, operation of planned expansion and improvement projects for the existing roadway system and transit facilities would still be in place. The No Project Alternative assumes that the limited public transportation (bus line) to ONT provided by Omnitrans would remain as it currently exists. Implementation of the No Project Alternative may produce both direct and indirect GHG emissions. The No Project Alternative would be subject to project-specific evaluation of GHG impacts, and mitigation would be required to reduce any potential impacts. Operation of the No Project Alternative may result in GHG emissions; however, the No Project Alternative would be subject to separate environmental review and, in an effort to reduce operation-related emissions, would be required to comply with existing GHG regulations, similar to those listed in Section 3.7.2, Regulatory Framework. With adherence to existing regulations, the No Project Alternative would have a less than significant impact related to GHG.

3.7.6.1.2 Proposed Project

Direct proposed Project related GHG emissions include emissions from construction activities. Once operational, direct emissions would result from area sources and mobile sources, while indirect sources would occur only after construction and include emissions from energy consumption, water demand, and solid waste generation. The most recent version of CalEEMod, version 2022.1.1.3, was used to calculate direct and indirect proposed Project-related GHG emissions.

3.7.6.1.2.1 Construction Impacts

Construction activities associated with the proposed Project would produce combustion emissions from various sources. During construction of the proposed Project, GHGs would be emitted through the operation of construction equipment and from worker and builder supply vendor vehicles, each of which typically use fossil-based fuels to operate. The combustion of fossil-based fuels creates GHGs such as CO_2, CH_4, and N_2O. Furthermore, CH_4 is emitted during the fueling of heavy equipment. Exhaust emissions from on-site construction activities would vary daily as construction activity levels change. Waste source

emissions generated during construction would include energy generated by landfilling and other methods of disposal related to transporting and managing the generated waste during construction activities.

SCAQMD does not provide a separate GHG significance threshold for construction emissions. However, as recommended by SCAQMD, the total GHG construction emissions were amortized over the 30-year lifetime of the proposed Project (i.e., total construction GHG emissions were divided by 30 to determine an annual construction emissions estimate that can be added to the proposed Project's operational emissions) in order to determine the proposed Project's annual GHG emissions inventory. As described in Section 3.7.5, SCAQMD convened the Working Group to establish a tiered system for local agencies to determine significance for GHG emissions in their CEQA documents. The proposed Project falls within Tier 3, which states that if GHG emissions are less than 3,000 $MTCO_2e$ per year, project level and cumulative GHG emissions would be considered less than significant.

Table 3.7-3 shows the proposed Project's estimated GHG emissions during construction during Year 1 (2025), Year 2 (2028), Year 3 (2029), Year 4 (2030) and Year 5 (2031). Construction activities for the MSF, vent shaft design option 2 or vent shaft design option 4, and passenger stations would occur in Year 2 (2028) and Year 4 (2030). Construction activities for tunnel boring would occur in Year 3 (2029), Year 4 (2030), and Year 5 (2031). Based on the Equipment Schedule (daily counts per month of construction), construction activities for tunnel boring would only occur in the first part of Year 3 (2029). The GHG emissions factors and fuel usage estimates from the OFFROAD2021 and EMFAC2021 models indicate the reduced amount of construction needed for the tunnel boring would reduce the total GHG emissions for that year.

Table 3.7-3 Construction Greenhouse Gas Emissions

Year	Total Emissions per Year (MT CO_2e)
Year 1	0
Year 2	662
Year 3	5,023
Year 4	2,027
Year 5	4,316
Total Emissions for the Entire Construction Process	12,029
Total Construction Emissions Amortized over 30 Years	401

Source: LSA 2022

For construction emissions, SCAQMD guidance recommends that the emissions be amortized (i.e., averaged) over 30 years and added to operational emissions. Averaged over 30 years, as shown in Table 3.7-4, the proposed construction activities would contribute approximately 401 $MTCO_2e$ emissions per year for the proposed Project. Therefore, GHG emissions for the proposed Project would be less than the

SCAQMD's threshold of 3,000 MT CO_2e per year during proposed Project construction, and impacts would be less than significant.

3.7.6.1.2.2 Operational Impacts

Long-term GHG emissions are typically generated from mobile sources (e.g., cars, trucks, and buses), area sources (e.g., maintenance activities and landscaping), indirect emissions from sources associated with energy consumption, waste sources (land filling and waste disposal), and water sources (water supply and conveyance, treatment, and distribution). Mobile source GHG emissions would include worker commute vehicle and delivery truck trips to and from the proposed Project. Area source emissions would be associated with various activities, such as landscaping and maintenance.

Table 3.7-4 Long-term Operational Greenhouse Gas Emissions

Source	Bio-CO_2	NBio-CO_2	Total CO_2	CH_4	N_2O	CO_2e
Proposed Operational Emissions (Pollutant Emissions (MT/yr)						
Area	<1	<1	<1	<1	<1	<1
Energy	<1	38	38	<1	<1	38
Mobile	<1	90	90	<1	<1	92
Waste	3	0	3	<1	0	12
Water	<1	1	1	<1	<1	2
Total Proposed Project Emissions	4	129	130	<1	<1	487
					Construction Emissions Amortized over 30 Years[1]	401
					Total proposed Project-related GHG Emissions	888
					SCAQMD Threshold	3,000
					GHG Emissions Exceed Threshold?	No

Source: Compiled by LSA (December 2022).
Note: [1] Construction emissions amortized over 30 years described in Section 3.7.6.

Bio-CO_2 = biologically generated CO_2
CH_4 = methane
CO_2 = carbon dioxide
CO_2e = carbon dioxide equivalent
GHG = greenhouse gas
MT/yr = metric tons per year
N_2O = nitrous oxide
Nbio-CO_2 = nonbiologically generated CO_2
SCAQMD = South Coast Air Quality Management District

For the purposes of this GHG analysis, the station operations at ONT would result in direct GHG area emissions from landscape maintenance, and indirect GHG emissions from electricity generation. Similarly, the MSF at Cucamonga Station would result in direct GHG area emissions from landscape maintenance, building heating, and indirect GHG emissions from electricity generation. One of the functions of the MSF is to store electric vehicles for the proposed Project. GHG emissions may stem from the use of these electric vehicles when traveling to the tunnel itself. Direct emissions would be minimal, given that electric vehicles produce substantially less GHGs than fossil fuel-powered vehicles. However, electric shuttles would produce indirect GHG emissions from energy generation. The tunnel would not generate any GHG

emissions directly; however, the electric shuttles would consume electricity during proposed Project operation, thus generating indirect GHG emissions from energy generation.

Area source emissions would also occur from maintenance activities at the vent shaft design option 2 and vent shaft design option 4 sites. Additionally, vent shaft design option 2 and vent shaft design option 4 would require vent equipment, which would consume electricity from the operation of mechanical equipment. Operation of the MSF and stations would generate small volumes of solid waste: product packaging, broken equipment, and site litter. Further, waste source emissions generated by the proposed Project at the stations and the MSF would include energy generated by landfilling and other methods of disposal related to transporting and managing the proposed Project's generated waste.

The purpose of the proposed Project is to reduce the number of fossil-fuel-powered vehicles used by ONT airport passengers by encouraging a mode shift between the Cucamonga Metrolink Station and ONT terminals from single-occupancy vehicles to autonomous vehicles. Once operational, there would be a reduction in GHG emissions from the proposed Project area due to this mode shift. The proposed Project is composed of transit facilities, including three at-grade passenger stations, one MSF, and one emergency access and ventilation shaft (vent shaft).

SCAQMD does not provide a separate GHG significance threshold for operation emissions. As described in Section 3.7.5, SCAQMD convened the Working Group to establish a tiered system for local agencies to determine significance for GHG emissions in their CEQA documents. The proposed Project falls within Tier 3, which states that if GHG emissions are less than 3,000 $MTCO_2e$ per year, project-level and cumulative GHG emissions would be considered less than significant.

Table 3.7-4 shows the proposed Project's estimated operational GHG emissions from these sources.

As shown in Table 3.7-4, the proposed Project operations would result in approximately 888 MT CO_2e per year. This result is less than the SCAQMD's threshold of 3,000 MT CO_2e per year. Therefore, GHG emissions from operation of the proposed Project would be less than the SCAQMD's threshold, and impacts would be less than significant.

3.7.6.2 Would the Project c**onflict with an applicable plan, policy or regulation adopted for the** purpose of reducing the emissions of greenhouse gases?

3.7.6.2.1 No Project Alternative

The No Project Alternative includes planned construction associated with expansion, improvement, and routine maintenance activities for the existing roadway system and transit facilities. The construction of these projects would be required to comply with regulatory requirements, goals of applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions. The No Project Alternative assumes that the limited public transportation (bus line) to ONT provided by Omnitrans would remain as it currently exists. Operation of these projects may result in GHG emissions; however, the No Project

Alternative would be subject to separate environmental review and, in an effort to reduce operation-related emissions, would be required to comply with existing GHG regulations, similar to those listed in Section 3.7.2 Regulatory Framework. With adherence to existing regulations, the No Project Alternative would have a less than significant impact related to GHG.

3.7.6.2.2 Proposed Project

The GHG plan consistency analysis for the proposed Project is based on the proposed Project's consistency with the City of Rancho Cucamonga's General Plan and CAP, the City of Ontario's General Plan and CCAP, and SCAG's 2020 RTP/SCS. The 2020 RTP/SCS is a regional growth management strategy that targets per-capita GHG reduction from passenger vehicles and light-duty trucks in the Southern California region. The 2020–2045 RTP/SCS incorporates local land use projections and circulation networks in city and county general plans.

3.7.6.2.2.1 Consistency with Greenhouse Gas Emissions Reduction Plans

The City of Rancho Cucamonga adopted its CAP in December 2021. It is a companion to the City of Rancho Cucamonga's General Plan, which articulates the City of Rancho Cucamonga's vision and lays out a set of strategies to achieve the community's vision for the future. Table 3.7-5 identifies the GHG reduction strategies with potential applicability to the proposed Project. Strategies that would not apply (e.g., residential strategies) have not been included in Table 3.7-5.

Table 3.7-5 City of Rancho Cucamonga CAP Greenhouse Gas Reduction Strategies

Goals and Strategies	Project Consistency
Goal 1: Zero Emissions and Clean Fuels. A community that uses zero-emission vehicles and clean vehicles to move people and goods.	Consistent: The proposed Project would include a transit system that uses ZE shuttles.
Goal 8: Water Conservation. A community that conserves and recycles water.	Consistent: The proposed Project would include drought-resistant landscaping.
Goal 11: Regional Mobility Hub. A multimodal transportation hub that connects regional and local destinations through a symbiotic relationship with regional partners.	Consistent: The proposed Project would include a transit system that connects local destinations.
Goal 12: Active Transportation. A first-class pedestrian and bicycle network that fosters safe and connected access to non-motorized travel and recreation.	Consistent: The proposed Project would consist of non-motorized electric shuttles.
Goal 13: Sustainable Transportation. A transportation network that adapts to changing mobility needs while preserving sustainable community values.	Consistent: The proposed Project would include a transit system that would adapt to changing mobility needs and reduce GHGs, carrying out community sustainability visions.

Source: Rancho Cucamonga Climate Action Plan (2021)

The City of Ontario adopted the 2022 CCAP in August 2022. The CCAP is the City of Ontario's strategic plan to reduce GHG emissions and foster a sustainable community through 2050 and beyond. The CCAP

identifies strategies that, when implemented, would reduce GHG emissions. Table 3.7-6 identifies the GHG reduction strategies with potential applicability to the proposed Project, vent shaft design option 2, vent shaft design option 4, and the MSF. Strategies that would not apply (e.g., residential strategies) have not been included in Table 3.7-6.

As summarized in Table 3.7-6, the proposed Project would not conflict with any of these local strategies. Additionally, the proposed Project is consistent with state and regional strategies. Further, the proposed Project would be subject to California Building Code requirements, such as the 2022 Building and Energy Efficiency Standards and the 2022 California Green Building Standards Code (CALGreen) requirements, which include water conservation measures. As such, the proposed Project would not conflict with the goals and policies of the City of Rancho Cucamonga CAP or the City of Ontario CCAP.

Table 3.7-6 City of Ontario CCAP Greenhouse Gas Reduction Strategies

Strategy Number	Strategy Name	Strategy Language	Project Consistency
10	Increase Transportation Ridership	Ensure a reliable and responsive transit system with dedicated and secure funding and resources to support increased ridership.	Consistent: The proposed Project would enhance the City of Ontario's overall transit system by providing reliable and responsive service between key city destinations. The proposed Project has adequate funding and resources to support ridership.
12	Community Vehicle Electrification	Promote and incentivize the adoption of electric vehicles citywide, including light-duty and heavy-duty vehicles, for municipal, commercial, and residential uses.	Consistent: The proposed Project includes use of electric shuttles.
13	Active Transportation Networks	Work with transit agencies, school districts, and employers to facilitate an interconnected transportation system that allows a shift in travel from private passenger vehicles to alternative modes, including public transit, ride sharing, car sharing, bicycling, and walking.	Consistent: The proposed Project's purpose is to provide an alternative to private passenger vehicles for key city destinations.
15	Parking Policy and Event Parking	Adopt a comprehensive parking policy that encourages carpooling and the use of alternative transportation, including providing parking spaces for car-share vehicles at convenient locations with access to public transportation.	Consistent: The proposed Project's purpose is to provide an alternative to private passenger vehicles.

Strategy Number	Strategy Name	Strategy Language	Project Consistency
22	Water Efficient Landscapes and Water Recycling	Promote drought-tolerant and fire-wise landscaping. Encourage increased use of reclaimed water for landscape irrigation, agricultural, and industrial use.	Consistent: The proposed Project would include drought-resistant landscaping.

Source: City of Ontario CCAP GHG Reduction Strategies (2022)

3.7.6.2.2.2 Consistency with the SCAG 2020 RTP/SCS

On September 3, 2020, the Regional Council of SCAG formally adopted the 2020 RTP/SCS. The 2020 RTP/SCS includes performance goals that were adopted to help focus future investments on the best-performing projects, as well as different strategies to preserve, maintain, and optimize the performance of the existing transportation system. Table 3.7-7 shows the proposed Project's consistency with the nine strategies found within the 2020 RTP/SCS. As shown, the proposed Project would be consistent with the GHG emission reduction strategies contained in the 2020 RTP/SCS.

Table 3.7-7 Consistency with the 2020–2045 RTP/SCS Goals

SCAG Measure	Project Consistency Analysis
Goal 1: Align the plan investments and policies with improving regional economic development and competitiveness.	Not Applicable: This goal is not project-specific and is, therefore, not applicable for the proposed Project's land uses.
Goal 2: Maximize mobility and accessibility for all people and goods in the region.	Consistent: One of the main purposes of the proposed Project is to increase mobility and connectivity for transit patrons, improve access to existing transportation services, and accommodate future employment and population growth.
Goal 3: Ensure travel safety and reliability for all people and goods in the region.	Consistent: All modes of transit in the City of Rancho Cucamonga and the City of Ontario are required to follow safety standards set by corresponding regulatory documents. Pedestrian walkways and bicycle routes must follow safety precautions and standards established by local (e.g., San Bernardino County, City of Rancho Cucamonga, City of Ontario) and regional (e.g., SCAG, Caltrans) agencies. Roadways for motorists must follow safety standards established for the local and regional plans. The proposed Project would be consistent with ingress and egress to public streets from the proposed Project site, including crosswalks and pedestrian walkways.
Goal 4: Preserve and ensure a sustainable regional transportation system.	Consistent: All new roadway developments and improvements to the existing transportation network must be assessed with some level of traffic analysis (e.g., traffic assessments, traffic impact studies) to determine how the developments would impact existing traffic capacities and to determine the needs for improving future traffic capacities. The proposed Project would encourage mode shift from automobiles to transit which would reduce VMT on the roadway network.

SCAG Measure	Project Consistency Analysis
Goal 5: Maximize the productivity of our transportation system.	Consistent: The local and regional transportation system would be improved by the proposed Project encouraging a mode shift to transit from single-occupancy vehicles using the surrounding road network.
Goal 6: Protect the environment and health of our residents by improving air quality and encouraging active transportation (non-motorized transportation, such as bicycling and walking).	Consistent: The reduction of energy use, improvement of air quality, and promotion of more environmentally sustainable developments are encouraged through alternative transportation methods, green design techniques for buildings, and other energy-reducing techniques. For example, development of the stations and MSF included in the proposed Project are required to comply with the provisions of the California Building and Energy Efficiency Standards and the CALGreen Code. The proposed Project would maximize the protection of the environment and improvement of air quality by encouraging and improving the use of the region's public transportation system (e.g., bus, bicycle) for residents, visitors, and workers, and would enhance pedestrian networks.
Goal 7: Actively encourage and create incentives for energy efficiency, where possible.	Consistent: This policy is not project-specific and is, therefore, not applicable. However, the proposed Project would be consistent with the energy efficiency requirements of Title 24.
Goal 8: Encourage land use and growth patterns that facilitate transit and non-motorized transportation.	Consistent: See response to RTP/SCS Goal 6.
Goal 9: Maximize the security of our transportation system through improved system monitoring, rapid recovery planning, and coordination with other security agencies.	Consistent: The proposed Project would be designed to provide a safe, secure, and comfortable transit system consistent with current Omnitrans operating rules and FTA regulatory requirements, and would incorporate safety improvements, warning systems, and barrier systems to enhance safety.

Source: SCAG 2020 RTP/SCS (2020)

3.7.6.2.2.3 Construction Impacts

There are numerous state plans, policies, and regulations adopted for the purpose of reducing GHG emissions. The principal plans and policies include AB 32 and SB 32. The quantitative goal of AB 32 was to reduce GHG emissions to 1990 levels by 2020. SB 32 requires further reductions of 40% below 1990 levels by 2030 and 80% below 1990 levels by 2050. Statewide plans and regulations are being implemented at the statewide level, and compliance on a project-specific level is not addressed. However, as previously discussed, the City of Rancho Cucamonga's General Plan and CAP, the City of Ontario's General Plan and CCAP, and SCAG's 2020–2045 RTP/SCS identify GHG reduction strategies. These strategies focus largely on project operation; however, construction of the proposed Project would not conflict with the strategies. For example, given the proposed Project's proximity to the Cucamonga Metrolink Station, construction of the proposed Project or other project elements (the vent shaft and the MSF) would not conflict with Goal 11 of the City of Rancho Cucamonga CAP or the City of Ontario CCAP's Strategies 10 through 13, all of which encourage transit opportunities. Further, construction of the proposed Project is consistent with the 2020–2045 RTP/SCS Goals, such as Goal 2 to maximize mobility and accessibility for all people and goods in the region. The proposed Project is consistent with Goal 2 of the 2020-2045 RTP/SCS Goals through its main purpose of expanding mobility options and improving transit access while simultaneously

supporting sustainable population and economic growth. Therefore, construction of the proposed Project would not conflict with the strategies and goals of applicable plans, policies, or regulations adopted for the purpose of reducing GHG emissions, and impacts would be less than significant.

3.7.6.2.2.4 Operational Impacts

The proposed Project would encourage a mode shift between the Cucamonga Metrolink Station and ONT terminals from single-occupancy vehicles to autonomous vehicles. As demonstrated in the Transportation Technical Report (SBCTA 2024b; Appendix Q), the proposed Project would result in a reduction in regional VMT and associated GHG emissions, which would directly contribute to the goals of SCAG's RTP/SCS that focus on increasing transit opportunities and decreasing transportation related GHG emissions. The proposed Project would promote transit opportunities and reduce single-passenger automobile use, which is consistent with several adopted state and local policies and regulations directed towards GHG emissions. Therefore, implementation of the proposed Project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions, and impacts would be less than significant.

3.7.7 Mitigation Measures

No mitigation measures are required for the proposed Project.

3.7.8 Impacts After Mitigation

3.7.8.1 Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

No mitigation measures are required, and the proposed Project would have a less than significant impact.

3.7.8.2 **Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the** emissions of greenhouse gases?

No mitigation measures are required, and the proposed Project would have a less than significant impact.

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3.8 HAZARDS AND HAZARDOUS MATERIALS

3.8.1 Introduction

This section of this Draft Environmental Impact Report (EIR) provides a summary of the evaluation of the impacts on hazards and hazardous materials related to implementation of the proposed Project. Detailed information for hazards and hazardous materials are in the Hazards and Hazardous Materials Technical Report (SBCTA 2024a; Appendix M). Potential water quality impacts from runoff that could contain hazardous or polluted materials during construction or operational activities are discussed in Section 3.9 (Hydrology and Water Quality) of this Draft EIR. Impacts related to toxic air contaminants that could be emitted during construction and operation of the proposed Project are discussed in Section 3.2 (Air Quality) of this Draft EIR. Impacts related to seismic activity that pose potential hazards to the proposed Project area are discussed in Section 3.6 (Geology, Soils, Seismicity, and Paleontology) of this Draft EIR. Additional discussion of impacts related to wildfire is presented in Chapter 4 (Other CEQA Considerations) of this Draft EIR.

3.8.2 Regulatory Framework

3.8.2.1 Federal

Several federal agencies regulate hazardous materials, including Unites States Environmental Protection Agency (USEPA), Department of Labor (federal Occupational Safety and Health Administration [OSHA]), and United States Department of Transportation (USDOT). Applicable federal regulations are contained primarily in Titles 10, 29, 40, and 49 of the Code of Federal Regulations (CFR). In particular, CFR Title 49 governs the manufacturing of packaging and transport containers, packing and repacking, labeling, and marking of hazardous material transport. Some of the major federal laws and issue areas include the following statutes (and regulations promulgated thereunder):

- Resources Conservation and Recovery Act (RCRA): hazardous waste management;
- Hazardous and Solid Waste Amendments Act (HSWA): hazardous waste management;
- Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA): cleanup of contamination;
- Superfund Amendments and Reauthorization Act (SARA): cleanup of contamination;
- Emergency Planning and Community Right-to-Know (SARA Title III): business inventories and emergency response planning;
- Clean Air Act: Asbestos National Emission Standards for Hazardous Air Pollutants rules;
- Toxic Substances Control Act: asbestos ban and phase-out rules; and

- Federal Regulation 49 CFR Title 14 Part 77: establishes standards and notification requirements for objects affecting navigable airspace.

USEPA is the primary federal agency responsible for implementation and enforcement of hazardous materials regulations. In most cases, enforcement of environmental laws and regulations established at the federal level is delegated to state and local environmental regulatory agencies. United States Consumer Product Safety Commission has also developed bans on the use of asbestos in certain consumer products such as textured paint and wall-patching compounds.

3.8.2.2 State

Primary state agencies with jurisdiction over hazardous chemical materials management include Department of Toxic Substances Control (DTSC) and Regional Water Quality Control Board (RWQCB). Other state agencies involved in hazardous materials management are Department of Industrial Relations (State of California Division of OSHA [Cal/OSHA] implementation), State Office of Emergency Services (OES; California Accidental Release Prevention implementation), Department of Fish and Wildlife, California Air Resources Board, California Department of Transportation (Caltrans), State Office of Environmental Health Hazard Assessment (Proposition 65 implementation), and Department of Resources Recycling and Recovery. The enforcement agencies for hazardous materials transportation regulations are California Highway Patrol (CHP) and Caltrans. Hazardous materials waste transporters are responsible for complying with all applicable packaging, labeling, and shipping regulations.

Hazardous chemical and biohazardous materials management laws in California include the following statutes (and regulations promulgated thereunder):

- Hazardous Materials Management Act: business plan reporting,
- Hazardous Waste Control Act: hazardous waste management,
- Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): release of and exposure to carcinogenic chemicals,
- Hazardous Substances Act: cleanup of contamination,
- Hazardous Waste Management Planning and Facility Siting (Tanner Act): preparation of hazardous waste management plans and the siting of hazardous waste facilities, and
- Hazardous Materials Storage and Emergency Response: including response to hazardous materials incidents.

State regulations and agencies pertaining to hazardous materials management and worker safety are described in the following sections.

3.8.2.2.1 California Environmental Quality Act

California Environmental Quality Act (CEQA; Section 21000 et seq.) and the 2024 CEQA Guidelines (Section 15000 et seq.) require state and local agencies to identify the significant environmental impacts of their actions, including potential significant impacts associates with hazards and hazardous materials, and to avoid or mitigate those impacts, when feasible.

3.8.2.2.2 California Environmental Protection Agency

California Environmental Protection Agency (Cal EPA) has broad jurisdiction over hazardous materials management in the state. Within Cal EPA, DTSC has primary regulatory responsibility for hazardous waste management and cleanup. Enforcement of regulations has been delegated to local jurisdictions that enter into agreements with DTSC for the generation, transport, and disposal of hazardous materials under the authority of Hazardous Waste Control Law (HWCL).

Along with DTSC, RWQCB is responsible for implementing regulations pertaining to management of soil and groundwater investigation and cleanup. RWQCB regulations are contained in Title 27 of the California Code of Regulations (CCR). Additional state regulations applicable to hazardous materials are contained in CCR Title 22. CCR Title 26 is a compilation of those sections or titles of CCR that are applicable to hazardous materials.

3.8.2.2.3 Department of Toxic Substances Control

RCRA of 1976 is the principal federal law that regulates the generation, management, and transportation of hazardous materials and other wastes. DTSC regulates hazardous waste in California primarily under the authority of the federal RCRA and the California Health and Safety Code. Other laws that affect hazardous waste are specific to handling, storage, transportation, disposal, treatment, reduction, cleanup, and emergency planning. In addition, DTSC reviews and monitors legislation to ensure that the position reflects the DTSC's goals. From these laws, DTSC's major program areas develop regulations and consistent program policies and procedures. The regulations spell out what people who handle hazardous waste must do to comply with the laws. Under RCRA, DTSC has the authority to implement permitting, inspection, compliance, and corrective action programs to ensure that people who manage hazardous waste follow state and federal requirements. As such, the management of hazardous waste in the proposed Project area would be under regulation by DTSC to ensure compliance with state and federal requirements pertaining to hazardous waste.

California law provides the general framework for regulation of hazardous wastes by HWCL passed in 1972. DTSC is the state's lead agency in implementing HWCL. HWCL provides for state regulation of

existing hazardous waste facilities, which include "any structure, other appurtenances, and improvements on the land, used for treatment, transfer, storage, resource recovery, disposal, or recycling of hazardous wastes," and requires permits for, and inspections of, facilities involved in generation and/or treatment, storage, and disposal of hazardous wastes.

3.8.2.2.4 Tanner Act

Although there are numerous state policies dealing with hazardous waste materials, the most comprehensive is Tanner Act (Assembly Bill [AB] 2948) that was adopted in 1986. Tanner Act governs the preparation of hazardous waste management plans and the storing of hazardous waste facilities in the State of California. Tanner Act also mandates that each County adopt a Hazardous Waste Management Plan. To be in compliance with Tanner Act, local or regional hazardous waste management plans need to include provisions that define: (1) the planning process for waste management, (2) the permit process for new and expanded facilities, and (3) the appeal process to the state available for certain local decisions.

3.8.2.2.5 Hazardous Materials Management Plans

In January 1996, Cal EPA adopted regulations implementing a "Unified Hazardous Waste and Hazardous Materials Management Regulatory Program" (Unified Program). The six program elements of the Unified Program are: hazardous waste generators and hazardous waste on-site treatment, underground storage tanks (USTs), aboveground storage tanks (ASTs), hazardous material release response plans and inventories, risk management and prevention program, and Uniform Fire Code hazardous materials management plans and inventories. The program is implemented at the local level by a local agency—Certified Unified Program Agency (CUPA). CUPA is responsible for consolidating the administration of the six program elements within its jurisdiction. The Hazardous Materials Division of the San Bernardino County Fire Department serves as the CUPA for the cities within San Bernardino County.

State and federal laws require detailed planning to ensure that hazardous materials are properly handled, used, stored, and disposed of, and, in the event that such materials are accidentally released, to prevent or to mitigate injury to health or the environment. California's Hazardous Materials Release Response Plans and Inventory Law, sometimes called the "Business Plan Act," aims to minimize the potential for accidents involving hazardous materials and to facilitate an appropriate response to possible hazardous materials emergencies. The law requires businesses that use hazardous materials to provide inventories of those materials to designated emergency response agencies, to illustrate on a diagram where the materials are stored on site, to prepare an emergency response plan, and to train employees to use the materials safely.

3.8.2.2.6 California Accidental Release Prevention Program

The California Accidental Release Prevention Program (CalARP) (CCR Title 19, Division 2, Chapter 4.5) covers certain businesses that store or handle more than a certain volume of specific regulated substances at their facilities. The CalARP regulations became effective on January 1, 1997, and include the provisions of the Federal Accidental Release Prevention Program (Title 40, CFR Part 68) with certain additions specific to the state pursuant to Article 2, Chapter 6.95, of the Health and Safety Code.

The list of regulated substances is found in Article 8, Section 2770.5 of the CalARP regulations. The businesses that use a regulated substance above the noted threshold quantity must implement an accidental release prevention program, and some may be required to complete a Risk Management Plan (RMP). An RMP is a detailed engineering analysis of the potential accident factors present at a business and the mitigation measures that can be implemented to reduce this accident potential. The purpose of an RMP is to decrease the risk of an off-site release of a regulated substance that might harm the surrounding environment and community. An RMP includes the following components: safety information, hazard review, operating procedures, training, maintenance, compliance audits, and incident investigation. The RMP must consider the proximity to sensitive populations located in schools, residential areas, general acute care hospitals, long-term health care facilities, and child day-care facilities, and must also consider external events such as seismic activity.

3.8.2.2.7 Worker and Workplace Hazardous Materials Safety

Occupational safety standards exist in federal and state laws to minimize worker safety risks from both physical and chemical hazards in the workplace. Cal/OSHA is responsible for developing and enforcing workplace safety standards and assuring worker safety in the handling and use of hazardous materials. Among other requirements, Cal/OSHA obligates many businesses to prepare injury and illness prevention plans and chemical hygiene plans. The Hazard Communication Standard requires that workers be informed of the hazards associated with the materials they handle. For example, manufacturers are to appropriately label containers; Material Safety Data Sheets are to be available in the workplace, and employers are to properly train workers.

3.8.2.2.8 Hazardous Materials Transportation

CHP and Caltrans are the enforcement agencies for hazardous materials transportation regulations. Transporters of hazardous materials and waste are responsible for complying with all applicable packaging, labeling, and shipping regulations. OES also provides emergency response services involving hazardous materials incidents.

3.8.2.2.9 Investigation and Cleanup of Contaminated Sites

The oversight of hazardous materials release sites often involves several different agencies that may have overlapping authority and jurisdiction. DTSC and RWQCB are the two primary state agencies responsible for issues pertaining to hazardous materials release sites. Air quality issues related to remediation and construction at contaminated sites are also subject to federal and state laws and regulations that are administered at the local level.

Investigation and remediation activities that would involve potential disturbance or release of hazardous materials must comply with applicable federal, state, and local hazardous materials laws and regulations. DTSC has developed standards for the investigation of sites where hazardous materials contamination has been identified or could exist based on current or past uses. The standards identify approaches to determine if a release of hazardous wastes/substances exists at a site and delineate the general extent of contamination; estimate the potential threat to public health and/or the environment from the release and provide an indicator of relative risk; determine if an expedited response action is required to reduce an existing or potential threat; and complete preliminary project scoping activities to determine data gaps and identify possible remedial action strategies to form the basis for development of a site strategy.

3.8.2.2.10 State Aeronautics Act

State Aeronautics Act is contained in California Public Resources Code Section 21001 et seq. and is established for several purposes, including encouraging development of private flying and general use of air transportation, fostering and promoting safety in aeronautics, protecting residents in the vicinity of an airport from unreasonable intrusions from airport noise, and establishing regulations for allowing the conduct of aviation activities in a manner not inconsistent with the rights of others.

3.8.2.3 Regional

3.8.2.3.1 San Bernardino County Business Emergency/Contingency Plan

The Hazardous Materials Division of the San Bernardino County Fire Department has been officially designated by the State Secretary for Environmental Protection as the CUPA for San Bernardino County in order to focus the management of specific environmental programs at the local government level. CUPA is charged with the responsibility of conducting compliance inspections for the regulated facilities in San Bernardino County. These facilities handle hazardous material, generate or treat a hazardous waste, and/or operate a UST. CUPA provides a comprehensive environmental management approach to resolve environmental issues. This balanced approach utilizes education and effective enforcement procedures to minimize the potential risk to human health and the environment and establish an atmosphere to promote fair business practices.

In San Bernardino County, the Business Emergency/Contingency Plan (Business Plan) is used to satisfy the contingency plan requirement for hazardous waste generators. Any business subject to any of the CUPA permits is required in San Bernardino County to file a Business Plan. A new business going through the process of obtaining county or city planning or building approval is required to comply with the Business Plan requirement prior to obtaining final certificate of occupancy and prior to bringing hazardous materials onto the property.

3.8.2.4 Local

3.8.2.4.1 San Bernardino County

The San Bernardino County Countywide Plan, Hazards Element (San Bernardino County 2020) sets forth goals and policies that regulate hazardous materials uses. The following goals, policies, and implementation programs are applicable to the proposed Project.

- Goal HZ-1 addresses risks caused by natural environmental hazards.
  - Policy HZ-1.2 mandates new development in environmental hazard areas.
  - Policy HZ-1.6 requires critical and essential facility locations to be outside of hazard areas.
  - Policy HZ-1.7 encourages hazard areas to be maintained as open space.
  - Policy HZ-1.12 supports local hazard mitigation plan implementation.
  - Policy HZ-1.13 establishes fire protection planning for new developments in County-designated Fire Safety Overlay and/or California Department of Forestry and Fire Protection (CAL FIRE) designated Very High Fire Hazard Severity Zones.
  - Policy HZ-1.14 requires long-term fire hazard reduction and abatement.
  - Policy HZ-1.15 ensures adequacy of evacuation routes.
- Goal HZ-2 addresses protection of people and the environment from exposure to hazards.
  - Policy HZ-2.1 regulates hazardous waste facilities.
  - Policy HZ-2.2 maintains a database of hazardous materials.
  - Policy HZ-2.3 encourages safer alternatives (e.g. non-toxic alternatives) to hazardous materials.
  - Policy HZ-2.4 designates truck routes for hazardous materials.
  - Policy HZ-2.5 promotes community education on hazardous materials.
- Goals HZ-3 addresses environmental justice in unincorporates areas.

- Policy HZ-3.1 requires health risk assessments and mitigation for projects processed by the County.
- Policy HZ-3.5 prohibits development of new hazardous waste facilities in unincorporated environmental justice focus areas.
- Policy HZ-3.6 advocates for remediation of contaminated water and soils impacting unincorporated environmental justice focus areas.
- Policy HZ-3.21 monitors pollutant levels, establishes thresholds, and identifies funding and mitigation options for emerging pollutants.

3.8.2.4.1.1 City of Rancho Cucamonga General Plan

The City of Rancho Cucamonga General Plan, Safety Element (City of Rancho Cucamonga 2021a) sets forth goals and policies that regulate hazardous materials use in the City of Rancho Cucamonga. The following goals, policies, and implementation programs are applicable to the proposed Project.

- Goal S-1 addresses city leadership in resilience and preparedness.
  - Policy S-1.7 maintains and updates plans, such as the City's Local Hazard Mitigation Plan (LHMP).
- Goal S-3 addresses wildfire hazards.
  - Policy S-3.1 applies state and local regulations for fire risk reduction.
  - Policy S-3.2 require preparation of Fire Protection Plans (FPPs).
  - Policy S-3.3 requires vegetation management for properties and roads adjacent to or within the WUIFA.
  - Policy S-3.4 requires development projects to incorporate buffer zones.
  - Policy S-3.6 coordinates with agencies on fire risk reduction planning and activities.
  - Policy S-3.7 supports wildfire awareness.
  - Policy S-3.8 prohibits new essential facilities within the Wildland-Urban Interface Fire Area (WUIFA).
- Goal S-6 addresses human caused hazards.
  - Policy S-6.2 encourages locating handling of hazardous materials far away from neighboring properties.
  - Policy S-6.3 facilitates site remediation at existing and future contaminated sites.
  - Policy S-6.4 supports Rancho Cucamonga interests in airport planning for ONT.
  - Policy S-6.5 establishes height restrictions within the Ontario Airport Influence Area (AIA).

- Policy S-6.6 supports development near ONT and consistency with airport plans.
- Policy S-6.7 facilitates railroad safety.

3.8.2.4.1.2 City of Rancho Cucamonga Municipal Code

Title 8 (Health and Safety), Chapter 8.17 (Refuse, Recyclables, and Organics Collection) of the City of Rancho Cucamonga Municipal Code (City of Rancho Cucamonga 2022) regulates hazardous waste disposal.

3.8.2.4.1.3 City of Rancho Cucamonga Local Hazard Mitigation Plan

The City of Rancho Cucamonga 2021 LHMP (City of Rancho Cucamonga 2021b) evaluates the natural and manmade hazards that could potentially affect the City Rancho Cucamonga and its inhabitants. The LHMP identifies strategies and actions intended to minimize potential hazards that could result from potential projects. The LHMP was created in conjunction with the City of Rancho Cucamonga General Plan and is considered an extension of that document, adopted by resolution. Potential hazards evaluated by the LHMP include hazards resulting from earthquake, flooding, wildfires, high/straight-line winds, and terrorism.

3.8.2.4.1.4 City of Rancho Cucamonga Fire Prevention District Ready RC Disaster Preparedness Manual

The Rancho Cucamonga Fire Prevention District provides fire and emergency response service to the City of Rancho Cucamonga. It has adopted ReadyRC, a disaster preparedness manual. The objective of ReadyRC is to provide a process for emergency management and response within the City in order to effectively protect lives, property, and the environment during disasters. ReadyRC includes several preparedness and training programs designed to help residents and businesses prepare, respond and recover from a disaster.

3.8.2.4.2 City of Ontario

3.8.2.4.2.1 City of Ontario General Plan

The City of Ontario General Plan, Safety Element (City of Ontario 2022) sets forth goals and policies that regulate hazardous materials use in the City of Ontario. The following goals, policies, and implementation programs are applicable to the proposed Project.

- Goal S-3 seeks to reduce risks from fire and rescue hazards.
  - Policy S-3.1 addresses prevention services related to fire, hazardous materials release, and structural collapse.
  - Policy S-3.2 supports community outreach on personal and public safety.
  - Policy S-3.8 requires fire prevention through environmental design for new development.
- Goal S-6 addresses hazardous materials and waste exposure and contamination.

- Policy S-6.1 enforces disclosure and notification laws related to hazardous materials and wastes.
- Policy S-6.2 addresses response to hazardous materials releases.
- Policy S-6.3 supports safer alternatives (e.g. non-toxic alternatives) to hazardous materials.
- Policy S-6.4 mandates safe storage and maintenance practices for hazardous materials.
- Policy S-6.5 regulates the location of hazardous materials facilities.
- Policy S-6.6 regulates the location of sensitive land uses.
- Policy S-6.7 supports proper disposal of household hazardous waste.
- Policy S-6.8 reinforces mitigation and remediation of groundwater contamination.
- Policy S- 6.9 requires remediation of methane.

- Goal S-8 addresses emergency and disaster management.
  - Policy S-8.1 maintains emergency management programs that meet state and federal mandates.
  - Policy S-8.2 maintains emergency management plans.

3.8.2.4.2.2 City of Ontario Municipal Code

City of Ontario Municipal Code, Title 6 (Sanitation and Health), Section 7.508 (Pollution Prevention Plan) (City of Ontario 2021) establishes notification requirement to the City of Ontario, Inland Empire Utilities Agency, and the City of Ontario Fire Department of any accidental or unforeseen events where the discharge would exceed the discharge limited in the permit. In addition, Part D (Hazardous Waste Discharge) has notification requirements for hazardous materials discharge incidents.

3.8.2.4.2.3 City of Ontario Local Hazard Mitigation Plan

The City of Ontario prepared a HMP (City of Ontario 2018) to identify the City of Ontario's hazards, review and assess past disaster occurrences, estimate the probability of future occurrences, and set goals to reduce or eliminate long-term risk to people and property from natural and manmade hazards. The multi-hazard mitigation plan goals are to minimize loss of life and/or property from natural and manmade hazard events, protect public health and safety, increase public awareness of risk from natural and manmade hazards, and enhance emergency systems including warning systems.

3.8.2.4.2.4 City of Ontario Emergency Operations Plan

The City of Ontario has prepared an Emergency Operations Plan to address the City's planned response to natural disasters, technological incidents, and national security emergencies. The plan does not address normal day-to-day emergencies or the well-established and routine procedures used in coping

with such emergencies. Its operational concepts focus on potential large-scale disasters that can generate unique situations requiring unusual emergency responses.

3.8.2.4.2.5 Ontario International Airport Land Use Compatibility Plan

The ONT Airport Land Use Compatibility Plan (ALUCP) was adopted on April 19, 2011, and amended in July 2018, by the Ontario City Council to address airport impacts and provide implementation techniques to ensure the development of compatible land uses around airports (Ontario International Airport – Inter Agency Collaborative [ONT-IAC] 2018a). The ALUCP implements relevant policies and guidelines for land use compatibility and specific findings of compatibility or incompatibility of land uses within the AIA and airport safety zones. The implementation of airport safety zone and height restrictions is intended to protect the safety of the people that work or reside within an airport zoned area. Airport safety zones, in particular, are established to minimize the number of people exposed to potential aircraft accidents in the vicinity of the airport with particular emphasis on the runway area and aircraft flight tracks.

3.8.3 Methodology

Data for this section were taken from the Environmental Data Resources (EDR) Area/Corridor Report prepared by Environmental Data Resources, Inc. (EDR Inc.) on November 4, 2022, the San Bernardino Countywide Plan Hazards Element (2020), the City of Rancho Cucamonga General Plan Safety Element (2021a), and the City of Ontario General Plan Safety Element (2022), and other relevant documents related to hazards and hazardous materials.

3.8.4 CEQA Thresholds of Significance

According to Appendix G of the 2024 CEQA Guidelines, implementation of the proposed Project may result in a potentially significant impact if it would:

- Create significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- Create as significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;
- Emit hazardous materials or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;
- 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;
- 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;

- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; and/or
- Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires.

3.8.5 Existing Settings

3.8.5.1 **Definitions**

California Health and Safety Code (CHSC) Chapter 6.5 sets forth definitions and regulations related to hazardous materials management and disposal. This Draft EIR uses the definition given in this chapter, which defines a hazardous material as:

> Any material that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or environment. "Hazardous Materials" include but are not limited to, hazardous substances, hazardous waste, and any material which the handler or the administering agency has a reasonable basis for believing that it would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or environment.

A "hazardous waste," for the purpose of this analysis, is any hazardous material that is abandoned, discarded, or recycled, as defined by CHSC Section 25124. The criteria that characterize a material as hazardous include ignitability, toxicity, corrosivity, reactivity, radioactivity, or bioactivity.

3.8.5.1.1 Hazard Versus Risk

Workers' and the general public's health are potentially at risk whenever hazardous materials have been used or where there could be an exposure to such materials. Inherent in the setting and analyses presented in this section are the concepts of the "hazard" of these materials and the "risk" they pose to human health. Exposure to some chemical substances may harm internal organs or systems in the human body, ranging from temporary effects to permanent disability, or death. Hazardous materials that result in adverse effects are generally considered "toxic." Other chemical materials, however, may be corrosive, or react with other substances to form other hazardous materials, but they are not considered toxic because organs or systems are not affected. Because toxic materials can result in adverse health effects, they are considered hazardous materials, but not all hazardous materials are necessarily "toxic." For purposes of the information and analyses presented in this section, the terms hazardous substances or hazardous materials are used interchangeably and include materials that are considered toxic.

The risk to human health is determined by the probability of exposure to a hazardous material and the severity of harm such exposure would pose; the likelihood and means of exposure, in addition to the

inherent toxicity of a material, are used to determine the degree of risk to human health. For example, a high probability of exposure to a low-toxicity chemical would not necessarily pose an unacceptable human health or ecological risk, whereas a low probability of exposure to a very-high-toxicity chemical might. Various regulatory agencies, such as USEPA, State Water Resources Control Board (SWRCB), the California DTSC, and state and federal OSHA are responsible for developing and/or enforcing risk-based standards to protect human health and the environment.

3.8.5.2 On-Site and Adjacent Uses

The proposed Project is located in the City of Rancho Cucamonga and in the City of Ontario within San Bernardino County. No residential uses currently exist on the proposed Project site. The proposed Project would construct a 4.2-mile-long tunnel between Cucamonga Metrolink Station and ONT. The proposed Project is a reversed L-shaped site consisting of Cucamonga Metrolink Station, Milliken Avenue, East Airport Drive, and ONT. The proposed Project will connect Cucamonga Metrolink Station, located in the City of Rancho Cucamonga, to ONT located within the City of Ontario. The northwestern portion of the proposed Project includes Cucamonga Metrolink Station. There are 960 standard parking spaces and 24 handicapped spaces at the station.

From the northwestern portion of the proposed Project, the tunnel alignment travels under Milliken Avenue, which is a major north-south arterial roadway. Milliken Avenue has three lanes from north of Inland Empire Boulevard and four lanes from south of Inland Empire Boulevard. From Milliken Avenue, the alignment travels south crossing under existing Interstate 10 (I-10). I-10 is an east-west cross-country highway and, at the proposed Project site, has six lanes in each direction. The alignment eventually connects to East Airport Drive which is an east-west arterial roadway with three travel lanes in each direction.

The southwestern portion of the proposed Project tunnel alignment terminates at ONT. Parking Lot 2 through Parking Lot 5 are located on the northern side of ONT. Parking Lots 2, 3, and 4 are surface lots providing general parking, just a short walk away from the terminals at ONT, and Parking Lot 5 is a surface economy lot in which a shuttle service is available.

Development in the immediate vicinity of the proposed Project site includes a mix of industrial, commercial, manufacturing, transportation, office, multi-family residential, hotel, and airport-related land uses. Immediately adjacent uses include the following:

- East: Several hotels are located on the eastern side of Milliken Avenue from 5th Street south to 4th Street. Concentrated areas of commercial uses and restaurants are located along Milliken Avenue from 4th Street south to I-10 including Ontario Mills which is a regional shopping mall complex. Hotels are also located adjacent to the Ontario Mills shopping mall.

- West: Multi-family residential uses are primarily located on the western side of Milliken Avenue from approximately 7th Street south to 4th Street. Concentrated areas of large retail, commercial uses, restaurants, hotels, and Toyota Arena are located along Milliken Avenue from 4th Street, south to I-10.
- North: Railroad tracks, industrial and manufacturing uses, trucking facilities, surface parking lots, Rancho Cucamonga Fire Station Number 174, and training center are located north of the proposed Project site.
- South: Industrial and manufacturing uses, along with trucking facilities, rental car facilities, parking lots, some hotels, and other uses related to the airport. ONT includes passenger terminals, general aviation facilities, air freight buildings, parking lots, and numerous airport and aircraft maintenance and support services.

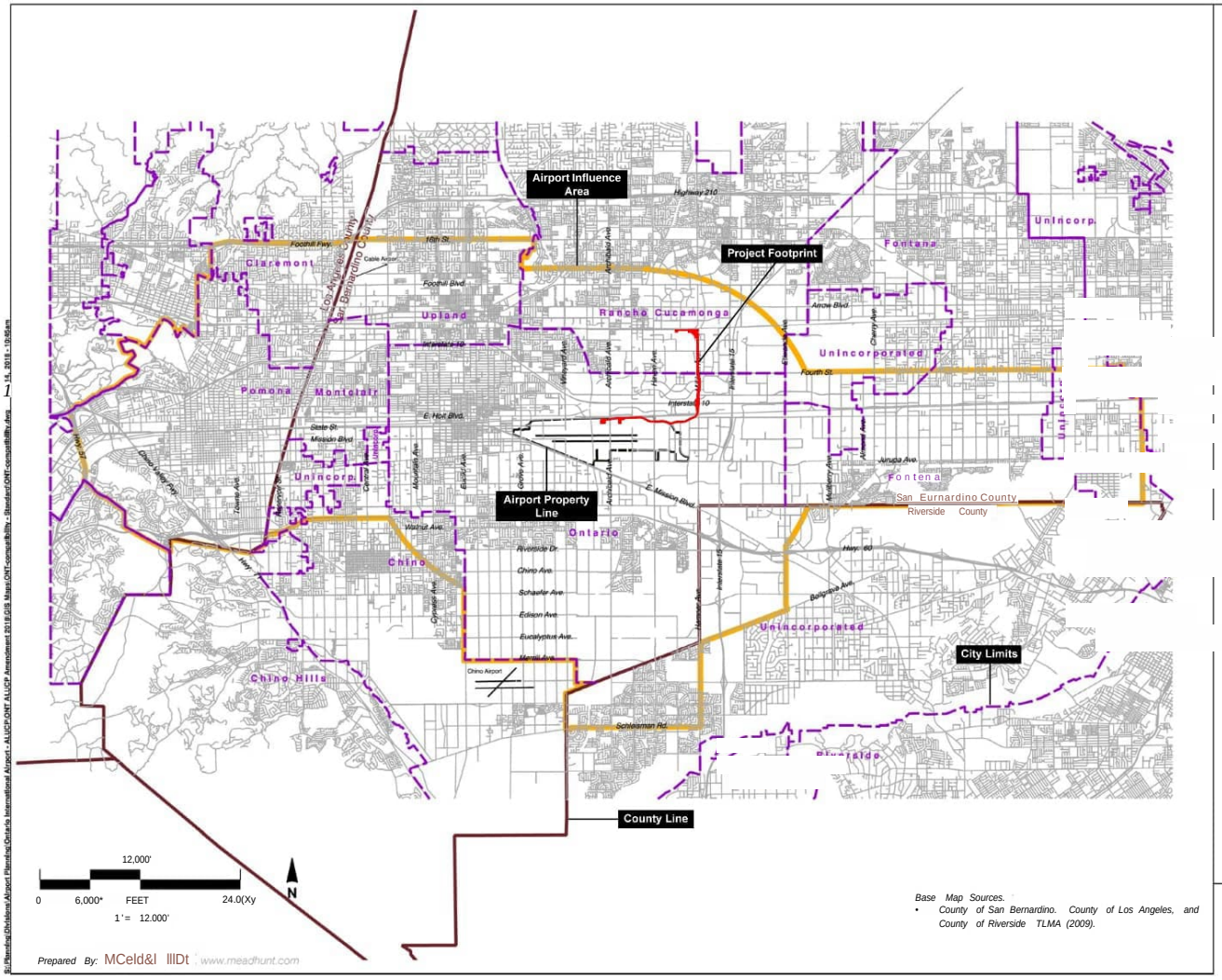
ONT is located at 2500 East Airport Drive in the City of Ontario. The southern portion of the proposed Project terminates at the ONT parking lots at Terminal 2 and Terminal 4. ONT is an international airport with passenger and freight air services. The ALUCP was adopted on April 19, 2011, and amended in July 2018. The ALUCP implements relevant policies and guidelines for land use compatibility and specific findings of compatibility or incompatibility of land uses within the AIA and airport safety zones. Figure 3.8-1 depicts the ONT AIA, and the southern portion of the proposed Project is within the ONT AIA. Figure 3.8-2 depicts the airport safety zones, and a small portion of the proposed Project falls within Safety Zone 3 (Inner Turning Zone) and Safety Zone 5 (Sideline Zone). Figure 3.8-3 depicts the noise impact zones, and the proposed Project falls within Noise Impact Zone 60–65 decibel (dB) Community Noise Equivalent Level (CNEL) and Zone 65–70 dB CNEL.

3.8.5.3 Records Search

A government agency database records search was conducted by EDR Inc. on November 4, 2022. The records search identifies properties located in the general vicinity of the proposed Project site that may have contributed to a release of hazardous substances (e.g., spills, leaks, incidents, etc.) to the soil and/or groundwater. Detailed information, including the precise location and identity of these hazardous material sites, is included in Attachment A of the EDR Area/Corridor Report. The records search was conducted in accordance with the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the American Society for Testing of Materials Standard Practice for Environmental Site Assessments (E1527-21).

The search radius (distance from proposed Project site) is dependent upon the applicable standards for each database and is identified for each of the respective database listings, as shown in Table 3.8-1. There are a variety of identified sites within the vicinity of the proposed Project site that are listed on the databases, as shown in Table 3.8-1. Many of the facilities are permitted for more than one hazardous material use and, therefore, could appear in more than one database.

Figure 3.8-1 Ontario International Airport Influence Area



LEGEND

Boundary Lines

- Airport Property Line
- County Line
- City Limits
- Street
- Existing Runway) Runway 8L-26R J Runway 8R-26L
- FAA Height Notification Area

Policy Boundaries

- Airport Influence Area[1]

NOTES

1. Airport influence area Includes the areas In which current or future airport-related safety, noise, airspace protection, or overflight factors may significantly affect land uses or necessitate restrictions on those uses.

Project Legend

- Project Footprint

Ontario-
XX AIRPORT PLANNING

Ontario international Airport
Land Use Compatibility Plan
July 2018 Amendment

Map 2-1

Compatibility Policy Map: Airport Influence Area

Figure 3.8-2 Airport Safety Zones

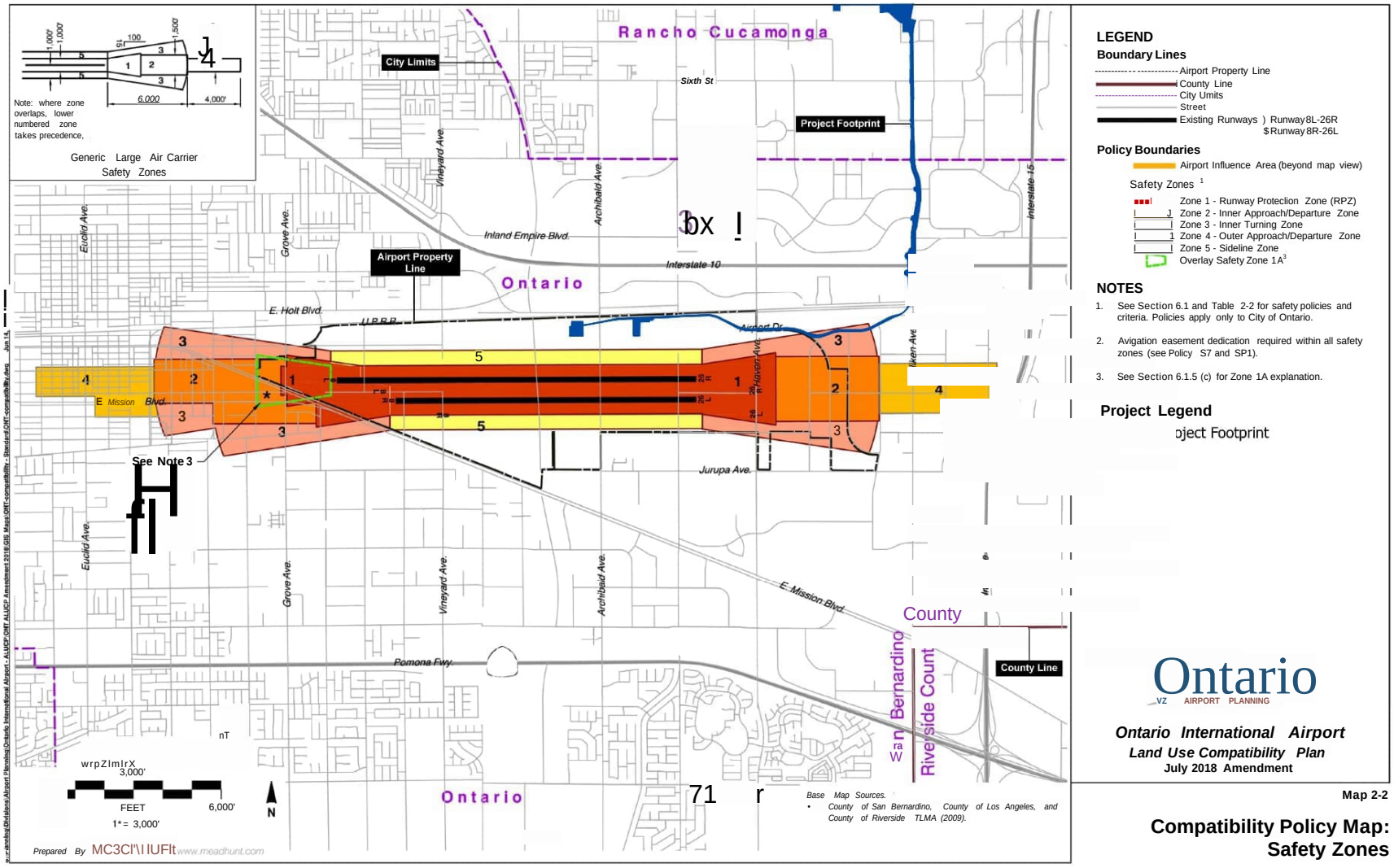
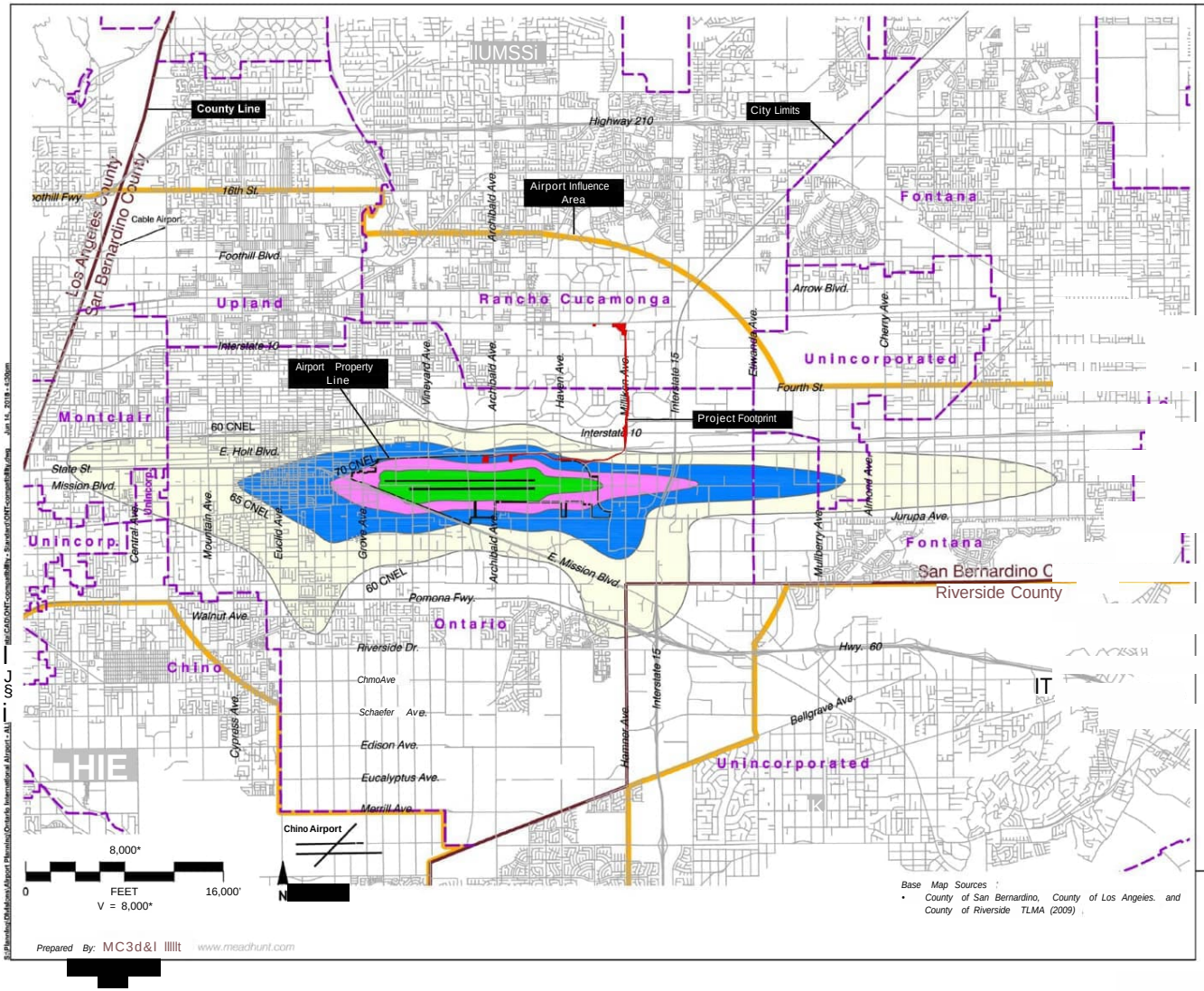


Figure 3.8-3 Noise Impact Zones



LEGEND

Boundary Lines

- Airport Property Line
- County Line
- Chy Limits
- Street
- Existing Runways) Runway 8L-28R
  J Runway 8R-26L

Policy Boundaries

- Airport Influence Area (portions extend beyond map view)

Noise Impact Zones[1]

- 60 - 65 dB CNEL
- 65 - 70 dB CNEL
- 70 - 75 dB CNEL
- 75 + dB CNEL

NOTES

1. See Section 6.2 and Table 2-3 for noise policies and criteria.
2. Avigation easement and dedication required in areas exposed to noise of CNEL 65 dB or greater (see Policy N5 and SP1).
3. No Project (343,000 annual operations) contours.

Project Legend

Project Footprint

Ontario--
VZ AIRPORT PLANNING

Ontario International Airport
Land Use Compatibility Plan
July 2018 Amendment

Map 2-3

Compatibility Policy Map: Noise Impact Zones

Table 3.8-1. Database Search Results

Agency Database	Survey Distance	Number of Sites Identified
AST—Aboveground Petroleum Storage Tank Facilities: A listing of aboveground storage tank petroleum storage tank locations.	0.25 miles	9
CERS HAZ WASTE: A list of sites in the Cal EPA Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs.	0.25 miles	65*
CERS TANKS—California Environmental Reporting System (CERS) Tanks: A list of sites in the Cal EPA Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs.	0.25 miles	21*
CERS: Provides an overview of regulated hazardous materials and waste, state, and federal cleanups, impacted ground and surface waters, and toxic materials activities across the spectrum of environmental programs for any given location in California.	0.25 miles	8*
CHMIRS—California Hazardous Material Incident Report System: CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).	property	3*
CIWQS—California Integrated Water Quality System: The California Integrated Water Quality System (CIWQS) is a computer system used by the state and RWQCBs to track information about places of environmental interest, manage permits and other orders, track inspections, and manage violations and enforcement activities.	property	1*
CORTESE—Hazardous Waste & Substances Sites List: Identifies public drinking water wells with detectable levels of contamination, hazardous substance sites selected for remedial action, sites with known toxic material identified through the abandoned site assessment program, sites with USTs having a reportable release and all solid waste disposal facilities from which there is known migration. The sites for the list are designated by SWRCB (LUST), Integrated Waste Board (SWF/LS), and DTSC (Cal-Sites).	0.25 miles	14*
HIST CORTESE: Identifies historical public drinking water wells with detectable levels of contamination, hazardous substance sites selected for remedial action, sites with known toxic material identified through the abandoned site assessment program, sites with USTs having a reportable release and all solid waste disposal facilities from which there is known migration. The sites for the list are designated by SWRCB [LUST], Integrated Waste Board [SWF/LS], and DTSC [CALSITES]. This listing is no longer updated by the state agency.	0.5 miles	8*
CPS-SLIC—Statewide SLIC Cases (GEOTRACKER): Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the RWQCB data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.	0.5 miles	5

Agency Database	Survey Distance	Number of Sites Identified
DRYCLEANERS—Cleaner Facilities: A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; dry-cleaning plants, except rugs; carpet and upholstery cleaning; industrial launderers; laundry and garment services.	0.25 miles	6
EMI—Emissions Inventory Data: Toxics and criteria pollutant emissions data collected by ARB and local air pollution agencies.	property	1*
ENVIROSTOR—EnviroStor Database: DTSC's Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifies sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List [NPL]); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in Cal-Sites, and provides additional site information, including, but not limited to, identification of formerly contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.	1 mile	10
FID UST—Facility Inventory Database: Contains a historical listing of active and inactive UST locations from SWRCB. Refer to local/county source for current data.	0.25 miles	10
HAULERS—Registered Waste Tire Haulers Listing: A listing of registered waste tire haulers.	property	4*
HAZNET—Facility and Manifest Data: The data is extracted from the copies of hazardous waste manifests received each year by DTSC. The annual volume of manifests is typically 700,000 to 1,000,000 annually, representing approximately 350,000 to 500,000 shipments. Data are from the manifests submitted without correction; therefore, many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method. This database begins with calendar year 1993.	property	25*
HIST Cal-Sites—Calsites Database: The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, Cal EPA reevaluated and significantly reduced the number of sites in the Calsites database. It is no longer updated by the state agency. It has been replaced by ENVIROSTOR.	1 mile	2
HWP—EnviroStor Permitted Facilities Listing: Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.	1 mile	2

Agency Database	Survey Distance	Number of Sites Identified
HWTS— Hazardous Waste Tracking System: DTSC maintains the Hazardous Waste Tracking System that stores ID number information since the early 1980s and manifest data since 1993. The system collects both manifest copies from the generator and destination facility.	property	41*
UST— Active UST Facilities: Active UST facilities gathered from the local regulatory agencies.	0.25 miles	31*
LUST—Leaking Underground Fuel Tank Report (GEOTRACKER): LUST Sites included in GeoTracker. GeoTracker is the RWQCB data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.	0.5 miles	21*
SWEEPS UST—Statewide Environmental Evaluation and Planning System: This UST listing was updated and maintained by a company contacted by SWRCB in the early 1990s. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.	0.25 miles	14
HIST UST—Hazardous Substances Storage Contained Database: Facilities on a historic list of UST sites.	0.25 miles	13
NPDES—NPDES Permits Listing: A listing of NPDES permits, including stormwater.	property	1*
PFAS—PFAS Contamination Site Location Listing: A listing of PFAS contaminated sites included in the GeoTracker database.	0.5 miles	2
RESPONSE— State Response Sites: Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high-potential risk.	1 mile	2
SWF/LF (SWIS)—Solid Waste Information System: Active, Closed and Inactive Landfills. SWF/LF records typically contain an inventory of solid waste disposal facilities or landfills. These may be active or inactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.	0.5 miles	1
WDS—Waste Discharge System: Sites which have been issued waste discharge requirements.	property	1*
CORRACTS—Corrective Action Report: CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.	1 mile	1
ECHO—Enforcement & Compliance History Information: ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.	property	10*

Agency Database	Survey Distance	Number of Sites Identified
EDR Exclusive Historical Auto Stations: EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc.	0.125 miles	24
EDR Exclusive Historical Cleaners: EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc.	0.125 miles	11*
FINDS—Facility Index System/Facility Registry System: Contains both facility information and "pointers" to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).	property	16*
FUDS—Formerly Used Defense Sites: The listing includes locations of Formerly Used Defense Sites properties where the United States Army Corps of Engineers is actively working or will take necessary cleanup actions.	1 mile	2
RCRA NonGen/NLR—RCRA - Non-Generators/No Longer Regulated: RCRA Info is EPA's comprehensive information system, providing access to data supporting RCRA of 1976 and HSWA of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by RCRA. Non-Generators do not presently generate hazardous waste.	0.25 miles	144*

Agency Database	Survey Distance	Number of Sites Identified
RCRA-LQG—Resource Conservation and Recovery Act Information System Large Quantity Generators: Sites that generate, transport, store, treat, and/or dispose of hazardous wastes as defined by RCRA. Facilities permitted to generate more than 1,000 kilograms (kg) of hazardous waste or over 1 kg of acutely hazardous waste per month.	0.25 miles	11
RCRA-SQG—Resource Conservation and Recovery Act Information System Small Quantity Generators: Sites that generate, transport, store, treat and/or dispose of hazardous wastes as defined by RCRA. Facilities permitted to generate more than 100 kg per month but less than 1,000 kg per month of non-acutely hazardous materials.	0.25 miles	27
RCRA-TSDF—Resource Conservation and Recovery Act Information System Small Quantity Generators: Sites that generate, transport, store, treat and/or dispose of hazardous wastes as defined by RCRA. Transporters are individuals or entities that move hazardous waste from the generator off-site to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.	0.5 miles	1
RCRA-VSQG—RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators): Sites that generate, transport, store, treat and/or dispose of hazardous wastes as defined by RCRA. Very small quantity generators (VSQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.	0.25 miles	6
SEMS—Superfund Enterprise Management System: Hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly known as the CERCLA, renamed to SEMS by EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to USEPA by states, municipalities, private companies, and private persons, pursuant to Section 103 of CERCLA. This dataset also contains sites which are either proposed to or on the NPL and the sites which are in the screening and assessment phase for possible inclusion on the NPL.	0.5 miles	2
SEMS-ARCHIVE—Superfund Enterprise Management System Archive: Sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by EPA in 2015.	0.5 miles	2
UXO—Unexploded Ordnance Sites: A listing of unexploded ordnance site locations	1 mile	2

Source: EDR Inc. 2022

Note: * Indicates that the proposed Project site is listed in this database

The sites identified within the proposed Project area are identified in Table 3.8-2. These sites were identified within the CERS HAZ WASTE, CERS TANKS, CERS, CHMIRS, CIWQS, CORTESE, HIST CORTESE, EMI, Haulers, Haznet, HWTS, UST, LUST, NPDES, WDS, ECHO, FINDS and RCRA NonGen/NLR databases.

Table 3.8-2. Sites Identified within Proposed Project Site

Name	Address	Database
Airport Terminal	2900 East Airport Drive	FINDS, ELMO
Alamo Rent-A-Car/ National Alamo	3450 East Airport Drive	UST, RCRA NonGen/NLR: RCRA, FINDS, ELMO, CA HAZNET, HWTS
American Airlines	2900 East Airport Drive	RCRA NonGen/NLR: RCRA, CA HAZNET, CERS, HWTS
American West Airlines	2900 East Airport Drive	HWTS
AMR Services	2900 East Airport Drive	HWTS
AVIS Rent-A-Car	3450 East Airport Drive	UST, HAULERS, CERS HAZ WASTE, CERS TANKS, FINDS, CA HAZNET, CERS, HWTS
Baseline Foods	4230 East Airport Drive	HWTS
Budget Rent-A-Car	3450 East Airport Drive	UST, RCRA NonGen/NLR: RCRA, FINDS, ELMO, CA HAZNET, HWTS
Carlton Truckers	I-10 freeway East Bond at South Milliken	CA HAZNET, HWTS
Certified Aviation	2900 East Airport Drive	HWTS
Chevron Products #20	791 Milliken Avenue	CA HAZNET, HWTS
City of Ontario Well	9600 North Milliken Avenue	CA HAZNET, HWTS
D & M Metals	840 East State Street	CA HAZNET, HWTS
DENT-OLOGY Inc.	3450 East Airport Drive	RCRA NonGen/NLR: RCRA, FINDS, ELMO, CA HAZNET, HWTS
Dollar Rent-A-Car	3450 East Airport Drive	UST, FINDS
DTG Operations Inc.	3450 East Airport Drive	RCRA NonGen/NLR: RCRA, FINDS, ELMO, CA HAZNET, HWTS
Dynamic Auto Images	3450 East Airport Drive	RCRA NonGen/NLR: RCRA, FINDS, ELMO, HWTS
Enterprise Car	3450 East Airport Drive	UST, CERS HAZ WASTE,CERS TANKS, RCRA NonGen/NLR: RCRA, FINDS, ELMO, CA HAZNET, CERS, HWTS
Enterprise Holdings	3450 East Airport Drive	HAULERS
FMC Airport Services	2900 East Airport Drive	CA WDS, CA CIWQS, HWTS
Frazee Paint & Walls	9090 Milliken Avenue	HWTS
Gardener Trucking	Milliken Avenue & East Airport Drive	CA HAZNET, HWTS
Hertz Corporation/ Hertz Rent-A-Car	3450 East Airport Drive	UST, HAULERS, CERS HAZ WASTE,CERS TANKS, RCRA NonGen/NLR: RCRA, FINDS, ELMO, CA HAZNET, CERS, HWTS
Home Depot/White Cap	5955 East Airport Drive	CA HAZNET, HWTS
J $ R Fleet Services	3450 East Airport Drive`	HWTS
Jetcruzer International	4230 East Airport Drive	RCRA NonGen/NLR: RCRA, FINDS, ELMO
Kewit Pacific	3106 East Airport Drive	CA HAZNET, HWTS
Koppers Co Inc.	12200 Airport Drive	CA HAZNET, HWTS

Name	Address	Database
L3 Communications Co	2900 East Airport Drive	HWTS
Leah WIllis	3102 East Airport Drive	CA HAZNET, HWTS
Les Schwab Tire Center	1044 North. Milliken Avenue	HAULERS, CERS HAZ WASTE, RCRA NonGen/NLR: RCRA, FINDS, ELMO, CA HAZNET, CERS, HWTS
Lockheed Air Terminal Inc.	ONT	LUST, RCRA NonGen/NLR: RCRA, CORTESE, CA HIST CORTESE, CERS
Milliken 1010 Zone	4301 East Guasti Road	CA NPDES
National Car Rental	3450 East Airport Drive	UST, CERS HAZ WASTE, DS, CERS
Not Reported	2900 East Airport Drive	CHMIRS
Not Reported	3450 East Airport Drive	CHMIRS
Not Reported	4th Street and Milliken Avenue	CHMIRSCERS TANKS, FIN
Ontario Airport – West	3450 East Airport Drive	CERS TANKS, CA HAZNET, CERS, HWTS
Ontario Airport Terminal	3102 East Airport Drive	UST
Ontario LINR & HATT	104 East A Street	EDR Hist Cleaner
Sam's Club Fueling	971 North Milliken	FINDS, EMI, CA HAZNET, HWTS
Sanyo Logistics	84000 Milliken Avenue	HWTS
Southeast Carriers	East Airport Drive & Double	CA HAZNET, HWTS
Stanley Steamers	865 Milliken Avenue	HWTS
Total Airport Services	2900 East Airport Drive	HWTS
Transportation Security	2900 East Airport Drive	CA HAZNET, HWTS
Western Edge LLC	3450 East Airport Drive	HWTS
Worldwide Flight SER	2900 East Airport Drive	HWTS

Source: EDR Inc. 2022

One LUST site is within the proposed Project area, and 20 LUST sites are within 0.5 miles of the proposed Project site. All 21 LUST sites have a case closed status. The status of the LUST cases reported as "case closed" indicates that remedial action is completed, or was deemed unnecessary, by the local regulatory agency. Based on their cross-gradient location relative to the proposed Project site and regulatory status of case closed, these facilities are not anticipated to have a negative environmental impact on the proposed Project site.

One CORTESE site is within the proposed Project area, and 13 CORTESE sites are within 0.5 miles of the proposed Project site. Total of 14 sites were determined to be included on the list of hazardous materials sites compiled pursuant to California Government Code Section 65962.5 (the "CORTESE" list). The Lockheed Air Terminal Inc. site located at ONT was included in the CORTESE list as a LUST cleanup site. The site had an unleaded gasoline leak that impacted the soil only. The abatement method was to remove the contaminated soil and dispose it at an approved site. The cleanup was completed, and the case was closed in 1985. The other 13 sites listed on the CORTESE list have a cleanup status as case closed.

3.8.5.4 **Other Potential On**-site Hazardous Materials

3.8.5.4.1 Lead

Lead is a naturally occurring metallic element. Among its numerous uses and sources, lead can be found in paint, water pipes, solder in plumbing systems, and in soil around buildings and structures painted with lead-based paint. In 1978, the federal government required the reduction of lead in house paint to less than 0.06 percent (600 parts per million). Because of its toxic properties, lead is regulated as a hazardous material. Excessive exposure to lead can result in the accumulation of lead in the blood, soft tissues, and bones. Children are particularly susceptible to potential lead-related health problems because it is easily absorbed into developing systems and organs. Inspection, testing, and removal (abatement) of lead-containing building materials must be performed by state-certified contractors who are required to comply with applicable health and safety and hazardous materials regulations. Buildings that have been constructed prior to 1978 and that contain lead-based paints could require abatement prior to construction activities.

3.8.5.4.2 Lead Arsenate

Lead arsenate is used as an herbicide, insecticide, or rodenticide. Lead arsenates were historically used by railroad companies as a means of weed control along a railroad right-of-way. Pesticide residues from lead arsenate bind tightly to the surface soil layer, where they can remain for decades. As a result, such residues, if present, could pose a human health risk when the soil is excavated. Lead and arsenic are the primary constituents of lead arsenate pesticide. Both lead and arsenic could be toxic at high concentrations in soil and are highly toxic to humans. The Union Pacific Railroad Company railroad tracks are located south of I-10 within the proposed Project site.

3.8.5.4.3 Aerially-Deposited Lead

Aerially-deposited lead (ADL) can be present along major roadway corridors, such as I-10 and Milliken Avenue. Lead alkyl compounds were first added to gasoline in the 1920s to boost octane levels and improve engine performance. Beginning in 1973, USEPA ordered a gradual phase-out of lead from gasoline that substantially reduced the prevalence of leaded gasoline by the mid-1980s. Prior to the 1970s, EPA estimated that vehicles emitted approximately 75 percent of the lead consumed in leaded gasoline as particulate matter in tailpipe exhaust (DTSC 2004). DTSC regulations specify the levels at which lead in soil is considered to be a risk. In areas where road construction would occur, there is potential for the ALD levels to be higher than DTSC's specifications from car emissions that occurred prior to the elimination of lead in gasoline (DTSC 2016).

3.8.5.4.4 Household Hazardous Waste

USEPA defines household hazardous waste as "leftover products such as paints, cleaners, oils, batteries, and pesticides that contain potentially hazardous ingredients that could be corrosive, toxic, ignitable, or reactive." According to USEPA, Americans generate approximately 1.6 million tons of household hazardous waste per year, while the average home can accumulate as much as 100 pounds of household hazardous waste in the basement and garage or in storage closets. Methods of improper disposal of household hazardous wastes commonly include pouring them down the drain, on the ground, into storm sewers, or in some cases putting them out with the trash. Though the dangers of such disposal methods might not be immediately obvious, improper disposal of these wastes can pollute the environment and pose a threat to human health.

3.8.6 Impact Evaluation

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

3.8.6.1.1 No Project Alternative

The No Project Alternative includes planned expansion, improvement projects and routine maintenance activities for the existing roadway system and transit facilities. Federal, state, and local regulations govern the disposal of wastes identified as hazardous, which could be produced in the course of construction activities. Should the use and/or storage of hazardous materials at the No Project Alternative site rise to a level subject to regulation, those uses would be required to comply with federal and state laws to eliminate or reduce the consequence of hazardous materials accidents resulting from routine use, disposal, and storage of hazardous materials on the proposed Project site during construction. Hazardous materials encountered during construction activities would be disposed of in compliance with all applicable regulations for the handling of such waste. Adherence and compliance with applicable regulations would ensure that construction and operation of the No Project Alternative would result in a less than significant impact related to the use and/or storage of hazardous materials, transport of hazardous materials, and disposal of hazardous waste.

3.8.6.1.2 Proposed Project

3.8.6.1.2.1 Construction Impacts

Construction of the proposed Project could expose the public or the environment to hazardous materials due to improper handling or use of hazardous materials or hazardous wastes particularly by untrained personnel; transportation accident; environmentally unsound disposal methods; or fire, explosion, or other emergencies. The severity of potential impacts varies with the activity conducted, the concentration of and type of hazardous material or wastes present, and the proximity of sensitive receptors.

The types and amounts of hazardous materials would vary according to the nature of the activity at the proposed Project site. In some cases, it is the type of hazardous material that is potentially hazardous; in others, it is the amount of hazardous material that could present a hazard. Whether a person exposed to a hazardous substance suffers adverse health effects as a result of that exposure depends upon a complex interaction of factors that determine the effects of exposure to hazardous materials: the exposure pathway (the route by which a hazardous material enters the body); the amount of material to which the person is exposed; the physical form of the hazardous material (e.g., liquid, vapor) and its characteristics (e.g., toxicity); the frequency and duration of exposure; and the individual's unique biological characteristics, such as age, gender, weight, and general health. Adverse health effects from exposure to hazardous materials may be short-term (acute) or long-term (chronic). Acute effects can include damage to organs or systems in the body and possibly death. Chronic effects, which may result from long-term exposure to a hazardous material, can also include organ or systemic damage, but chronic effects of particular concern include birth defects, genetic damage, and cancer.

Hazardous materials regulations were established at the state level to ensure compliance with federal regulations intended to reduce the risk to human health and the environment from the routine use of hazardous substances. For the purpose of NEPA, pipeline information is discussed in the Environmental Assessment Report prepared for the proposed Project (SBCTA 2024b).

During construction, the amount of hazardous materials used, stored, disposed of, and/or transported off-site would be required to comply with federal and state laws to eliminate or reduce the risk of hazardous materials accidents. For example, employees who would work around hazardous materials would be required to wear appropriate protective equipment, and safety equipment would be routinely available in all areas where hazardous materials are used. For hazardous materials that present a moderate explosion hazard, high fire or physical hazard, or health hazard would be required to be stored in designated areas designed to prevent accidental release to the environment.

To ensure that workers and others at the proposed Project site are not exposed to unacceptable levels of risk associated with the use and handling of hazardous materials, employers and businesses are required to implement existing hazardous materials regulations, with compliance monitored by state (e.g., OSHA in the workplace or DTSC for hazardous waste) and local jurisdictions (e.g., fire departments). Compliance with existing safety standards related to the handling, use, and storage of hazardous materials, and compliance with the safety procedures mandated by applicable federal, state, and local laws and regulations (RCRA, California HWCL, and principles prescribed by California Department of Health Services, Centers for Disease Control and Prevention, and National Institutes of Health) is mandated. Should the use and/or storage of hazardous materials at the proposed Project site rise to a level subject to regulation, those uses would be required to comply with federal and state laws to eliminate or reduce the consequence of hazardous materials accidents resulting from routine use, disposal, and storage of hazardous materials on the proposed Project site during the construction phases of the proposed Project.

USDOT Office of Hazardous Materials Safety prescribes strict regulations for the safe transportation of hazardous materials, as described in CFR Titles 40, 42, 45, and 49 and implemented by CCR Titles 17, 19, and 27. The transport of hazardous materials can result in accidental spills, leaks, toxic releases, fire, or explosion. During the construction phase, hazardous materials in the form of paints, solvents, glues, roofing materials and other common construction materials containing toxic substances may be transported to the site, and construction waste that possibly contains hazardous materials could be transported off-site for the purposes of disposal. Appropriate documentation for all hazardous waste that is transported off-site in connection with activities at the proposed Project site would be provided as required to ensure compliance with the existing hazardous materials regulations previously described. Adherence to these regulations, which requires compliance with all applicable federal and state laws related to the transportation of hazardous materials, would reduce the likelihood and severity of accidents which might occur during transit.

During the construction phase, the proposed Project may generate hazardous and/or toxic waste that includes excavation activities removing potential contaminated soil from the proposed Project site. Federal, state, and local regulations govern the disposal of wastes identified as hazardous, which could be produced in the course of construction activities. Hazardous materials encountered during demolition or construction activities would be disposed of in compliance with all applicable regulations for the handling of such waste. Adherence and compliance with applicable regulations would reduce impacts due to the use and/or storage of hazardous materials, transport of hazardous materials, and disposal of hazardous waste to a less than significant level.

3.8.6.1.2.2 Operational Impacts

Hazardous materials associated with the operation of the proposed Project would consist mostly of typical household cleaning products, and pesticides/herbicides. It is not anticipated that the use and/or storage of hazardous materials at the proposed Project site would rise to a level subject to regulation, or those uses that would be required to comply with federal and state laws to eliminate or reduce the consequence of hazardous materials accidents resulting from routine use, disposal, and storage of hazardous materials on the proposed Project site during operation of the proposed Project.

The quantities of these typical household cleaning products and pesticides/herbicides products routinely in use or stored on the proposed Project site are unlikely to result in an abnormally high increase in the amount of hazardous materials and/or waste transported to the surrounding areas. Operation of the proposed Project would not require the handling of hazardous or other materials that would result in the production of large amounts of hazardous waste. Hazardous wastes generated during the operation activities include the use of typical household cleaning products and pesticides/herbicides. These hazardous wastes would be disposed of in compliance with all applicable regulations for the handling of such waste, reducing impacts due to the disposal of hazardous wastes.

It is not anticipated that large qualities of hazardous materials would be used during operation of the proposed Project. The hazardous materials associated with operation activities would consist mostly of typical household cleaning products, and pesticides/herbicides. Compliance with applicable regulations would reduce any potential impacts due to the use and/or storage of hazardous materials, transport of hazardous materials, and disposal of hazard waste to a less than significant level.

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

3.8.6.2.1 No Project Alternative

The No Project Alternative includes planned expansion, improvement projects, and routine maintenance activities for the existing roadway system and transit facilities. Adherence to existing regulations would reduce impacts related to creating a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials to a less than significant level during construction and operation.

3.8.6.2.2 Proposed Project

3.8.6.2.2.1 Construction Impacts

Construction activities for the proposed Project, such as grading and excavation, could result in the exposure of construction personnel and the public to previously unidentified hazardous substances in the soil. Exposure to unanticipated hazardous substances could occur from previously unidentified soil contamination caused by the contaminants originating at nearby listed sites (e.g., roadways, airport, railroad, and industrial uses). or from construction-related soil contamination caused by spillage and/or mixing of construction trash and debris into the soil during the original 1979 construction of the site or from unknown wells. Exposure to hazardous materials during construction activities could occur as a result of any of the following:

- Direct dermal contact with hazardous materials;
- Incidental ingestion of hazardous materials (usually due to improper hygiene, when workers fail to wash their hands before eating, drinking, or smoking); and
- Inhalation of airborne dust released from dried hazardous materials.

If any unidentified sources of contamination are encountered during demolition, grading, or excavation, the removal activities required could pose health and safety risks capable of resulting in various short-term or long-term adverse health effects in exposed persons.

In order to address the potential for encountering unknown contamination within the proposed Project area, MM-HAZ-1 would minimize the potential risk of contamination by implementing investigation and remediation efforts at the proposed Project site.

In addition, dewatering during construction activities could potentially encounter contaminated groundwater. As discussed in Section 3.9 (Hydrology and Water Quality), implementation of MM-HWQ-1 would require the Applicant to obtain a dewatering permit prior to the issuance of a grading permit by the City of Ontario and the City of Rancho Cucamonga. In addition, soil and groundwater testing would be conducted to a minimum depth of 50 feet; if contaminated groundwater is discovered on-site, treatment and discharge of the contaminated groundwater would be conducted in compliance with applicable regulatory requirements including the Santa Ana RWQCB standards. MM-HWQ-1 would ensure proper testing and permits are obtained prior to construction activities to minimize potential impacts of temporary or permanent groundwater dewatering.

Implementation of MM-HAZ-1 and MM-HWQ-1 and adherence to all local, state, and federal regulations would reduce the impacts associated with the potential exposure of unknown hazardous materials through the proposed Project construction to a less than significant level; by ensuring remediation of contaminated soil containing hazardous materials prior to development of the proposed Project, and by providing supplemental procedures in the event of unanticipated discoveries of contaminants.

3.8.6.2.2.2 Operational Impacts

While it is anticipated that operation of the proposed Project would not create a significant hazard to the public or the environment through reasonably foreseeable upset or accident conditions involving the release of hazardous materials into the environment, this operational analysis presents the potential possibilities of such a risk.

The proposed Project would include the use of and storage of common hazardous materials such as cleaning products. Additionally, grounds and landscape maintenance could also use a variety of products formulated with hazardous materials such as pesticides/herbicides. The properties and health effects of different chemicals are unique to each chemical and depend on the extent to which an individual is exposed. The extent and exposure of individuals to hazardous materials would be limited by the relatively small quantities of these materials that would be stored and used on the proposed Project site. As common maintenance products and chemicals would be consumed by use and with adherence to warning labels and storage recommendations from the individual manufacturers, these hazardous materials would not pose any greater risk than at any other similar development.

With implementation of the proposed Project, hazardous materials could be stored within the proposed Project site, but the materials would generally be in the form of routinely used common chemicals. Therefore, the probability of a major hazardous materials incident would be remote. Minor incidents would be more likely, but the consequences of such accidents would likely not be severe due to the types

of common chemicals anticipated to be used at the proposed Project site, and the impact would be less than significant.

3.8.6.3 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**?

3.8.6.3.1 No Project Alternative

The No Project Alternative site could be located within 0.25 mile of a school. The No Project Alternative includes planned expansion, improvement projects, and routine maintenance activities for the existing roadway system and transit facilities. Construction and operation activities would occur on existing roadways and transit facilities. The No Project Alternative would be subject to federal, state, and local regulations regarding hazardous materials, substance or wastes within 0.25 miles of an existing or proposed school. Therefore, with adherence to existing regulation, impact to schools during construction and operation would be less than significant.

3.8.6.3.2 Proposed Project

3.8.6.3.2.1 Construction Impacts

The closest school is the Joshua Center Christian Academy, a private K-12 school located approximately 0.45-mile northwest of the proposed Project site at 8711 Monroe Court, Suite B in the City of Rancho Cucamonga (California Department of Education 2022). The San Joaquin Valley College, which is a vocational school, is located approximately 0.45 miles west of Milliken Avenue at 4580 Ontario Mills Parkway in the City of Ontario (San Joaquin Valley College 2023). The next closest school to the proposed Project site is the Ontario Center School (serving K-5), located approximately 0.64 miles north of the ONT parking lots and 1.34 miles west of Milliken Avenue at 835 North Center Avenue in the City of Ontario (Ontario Center School 2023). No schools exist within 0.25 mile of the proposed Project site. Therefore, the proposed Project would result in no impact related to the emissions or handling of hazardous materials within the vicinity of nearby schools during construction.

3.8.6.3.2.2 Operational Impacts

No schools exist within 0.25 miles of the proposed Project site. Therefore, the proposed Project would result in no impact related to the emissions or handling of hazardous materials within the vicinity of nearby schools during operation.

3.8.6.4 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** signi**f**icant hazard to the public or the environment?

3.8.6.4.1 No Project Alternative

The No Project Alternative includes planned expansion, improvement projects, and routine maintenance activities for the existing roadway system and transit facilities. The No Project Alternative site includes one or more hazardous materials lists compiled in accordance with Government Code Section 65962.5. The sites listed on the CORTESE list have a cleanup status as case closed, which signify that they have been remediated to the satisfaction of the agency with oversight. Therefore, with adherence to existing regulations, the No Project Alternative would result in a less than significant impact during construction and operation.

3.8.6.4.2 Proposed Project

3.8.6.4.2.1 Construction Impacts

A search of various regulatory databases identified several sites in the surrounding area as being contaminated or having the potential to become contaminated from the release of hazardous substances. A summary of these sites is in Table 3.8-1 along with the address of each site and the specific databases listing the site as contaminated. Table 3.8-2 identifies the contaminated sites within the proposed Project area. These sites were identified within the CERS HAZ WASTE, CERS TANKS, CERS, CHMIRS, CIWQS, CORTESE, HIST CORTESE, EMI, Haulers, Haznet, HWTS, UST, LUST, NPDES, WDS, ECHO, FINDS and RCRA NonGen/NLR databases.

One CORTESE site is within the proposed Project area, and 13 CORTESE LUST sites are within 0.5 miles of the proposed Project site. A total of 14 sites was determined to be included on the list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 (the "CORTESE" list). The Lockheed Air Terminal Inc. site located at ONT was included in the CORTESE list as a LUST cleanup site. The site had an unleaded gasoline leak that impacted the soil only. The abatement method was to remove the contaminated soil and dispose it at an approved site. The cleanup was completed, and the case was closed in 1985. The other 13 sites listed on the CORTESE list have a cleanup status as case closed.

One LUST site is within the proposed Project area, and 20 LUST sites are within 0.5 miles of the proposed Project site. All 21 LUST sites have a case closed status. The status of the LUST cases reported as "case closed" indicates that remedial action is completed, or was deemed unnecessary, by the local regulatory agency. Based on their cross-gradient location relative to the proposed Project site and regulatory status of case closed, these facilities are not anticipated to have a negative environmental impact on the proposed Project site.

The proposed Project is located on a site that is included on one or more hazardous materials lists compiled in accordance with Government Code Section 65962.5. All 14 sites listed on the CORTESE list

have a cleanup status as case closed. With implementation of MM-HAZ-1 and adherence to existing regulations, operation of the proposed Project would not create or result in a significant hazard to people or the environment. Therefore, the proposed Project would result in a less than significant impact with mitigation incorporated during construction.

3.8.6.4.2.2 Operational Impacts

As discussed in Section 3.8.6.4.2.1, Table 3.8-1 and Table 3.8-2 identify the proposed Project sites listed within the CERS HAZ WASTE, CERS TANKS, CERS, CHMIRS, CIWQS, CORTESE, HIST CORTESE, EMI, Haulers, Haznet, HWTS, UST, LUST, NPDES, WDS, ECHO, FINDS and RCRA NonGen/NLR databases.

One CORTESE site is within the proposed Project area, and 13 CORTESE LUST sites are within 0.5 miles of the proposed Project site. A total of 14 sites was determined to be included on the list of hazardous materials sites compiled pursuant to California Government Code Section 65962.5 (the "CORTESE" list). The Lockheed Air Terminal Inc. site located at ONT was included in the CORTESE list as a LUST cleanup site. The site had an unleaded gasoline leak that impacted the soil only. The abatement method was to remove the contaminated soil and dispose it at an approved site. The cleanup was completed, and the case was closed in 1985. The other 13 sites listed on the CORTESE list have a cleanup status as case closed.

One LUST site is within the proposed Project area, and 20 LUST sites are within 0.5 miles of the proposed Project site. All 21 LUST sites have a case closed status. The status of the LUST cases reported as "case closed" indicates that remedial action is completed, or was deemed unnecessary, by the local regulatory agency. Based on their cross-gradient location relative to the proposed Project site and regulatory status of case closed, these facilities are not anticipated to have a negative environmental impact on the proposed Project site.

The proposed Project is located on a site that is included on one or more hazardous materials lists compiled in accordance with Government Code Section 65962.5. With adherence to existing regulations, operation of the proposed Project would not create or result in a significant hazard to people or the environment, and the proposed Project would result in a less than significant impact.

3.8.6.5 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?

3.8.6.5.1 No Project Alternative

The No Project Alternative includes planned expansion, improvement projects, and routine maintenance activities for the existing roadway system and transit facilities. The ALUCP implements relevant policies and guidelines for land-use compatibility and specific findings of compatibility or incompatibility of land uses within the AIA, airport safety zones, and noise impact zones. The ALUCP also addresses airport land-use compatibility concerns regarding exposure to aircraft noise, land use safety with respect both

to people and property on the ground and the occupants of the aircraft, protection of airport airspace, and general concerns related to aircraft overflights.

The No Project Alternative would not interfere with CFR Title 14 Part 77.13 which requires that any construction or alterations to structures that exceed 200 feet in height above ground level must notify the Federal Aviation Administration (FAA) for project approval. Activities associated with the land uses listed may be carried out with minimal interference from aircraft noise. The No Project Alternative would be a compatible use within the ONT AIA, Safety Zones, and Noise Impact Zones. Construction activities would be temporary. Adherence to all local, state, and federal regulations would ensure that impacts associated with potential aviation hazards remain less than significant during construction and operation for the No Project Alternative.

3.8.6.5.2 Proposed Project

3.8.6.5.2.1 Construction Impacts

ONT is located at 2500 East Airport Drive in the City of Ontario. The southern portion of the proposed Project includes an underground tunnel at a depth of approximately up to 70 feet below ground surface (bgs) that would serve as a transportation route for autonomous electric vehicles. In addition, the southern portion of the proposed Project includes two stations within the ALCUP that would be located at the parking lots of ONT Terminal 2 and ONT Terminal 4. Concentration of people and facilities in the vicinity of airports raises concerns about aircraft hazards. The ALUCP implements relevant policies and guidelines for land use compatibility and specific findings of compatibility or incompatibility of land uses within the AIA, airport safety zones, and noise impact zones. The ALUCP also addresses airport land use compatibility concerns regarding exposure to aircraft noise, land use safety with respect both to people and property on the ground and the occupants of the aircraft; protection of airport airspace; and general concerns related to aircraft overflights.

The southern portion of proposed Project is located within the ONT AIA as shown in Figure 3.8-1. This portion of the proposed Project that is located within the AIA is a tunnel at a depth of approximately up to 70 feet bgs and would not impact ONT airspace. In addition, the two stations to be located in the parking lots for Terminal 2 and Terminal 4 would be approximately 40 feet in height and would not exceed the height of the existing structures on the ONT property. Cranes would be required during construction of the three proposed Project stations, the ventilation shaft (vent shaft), and used to deploy and recover the TBM from the excavation and receiving pits. The proposed Project would be required to comply with CFR Title 14 Part 77.13 which requires that any construction or alterations to structures that exceed 200 feet in height above ground level must notify the FAA for project approval.

The southern portion of the proposed Project is located within Safety Zone 3 (Inner Turning Zone) as shown in Figure 3.8-2. The ALUCP's Table 2-2 (Safety Criteria) has determined that transportation uses including: 1) Airport Terminals: airline, general aviation; 2) Rail and Bus Stations; 3) Transportation

Routes: roads and rail right-of-way, bus stops; and 4) Auto Parking: surface lots and structures are compatible use in Safety Zone 3. Therefore, construction of the proposed Project in Safety Zone 3 would be compatible with the ALUCP Safety Criteria.

The southern portion of the proposed Project is located in Noize Impact Zone 60–65 dB CNEL and Zone 65–70 dB CNEL as shown in Figure 3.8-3. The ALUCP's Table 2-3 (Noise Criteria) has determined that transportation uses including: 1) Rail and Bus Stations; 2) Transportation Routes: roads and rail right-of-way, bus stops; and 3) Auto Parking: surface lots and structures are compatible use in Noize Impact Zone 60–65 dB CNEL and Zone 65–70 dB CNEL. The ALUCP has determined that activities associated with the land uses listed may be carried out with minimal interference from aircraft noise. Therefore, per the ALUCP, the proposed Project is a compatible use within the ONT Noise Impact Zones.

The proposed Project would comply with CFR Title 14 Part 77.13 which requires that any construction or alterations to structures that exceed 200 feet in height above ground level must notify the FAA for project approval. The proposed Project would be a compatible use within the ONT AIA, Safety Zones, and Noise Impact Zones with temporary construction activities. Adherence to all local, state, and federal regulations would ensure that during construction of the proposed Project, impacts associated with potential aviation hazards remain less than significant.

3.8.6.5.2.2 Operational Impacts

The southern portion of proposed Project is located within the ONT AIA as shown in Figure 3.8-1. This portion of the proposed Project that is located within the AIA is a tunnel at a depth of approximately up to 70 feet bgs and would not impact ONT airspace. In addition, the two stations to be located in the parking lots for Terminal 2 and Terminal 4 would be approximately 40 feet in height and would not exceed the height of the existing structures on the ONT property. The proposed Project would not interfere with CFR Title 14 Part 77.13 which requires that any construction or alterations to structures that exceed 200 feet in height above ground level must notify the FAA for project approval.

The southern portion of the proposed Project is located within Safety Zone 3 (Inner Turning Zone) as shown in Figure 3.8-2. The ALUCP's Table 2-2 (Safety Criteria) has determined that transportation uses including: 1) Airport Terminals: airline, general aviation; 2) Rail and Bus Stations; 3) Transportation Routes: roads and rail right-of-way, bus stops; and 4) Auto Parking: surface lots and structures are compatible use in Safety Zone 3. Therefore, per the ALUCP, the proposed Project is a compatible use within the ONT Safety Zones.

The southern portion of the proposed Project is located in Noise Impact Zone 60–65 dB CNEL and Zone 65–70 dB CNEL as shown in Figure 3.8-33. The ALUCP's Table 2-3 (Noise Criteria) has determined that transportation uses including: 1) Rail and Bus Stations; 2) Transportation Routes: roads and rail right-of-way, bus stops; and 3) Auto Parking: surface lots and structures are compatible use in Noise Impact Zone 60–65 dB CNEL and Zone 65–70 dB CNEL. The ALUCP has determined that activities associated with the land uses listed may be carried out with minimal interference from aircraft noise.

Therefore, per the ALUCP, the proposed Project is a compatible use within the ONT Noise Impact Zones. Adherence to all local, state, and federal regulations would ensure that during operation of the proposed Project, impacts associated with potential aviation hazards would remain less than significant.

3.8.6.6 Would the Project i**mpair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan**?

3.8.6.6.1 No Project Alternative

The No Project Alternative includes planned expansion, improvement projects, and routine maintenance activities for the existing roadway system and transit facilities. Adherence to existing regulation would ensure that the No Project Alternative would have a less than significant impact related to interference with any adopted emergency response or evacuation plans during construction and operation.

3.8.6.6.2 Proposed Project

3.8.6.6.2.1 Construction Impacts

As required by existing regulations, the proposed Project would be required to provide adequate access for emergency vehicles during construction activities. Temporary short-term construction impacts on street traffic adjacent to the proposed Project site due to roadway and infrastructure improvements and the potential extension of construction activities into the right-of-way could result in a reduction of the number of lanes or temporary closure of segments of adjacent roadways. Any such impacts would be limited to the construction period of the proposed Project and would affect only adjacent streets or intersections. However, MM-HAZ-2 would ensure that emergency response teams for the City of Rancho Cucamonga and the City of Ontario, including the fire departments and police departments, would be notified of any lane closures during construction activities in the proposed Project site and that a minimum of one lane would remain open at all times to provide adequate emergency access to the proposed Project site and surrounding neighborhoods. Implementation of MM-HAZ-2 would ensure that the proposed Project would provide adequate access for emergency vehicles, and the impact during construction would be less than significant.

3.8.6.6.2.2 Operational Impacts

As required by law, the proposed Project would be required to provide adequate access for emergency vehicles during operational activities. Additionally, development would be required to regulate the storage of flammable and explosive materials and their transport within the proposed Project site and would comply with applicable Uniform Fire Code regulations for issues including fire protection systems and equipment, general safety precautions, and distances of structures to fire hydrants. In addition, the LHMP for the City of Rancho Cucamonga and the LHMP for the City of Ontario address procedures for large-scale emergency situations, such as natural disasters and technological incidents and not normal day-to-day emergencies. These emergency preparedness documents are for large-scale emergency situations such an earthquake that would be applicable to the entire City of Rancho Cucamonga and the

City of Ontario, including the proposed Project site. With compliance with existing regulations and policies, the proposed Project during operation would result in a less than significant impact.

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

3.8.6.7.1 No Project Alternative

The No Project Alternative site is located within a highly urbanized area. The No Project Alternative area does not include any areas designated as a State Responsibility Area (SRA) or land classified as a Very High Fire Hazard Severity Zone (VHFHSZ) (CAL FIRE 2022). While the City of Rancho Cucamonga borders the San Bernardino National Forest, the wildland-urban interface is approximately 2.2 miles north of the proposed Project site (City of Rancho Cucamonga 2021a). The City of Ontario does not possess any SRAs or VHFHSZ within its city limits (City of Ontario 2022). The No Project Alternative is not located within or near a wildfire hazard zone; therefore, construction and operation of the No Project Alternative would result in no impact.

3.8.6.7.2 Proposed Project

3.8.6.7.2.1 Construction Impacts

The proposed Project is located within a highly urbanized area. The proposed Project area does not include any areas designated as a SRA or land classified as a VHFHSZ (CAL FIRE 2022). While the City of Rancho Cucamonga borders the San Bernardino National Forest, the wildland-urban interface is approximately 2.2 miles north of the proposed Project site (City of Rancho Cucamonga 2021a). The City of Ontario does not possess any SRAs or VHFHSZ within its city limits (City of Ontario 2022). The proposed Project is not located within or near a wildfire hazard zone; therefore, during construction, the proposed Project would result in no impact.

3.8.6.7.2.2 Operation Impacts

The proposed Project is not located within or near a wildfire hazard zone; therefore, during operation, the proposed Project would result in no impact.

3.8.7 Mitigation Measures

In order to address the potential for encountering unknown contamination within the proposed Project area during construction, MM-HAZ-1 would minimize the potential risk of contamination by implementing investigation and remediation efforts at the proposed Project site.

MM-HAZ-1 In the event that previously unknown or unidentified soil and/or groundwater contamination that could present a threat to human health or the environment is encountered during construction in the Project area, construction activities in the immediate vicinity of the contamination shall cease immediately. If contamination is

encountered, a Risk Management Plan shall be prepared and implemented that (1) identifies the contaminants of concern and the potential risk each contaminant would pose to human health and the environment during construction and post-development and (2) describes measures to be taken to protect workers, and the public from exposure to potential site hazards. Such measures could include a range of options, including but not limited to, physical site controls during construction, remediation, long-term monitoring, post-development maintenance or access limitations, or some combination thereof. Depending on the nature of contamination, if any, appropriate agencies shall be notified (e.g., City of Ontario Fire Department, City of Rancho Cucamonga Fire Department). If needed, a Site Health and Safety Plan that meets Occupational Safety and Health Administration requirements shall be prepared and in place prior to commencement of work in any contaminated area.

Implementation of MM-HWQ-1 from Section 3.9 (Hydrology and Water Quality) of this Draft EIR requires that if construction dewatering on the proposed Project site is required, San Bernardino County Transportation Authority would obtain a construction dewatering permit to reduce potential pollutants entering the storm drain system.

MM-HWQ-1 If temporary construction dewatering on the project site is required, San Bernardino County Transportation Authority shall obtain a dewatering permit prior to the issuance of a grading permit. Ponded water in excavations shall be tested prior to discharge to the storm drain system. If installation of foundation piles has the potential to intercept groundwater and the water would be discharged to the excavation floor, groundwater testing to a minimum depth of 50 feet, or as otherwise determined by the Ontario or City of Rancho Cucamonga, shall be conducted to the satisfaction of the Water Resources Protection Program staff. If contaminated groundwater is determined to be present, treatment and discharge of the contaminated groundwater shall be conducted in compliance with applicable regulatory requirements including the Santa Ana Regional Water Quality Control Board standards.

Implementation of MM-HAZ-2 would ensure that proposed development would provide adequate access for emergency vehicles during construction activities.

MM-HAZ-2 To ensure adequate access for emergency vehicles when construction activities would result in temporary lane or roadway closures, the developer shall consult with the City Police Departments and Fire Departments to disclose temporary lane or roadway closures and alternative travel routes. The developer shall be required to keep a minimum of one lane in each direction free from encumbrances at all times on perimeter streets accessing the project site. At any time only a single lane is available, the developer shall provide a temporary traffic signal, signal carriers (i.e., flagpersons), or other appropriate traffic controls to allow travel in both directions. If construction activities require the complete closure of a roadway segment, the developer shall coordinate with the Police Departments and Fire Departments to designate proper detour routes and signage indicating alternative routes.

No mitigation measure would be required for hazards and hazardous materials during operation activities for the proposed Project.

3.8.8 Impacts After Mitigation

3.8.8.1 **Create significant hazard to the public or the environment through the routine transport, use,** or disposal of hazardous materials?

No mitigation measure would be required, and the impacts of the proposed Project would be less than significant.

3.8.8.2 Create as signi**fi**cant hazard to the public or the environment through reasonably foreseeable **upset and accident conditions involving the release of hazardous materials into the** environment?

Implementation of MM-HAZ-1 and MM-HWQ-1 and adherence to all local, state and federal regulations would reduce the impacts associated with the potential exposure of unknown hazardous materials during construction to a less than significant level. No mitigation measure would be required during operation, and the proposed Project would have a less than significant impact.

3.8.8.3 Emit hazardous materials or handle hazardous or acutely hazardous materials, substances, or waste within one-**quarter mile of an existing or proposed school**?

No mitigation measure would be required, and the proposed Project would have no impact.

3.8.8.4 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?

With implementation of MM-HAZ-1 and adherence to existing regulations during construction, the proposed Project would have a less than significant impact. No mitigation measure would be required during operation and the proposed Project would have a less than significant impact.

3.8.8.5 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?

No mitigation measure would be required, and the proposed Project would have a less than significant impact.

3.8.8.6 **Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan**?

With implementation of MM-HAZ-2 during construction, the proposed Project would have a less than significant impact. No mitigation measure would be required during operation, and the proposed Project would have a less than significant impact.

3.8.8.7 Expose people or structures, either directly or indirectly, to a signi**fi**cant risk of loss, injury, or death involving wildland **fi**res?

No mitigation measure would be required, and the proposed Project would have no impact.

3.9 HYDROLOGY AND WATER QUALITY

3.9.1 Introduction

This section of this Draft Environmental Impact Report (EIR) provides a summary of the evaluation of the impacts to hydrology and water quality resulting from the implementation of the proposed Ontario International Airport (ONT) Connector Project (Project). Detailed information for the hydrology and water quality resources are included in the Hydrology and Water Quality Technical Report (SBCTA 2024; Appendix N).

3.9.2 Regulatory Framework

3.9.2.1 Federal

3.9.2.1.1 Clean Water Act

The Clean Water Act (CWA) of 1972 establishes the basic structure for regulating discharges of pollutants into waters of the United States (U.S.) and gives the United States Environmental Protection Agency (EPA) the authority to implement pollution control programs such as setting wastewater standards for industries. In most states, EPA has delegated this authority to state agencies. In California, the State Water Resources Control Board (SWRCB) and Regional Water Quality Control Boards (RWQCBs) implement these programs. The proposed Project is within the jurisdiction of the Santa Ana RWQCB. Specific sections of the CWA that are applicable to the proposed Project are described in the following section.

The CWA includes the federal Antidegradation Policy which was enacted to require the states to enact policies to fully protect existing water uses and level of water quality required to protect and maintain the existing uses. Additional provisions of the CWA that are applicable to the proposed Project are described in the following section.

3.9.2.1.2 Clean Water Act Section 301

CWA Section 301 prohibits the discharge of any pollutant into waters of the U.S. without authorization under specific provisions of CWA.

3.9.2.1.3 Clean Water Act Section 303(d)

CWA Section 303(d) requires states, territories, and authorized tribes to develop a list of water quality-impaired segments of waterways. The CWA Section 303(d) list includes waterbodies that do not meet water quality standards for the specified beneficial uses of that waterway, even after point sources of pollution have installed the minimum required levels of pollution control technology. The law requires that these jurisdictions establish priority rankings for waterbodies on their CWA Section 303(d) lists and implement a Total Maximum Daily Load (TMDL) process to meet water quality standards.

The TMDL process is a tool for implementing water quality standards and is based on the relationship between pollution sources and in-stream water quality conditions. The TMDL process establishes the maximum allowable loadings of a pollutant that can be assimilated by a waterbody while still meeting

applicable water quality standards. The TMDL process provides the basis for establishing water quality-based controls that are intended to provide the pollution reduction necessary for a waterbody to meet water quality standards. A TMDL is the sum of the allowable loads of a single pollutant from all contributing point and non-point sources. The TMDL's allocation calculation for each waterbody must include a margin of safety to ensure that the water body can be utilized for its state-designated beneficial uses. Additionally, the calculation also must account for seasonal variation in water quality.

TMDLs are intended to address all significant stressors that cause or threaten to cause impairments to beneficial uses, including point sources (e.g., sewage treatment plant discharges), non-point sources (e.g., runoff from fields, streets, range, or forest land), and naturally occurring sources (e.g., runoff from undisturbed lands). TMDLs are developed to provide an analytical basis for planning and implementing pollution controls, land management practices, and restoration projects needed to protect water quality. States are required to include approved TMDLs and associated implementation measures in state water quality management plans. Within California, TMDL implementation is achieved through regional water quality control plans (Basin Plans).

TMDL Implementation Plans provide a schedule for responsible jurisdictions to implement best management practices (BMPs) to comply with pollutant-reduction schedules. BMPs are defined as a technique, measure, or structural control to manage the quantity and improve the quality of stormwater runoff in the most cost-effective manner.

3.9.2.1.4 Clean Water Act Section 401

Under CWA Section 401, a federal agency may not issue a permit or license to conduct any activity that may result in any discharge into waters of the U.S. unless a CWA Section 401 water quality certification is issued, or certification is waived. States and authorized tribes where the discharge would originate are generally responsible for issuing water quality certifications. In cases where a state or tribe does not have authority, EPA is responsible for issuing certification (33 United States Code [USC] 1341). Some of the major federal licenses and permits subject to CWA Section 401 include:

- CWA Section 402 and CWA Section 404 permits issued by EPA or United States Army Corps of Engineers (USACE);
- Federal Energy Regulatory Commission licenses for hydropower facilities and natural gas pipelines; and
- Rivers and Harbors Act Section 9 and Section 10 permits.

CWA provides that certifying authorities (states, authorized tribes, and EPA) must act on a CWA Section 401 certification request "within a reasonable period of time (which shall not exceed one year) after receipt" of such a request. A certifying authority may waive certification expressly, or by failing or refusing to act within the established reasonable period of time. In making decisions to grant, grant with conditions, or deny certification requests, certifying authorities consider whether the federally licensed or permitted activity will comply with applicable water quality standards, effluent limitations, new source

performance standards, toxic pollutants restrictions, and other appropriate water quality requirements of state or tribal law.

3.9.2.1.5 Clean Water Act Section 402

CWA Section 402 establishes the National Pollutant Discharge Elimination System (NPDES) permit process, which provides a regulatory mechanism for the control of point source discharges (a municipal or industrial discharge at a specific location or pipe) to waters of the U.S. The NPDES program also regulates: 1) diffuse source discharges caused by general construction activities over one acre; and 2) stormwater discharges in municipal stormwater systems where runoff is carried through a developed conveyance system to specific discharge locations.

3.9.2.1.6 National Flood Insurance Program

Congress acted to reduce the costs of disaster relief by passing the National Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973. The intent of these acts was to reduce the need for large, publicly funded flood control structures and disaster relief efforts by restricting development in floodplains. The Federal Emergency Management Agency (FEMA) administers the National Flood Insurance Program (NFIP) to provide subsidized flood insurance to communities that comply with FEMA regulations limiting development in a floodplain. FEMA issues Federal Insurance Rate Maps (FIRMs) which delineate flood hazard zones in communities participating in the NFIP.

3.9.2.1.7 Executive Order 11988 (Floodplain Management)

Executive Order 11988 directs all federal agencies to refrain, to the extent practicable and feasible, from all short-term and long-term adverse impacts associated with floodplain modification, to refrain from direct and indirect support of development within 100-year floodplains wherever a practicable alternative is available, and to restore and preserve the natural and beneficial values served by floodplains. Projects that encroach upon 100-year floodplains must be supported with additional specific information. U.S. Department of Transportation Order 5650.2, Floodplain Management and Protection, prescribes "policies and procedures for ensuring that proper consideration is given to the avoidance and mitigation of adverse floodplain impacts in agency actions, planning programs, and budget requests." The Order does not apply to areas with Zone C (areas of minimal flooding as shown on FEMA FIRMs).

Executive Order 11988 links the need to protect lives and property with the need to restore and preserve natural and beneficial floodplain values. Specifically, federal agencies are directed to avoid conducting, allowing, or supporting actions on the base floodplain unless the agency finds that the base floodplain is the only practicable alternative location. Similarly, U.S. Department of Transportation Order 5650.2, which implements Executive Order 11988 (Floodplain Management) and was issued pursuant to National Environmental Policy Act of 1969, National Flood Insurance Act of 1968, and Flood Disaster Protection Act of 1973, prescribes policies and procedures for ensuring that proper consideration is given to the avoidance and mitigation of adverse floodplain impacts in agency actions, planning programs, and budget requests.

3.9.2.1.8 Floodplain Development

FEMA is responsible for determining flood elevations and floodplain boundaries based on USACE studies. FEMA is also responsible for producing and distributing the FIRMs, which are used in the NFIP. These maps identify the locations of Special Flood Hazard areas, including the 100-year floodplain.

FEMA allows non-residential development in the floodplain; however, construction activities are restricted within the flood hazard areas depending upon the potential for flooding within each area. Federal regulations governing development in a floodplain are set forth in Title 44, Part 60 of the Code of Federal Regulations (CFR), which enables FEMA to require municipalities that participate in the NFIP to adopt certain flood hazard reduction standards for construction and development in 100-year floodplains.

NFIP Section 60.3(c)(2) regulations require that the lowest occupied floor of a residential structure be elevated to, or above, the 100-year flood elevation (the base flood elevation). NFIP Section 60.3(c)(3) adds that non-residential or commercial structures can be either elevated or dry flood-proofed to, or above, the 100-year flood elevation.

3.9.2.1.9 Safe Drinking Water Act

Safe Drinking Water Act (SDWA) of 1974 was established to protect the quality of drinking water in the U.S. This law focuses on all waters actually or potentially designed for drinking use, whether from aboveground or underground sources. SDWA Section 1424 (Public Law 93-523, 42 USC 300 et seq.) establishes EPA's authority to determine if an area has an aquifer which is the sole or principal drinking water source for the area that, if contaminated, would create a significant hazard to public health. Upon determination, EPA will publish a notice in the Federal Register. After the publication of any such notice, no commitment for federal financial assistance (through a grant, contract, loan guarantee, or otherwise) may be entered into for any project which EPA determines may contaminate such aquifer through a recharge zone so as to create a significant hazard to public health. A plan or design for a project must ensure that the aquifer will not be contaminated, and a commitment for federal assistance may be authorized under another provision of law.

3.9.2.2 State

3.9.2.2.1 California Environmental Quality Act

California Environmental Quality Act (CEQA) (Sections 21000 et seq.) and CEQA Guidelines (Sections 15000 et seq.) requires state and local agencies to identify the significant environmental impacts of their actions, including potential significant impacts associates with hydrology and water quality, and to avoid or mitigate those impacts, when feasible.

3.9.2.2.2 State Water Resources Control Board and Regional Water Quality Control Boards

SWRCB and nine RWQCBs are responsible for the protection of water quality in California. SWRCB establishes statewide policies and regulations mandated by federal and state water quality statutes and regulations. RWQCBs are responsible for the development and implementation of Basin Plans that address regional beneficial uses, water quality characteristics, and water quality problems. RWQCBs are

responsible for implementing Porter-Cologne Water Quality Control Act. RWQCB is also responsible for issuing water quality certifications pursuant to CWA Section 401 as previously described.

All projects resulting in waste discharges, whether to land or water, are subject to California Water Code Section 13263. Through the mandates of this section, dischargers are required to comply with Waste Discharge Requirements (WDRs) as developed by RWQCB. WDRs for discharges to surface waters must meet requirements for related NPDES permits.

3.9.2.2.3 Porter-Cologne Water Quality Control Act

Porter-Cologne Water Quality Control Act of 1969 established the principal California program for water quality control. Porter-Cologne Water Quality Control Act regulates discharges to surface and groundwater and directs RWQCBs to develop regional Basin Plans. Basin Plans are required to: 1) designate beneficial uses for surface and ground waters; 2) set narrative and numerical objectives that must be attained or maintained to protect the designated beneficial uses and conform to the state's antidegradation policy; and 3) describe implementation programs to protect all waters in the region. Development of Basin Plans and the triennial review of these plans by SWRCB are necessary for compliance with CWA Section 303 (40 CFR 131).

California's Porter-Cologne Water Quality Control Act requires projects that are discharging or proposing to discharge wastes that could affect the quality of the State's water to file a Report of Waste Discharge with appropriate RWQCB. RWQCBs are responsible for implementing CWA Sections 401, 402, and 303(d). Porter-Cologne Water Quality Control Act also provides development and periodic review of the Basin Plans that designate beneficial uses of California's major rivers and groundwater basins and establish water quality objectives (WQOs) for those waters. Projects primarily implement Basin Plans using the NPDES permitting system to regulate waste discharges so that WQOs are met.

3.9.2.2.4 State Antidegradation Policy

In accordance with the federal Antidegradation Policy, the state policy was adopted by SWRCB to maintain high quality waters in California. This state policy, implemented by RWQCBs, restricts the degradation of surface and groundwaters in an effort to achieve the federal CWA goals and objectives. Specifically, the policy protects bodies of water where the existing water quality is higher than necessary for the protection of present and anticipated beneficial uses. The policy requires that any activity that produces a waste or increased amount of waste and that discharges into high quality waters must meet WDRs to control the discharge and assure that degradation of the existing water quality not occur.

3.9.2.2.5 National Pollutant Discharge Elimination System

In accordance with CWA Section 402(p), which regulates municipal and industrial stormwater discharges under the NPDES program, SWRCB adopted an Industrial General Permit and Construction General Permit. The NPDES Industrial General Permit was established pursuant to amendments made to CWA in 1987 to require that stormwater associated with industrial activities be regulated by an NPDES permit (Water Quality Order Number [No.] 2014-0057-DWQ as amended in 2015 and 2018). There are

11 categories of industrial activities that are regulated under the Industrial General Permit for discharges directly to surface waters or indirectly through municipal storm sewers.

SWRCB permits all regulated construction activities under Order No. 2009-009-DWQ, as amended by Order No. 2010-0014-DWQ and Order No. 2012-0006-DWQ. The Order requires that, prior to beginning any construction activities, the permit applicant must obtain coverage under the Construction General Permit by preparing and submitting a Permit Registration Document that includes a Notice of Intent (NOI) and appropriate fee to SWRCB. SWRCB may issue a Construction General Permit or Individual Construction Permits that would contain more specific permit provisions. The Individual Construction Permits would replace the Construction General Permit regulations and provisions, if issued. Additionally, coverage would not occur until an adequate Stormwater Pollution Prevention Plan (SWPPP) has been prepared. A separate NOI would be submitted to SWRCB for each construction site.

Construction activities subject to the NPDES Construction General Permit include clearing, grading, and disturbances to the ground, such as stockpiling or excavation, that result in soil disturbances of at least one acre of total land area. Because construction of the proposed Project would cumulatively disturb more than one acre, all improvements and development activities would be subject to these permit requirements.

Construction activities, including small construction sites less than one acre but part of a larger common plan of at least one acre, must obtain coverage under this Construction General Permit and are required to prepare an SWPPP. The SWPPP has two major objectives: (1) to help identify the sources of sediment and other pollutants that affect the quality of stormwater discharges; and (2) to describe and ensure the implementation of BMPs to reduce or eliminate sediment and other pollutants in stormwater and non-stormwater discharges.

Required elements of a SWPPP include: (1) site description addressing the elements and characteristics specific to the site; (2) descriptions of BMPs for erosion and sediment controls; (3) BMPs for construction waste handling and disposal; (4) implementation of approved local plans; (5) proposed post-construction controls, including a description of local post-construction erosion and sediment control requirements; and (6) non-stormwater management. The SWPPP must include BMPs that address source control and, if necessary, include BMPs that address specific pollutant control. The SWPPP prepared to comply with the Construction General Permit would also address post-construction activities that can result in ongoing erosion or sedimentation impacts.

The Construction General Permit was adopted by SWRCB on September 2, 2009 and became effective on July 1, 2011. In addition, Order No. 2010-0014-DWQ was adopted on November 16, 2010, and became effective on February 14, 2011. The amendment provided updated text changes to the fact sheet, Conditions for Permit Coverage, and the Special Provisions, Electronic Signature and Certification Requirements of Order No. 2009-009-DWQ. All construction activities related to the proposed Project are subject to the requirements in the Construction General Permit. The current amended Order includes the following:

- Technology-based Numeric Action Levels (NALs): The General Permit includes NALs for pH and turbidity.
- Technology-based Numeric Effluent Limitations (NELs): The General Permit contains NELs for pH during any construction phase where there is a high risk of pH discharge and turbidity for all discharges.
- Risk-based Permitting Approach: The General Permit establishes a four-level risk calculation, with only the lowest three levels covered under this General Permit. Those dischargers that are determined to be Risk Level 4 are not covered by this General Permit and, thereby, are required to submit a Report of Waste Discharge to appropriate RWQCB and seek coverage under an individual or other applicable general permit.
- Minimum Requirements Specified: The General Permit specifies more minimum BMPs and requirements that were previously only required as elements of the SWPPP or were suggested by guidance.
- Project Site Soil Characteristics Monitoring and Reporting: The General Permit requires all dischargers to monitor and report the soil characteristics at the proposed Project location. The primary purpose of this requirement is to provide better risk determination and eventually better program evaluation.
- Effluent Monitoring and Reporting: The General Permit requires effluent monitoring and reporting for pH and turbidity in stormwater discharges. The purpose of this monitoring is to be used to determine compliance with the NELs and evaluate whether NALs included in this General Permit are exceeded.
- Receiving Water Monitoring and Reporting: The General Permit requires some Risk Level 2 and Risk Level 3 dischargers to monitor receiving waters.
- New Development and Redevelopment Stormwater Performance Standards: The General Permit specifies runoff reduction requirements for all sites not covered by a Phase I or Phase II MS4 NPDES permit, to avoid, minimize and/or mitigate post-construction stormwater runoff impacts.
- Rain Event Action Plan: The General Permit requires sites to develop and implement a Rain Event Action Plan that must be designed to protect all exposed portions of the site within 48 hours prior to any likely precipitation event.
- Site Photographic Self-Monitoring and Reporting: The General Permit requires all projects to provide photographs of their sites at least once quarterly if there are rain events causing a discharge during that quarter. The purpose of this requirement is to help RWQCB staff prioritize their compliance evaluation measures (inspections, etc.). In addition, this reporting makes compliance related information more available to the public.

- Annual Reporting: The General Permit requires all projects that are enrolled for more than one continuous three-month period to submit information and annually certify that their site is in compliance with these requirements. The primary purpose of this requirement is to provide information needed for overall program evaluation and public information.
- Certification/Training Requirements for Key Project Personnel: The General Permit requires that key personnel (e.g., SWPPP preparers, inspectors, etc.) have specific training or certifications to ensure their level of knowledge and skills are adequate to ensure their ability to design and evaluate project specifications that comply with General Permit requirements.

3.9.2.2.6 Alquist-Priolo Earthquake Fault Zoning Act

The 1972 Alquist-Priolo Earthquake Fault Zoning Act was created with the purpose of mitigating hazards associated with fault rupture. Structures for human occupancy are prohibited from being placed across the trace of an active fault. This Act is an important regulation in relation to water resources, given the potential hazards of dam failure/inundation caused by strong earthquake ground-shaking and associated erosion or flooding.

3.9.2.2.7 Sustainable Groundwater Management Act

Sustainable Groundwater Management Act (SGMA), adopted in 2014, provides a framework for regulating groundwater in California. The intent of the Act is to strengthen local groundwater management of basins most critical to the state's water needs. SGMA requires basins to be sustainably managed by local public agencies (e.g., Counties, Cities, and water agencies) who become groundwater sustainability agencies. The primary purpose of the groundwater sustainability agencies is to develop and implement a Groundwater Sustainability Plan for basins designated as high- and medium-priority to achieve long-term groundwater sustainability.

3.9.2.3 Regional

The following sections describe regional regulations that are applicable to operation and/or construction of the proposed Project.

3.9.2.3.1 Santa Ana Regional Water Quality Control Board

3.9.2.3.1.1 Basin Plan

The Basin Plan that applies to the proposed Project is the Santa Ana River Basin Plan (Santa Ana RWQCB 1995). The Santa Ana River Basin Plan sets forth the regulatory water quality standards for surface waters and groundwater within the region. The water quality standards address both the designated beneficial uses for each water body and the narrative and numeric WQOs to meet them. Where multiple designated beneficial uses exist, water quality standards are written to protect the most sensitive use. Also, the Santa Ana River Basin Plan describes the implementation programs and actions necessary to meet the WQOs and the monitoring and assessment methods used to determine attainment of the WQOs.

3.9.2.3.1.2 Total Maximum Daily Loads

In accordance with the federal CWA and the state Porter-Cologne Water Quality Control Act, TMDLs have been developed and incorporated into the Basin Plan for some pollutants identified on the CWA Section 303(d) list as causing contamination in the Santa Ana River Watershed. TMDLs govern the discharge of wastewater, urban runoff, and stormwater. A TMDL is a number that represents the assimilative capacity of a receiving waterbody to absorb a pollutant. The Santa Ana Region has established TMDLs (Category 5B) for noxious aquatic plants, nutrients, pathogens, coliform bacteria, organic enrichment/low dissolved oxygen, indicator bacteria, pesticides, sediments/siltation, and unknown toxicity. TMDLs applicable to the tributary Cucamonga Creek of the Santa Ana River is described in Section 5.9.6.3 (Water Quality) of this DEIR.

3.9.3 Local

A list of relevant local goals and polices are discussed in the Hydrology and Water Quality Technical Report (SBCTA 2024; Appendix N). Applicable local goals and policies include:

3.9.3.1.1 San Bernardino County General Plan

The San Bernardino County General Plan sets specific goals and policies in relation to water resources, water quality, and flooding in the Natural Resources Element, Infrastructure and Utilities Element, and Hazards Element (San Bernardino County 2020).

3.9.3.1.1.1 Natural Resources Element

- Goal NR-2 addresses water quality.
    - Policy NR-2.1 establishes interagency coordination on water quality.
    - Policy NR-2.2 supports development and implementation of water management plans.
    - Policy NR-2.4 applies water quality standards for wastewater discharge.
    - Policy NR-2.5 ensures compliance for stormwater discharge management.

3.9.3.1.1.2 Infrastructure and Utilities Element

- Goal IU-1 monitors water supply and infrastructure.
    - Policy IU-1.1 regulates water supply for new development.
    - Policy IU-1.3 promotes use of recycled water to supplement groundwater supplies.
    - Policy IU-1.7 allows new development on areas vital for groundwater recharge to infiltrate predevelopment levels of stormwater into the ground.
    - Policy IU-1.8 coordinates groundwater management and discourages new development that would aggravate groundwater overdraft conditions and other California Water Code undesirable results.
    - Policy IU-1.9 encourages water conservation.

- Policy IU-1.10 encourages connected water distribution systems.
- Policy IU-1.11 assists in development of water storage and conveyance facilities.

- Goal IU-3 monitors stormwater drainage in unincorporated areas.
  - Policy IU-3.1 maintains a regional flood control system.
  - Policy IU-3.2 requires installation and maintenance of stormwater management facilities for new development.
  - Policy IU-3.4 retains and encourages retention of natural floodways and watercourses.
  - Policy IU-3.5 requires new developments to pay a fair share its capital costs.

3.9.3.1.1.3 Hazard Element

- Goal HZ-1 minimizes natural environmental hazard risks.
  - Policy HZ-1.2 requires all new development to be located outside of flood and geologic environmental hazard areas and any new development built within environmental hazard areas to have adequate mitigation.
  - Policy HZ-1.3 requires floodplain mapping for 100- and 200-year storm events for any new lot or development partially or entirely in 100-year flood zones or 100-year flood awareness areas.
  - Policy HZ-1.4 supports collaboration with property owners for funding to mitigate flood hazards in 500-year flood zones.
  - Policy HZ-1.5 encourages design features for shelter in place and evacuation in environmental hazard areas.
  - Policy HZ-1.6 requires new critical and essential facilities be located outside of hazard areas.
  - Policy HZ-1.7 requires underground utilities to be designed to withstand seismic forces, ground settlement, and ride risk.
  - Policy HZ-1.12 implements the Multi-jurisdictional Hazard Mitigation Plan.
  - Policy HZ-1.15 ensures the maintenance and reliability of evacuation routes.

3.9.3.1.1.4 San Bernardino County Municipal Code

The San Bernardino County, California Code of Ordinances covers floodplain safety under Title 8: Development Code (San Bernardino County 2022). This section outlines mandated safety measures applying to regions within FEMA-designated 100-year floodplains, 100- to 500-year floodplains, and undetermined flood hazard areas. Per County Ordinances, areas within 100-year floodplains are subject to Floodplain Development Standards Review. These reviews shall ensure that the proposed Project complies with this Development Code regarding flood protection measures and shall require the submittal of an elevation certificate completed by a licensed land surveyor, registered civil engineer, or architect

who is authorized by state or local law to certify elevation information (Section 82.14.040[a][2]). Development of the Project shall not be permitted within any areas designated by FEMA as A, A1-30, AO, AH, or AE on the FIRMs, unless it is demonstrated that the cumulative effect of the proposed development when combined with all other existing and anticipated development will not increase the water surface elevation of the base flood more than one foot at any point within the community (Section 82.14.040[a][3]). As the proposed Project by nature cannot be elevated from the ground, certification of dry flood-proofing must be performed by a registered civil engineer or architect and provided to the Floodplain Administrator (Section 82.14.050[d][2]).

3.9.3.1.2 City of Rancho Cucamonga General Plan

The City of Rancho Cucamonga General Plan's Resource Conservation Element and Safety Element describes the policies for protecting water resources within the City (City of Rancho Cucamonga 2021a). The following goals and policies are relevant to water resources in the proposed Project area:

3.9.3.1.2.1 Resource Conservation Element

- Goal RC-2 addresses water resources for the community and natural environment.
    - RC-2.1 protects lands critical to replenishment of water supplies.
    - RC-2.2 preserves and enhances stormwater capture for groundwater recharge.
    - RC-2.3 promotes retention and protection of riparian resources.
    - RC-2.5 enforces water conservation.
    - RC-2.6 encourages landscaping that uses climate-appropriate native or non-invasive plants and efficient irrigation systems.
    - RC-2.7 supports the use of greywater.
- Goal RC-6 addresses climate change.
    - RC-6.12 plans for constrained future water supplies and water conservation.
    - RC-6.14 encourages new development proposals to design for changing precipitation patterns.

3.9.3.1.2.2 Safety Element

- Goal S-4 addresses flood hazards.
    - S-4.1 prohibits siting and construction of new essential facilities within flood hazards zones and requires mitigation if the facility must be located within a flood hazard zone.
    - S-4.2 requires all new development to minimize flood risk with siting and design measures.
    - S-4.3 encourages compliance with 100-year floodplain requirements for properties located within the 500-year floodplain designation.
    - S-4.4 requires flood infrastructure for new development.

- S-4.5 requires property enhancements to reduce or minimize run-off for properties located near flood zones.
- S-4.6 promotes regional coordination for flood management and mitigation projects.

3.9.3.1.2.3 Public Facilities and Services Element

- Goal PF-5 supports water and wastewater-related infrastructure.

3.9.3.1.3 City of Rancho Cucamonga Municipal Code

The City of Rancho Cucamonga Municipal Code outlines Floodplain Management Regulations under Title 19: Environmental Protection, which concerns the construction and operations of a project on land identified as a FEMA Special Flood Hazard. Per Section 19.12.030, General Provisions, no structure or land may be constructed, located, extended, converted, or altered without full compliance with the terms of the Floodplain Management Regulations Chapter of the Municipal Code and other applicable regulations.

Water quality regulatory framework is also codified in the City of Rancho Cucamonga Municipal Code. Any developer/owner engaging in construction activities which disturb five acres or more of land shall apply for coverage under the general stormwater permit for construction activity. Section 19.20.220 regulates non-stormwater discharges, including any possibly discharges that could result from the construction of the Project. Discharges of non-stormwater from construction activities are prohibited except for those discharges listed in Section 19.20.100 or any discharges authorized by the City engineer or Santa Ana RWQCB. Conditionally permitted non-stormwater discharges could include construction dewatering wastes, discharges resulting from hydrostatic testing of vessels, discharges resulting from the maintenance of potable water supply pipelines, and discharges from potable water supply systems resulting from system failures, pressure releases, etc. Authorized non-stormwater discharges under Section 19.20.210 shall be reported to the City engineer at least five days prior to a planned discharge, as outlined in Section 19.20.250.

3.9.3.1.4 City of Rancho Cucamonga Urban Water Management Plan

Cucamonga Valley Water District (CVWD) is the water supplier for the City of Rancho Cucamonga. CVWD serves more than 3,000 customers (i.e., individual metered accounts), and it supplies more than 3,000 acre-feet of water annually to its customers for municipal purposes (CVWD 2021). CVWD's 2020 Urban Water Management Plan (UWMP) reflects the current supply and demand situation along with an updated presentation of future supplies, demand forecasts and measures to monitor and control future demand. The UWMP, along with other City planning documents, is used to guide the City's water use and management efforts through the year 2045. The UWMP incorporates water supply reliability determinations that could result from potential prolonged drought, regulatory revisions, and/or changing climatic conditions.

3.9.3.1.5 City of Ontario General Plan

The City of Ontario's General Plan outlines the goals and policies regarding water resources within the Environmental Resources Element and the Safety Element (City of Ontario 2022). The following goals and policies are relevant to water resources in the proposed Project area:

3.9.3.1.5.1 Environmental Resources Element

- Goal ER-1 promotes a reliable, cost-effective water management system.
    - Policy ER-1.1 increases local water supplies to reduce dependence on imported water.
    - Policy ER-1.2 matches water supply and quality to the appropriate use.
    - Policy ER-1.3 coordinates water conservation and ensures sustainable local water supplies.
    - Policy ER-1.4 requires supply-demand balance of water supply.
    - Policy ER-1.5 coordinates water resource management, with priority for environmental justice areas.
    - Policy ER-1.6 encourages low impact development strategies to manage urban run-off quantity.
    - Policy ER-1.7 requires control and management of urban run-off.
    - Policy ER-1.8 requires wastewater management.

3.9.3.1.5.2 Safety Element

- Goal S-1 seeks to minimize risk caused by earthquake-induced and geological hazards.
- Goal S-2 seeks to minimize risk caused by flooding and inundation hazards.
    - Policy S-2.1 manages the entitlement and permitting process.
    - Policy S-2.2 requires floodplain mapping for new developments partially or entirely in 100-year flood zones.
    - Policy S-2.3 prohibits facilities located in the 100- and 500-year flood zone from using hazardous materials.
    - Policy S-2.4 prohibits the development of critical facilities in the 100-year floodplain and discourages the development of critical facilities in the 500-year floodplain.
    - Policy S-2.5 addresses stormwater management.
    - Policy S-2.6 encourages joint use of flood-control facilities.
    - Policy S-7.7 encourages collaboration between agencies.

- Goal S-8 supports emergency/disaster preparedness, response, and recovery.
    - Policy S-8.1 maintains emergency management programs that meet state and federal mandates.
    - Policy S-8.2 maintains emergency management plans.
    - Policy S-8.6 addresses community outreach efforts.

3.9.3.1.5.3 City of Ontario Municipal Code

Chapter 6 of the Ontario Municipal Code covers stormwater and urban runoff pollution (City of Ontario 2021a). Specifically, this chapter is enacted pursuant to authority conferred by an Areawide Urban Stormwater Run-Off Permit (NPDES Permit No. CAS618036, Order No. R8-2002-0012) issued by Santa Ana RWQCB pursuant to CWA Section 402(p). The section outlines prohibited activities; industrial, commercial, and public facility requirements; and BMPs for reducing runoff and pollution from runoff. Ontario Municipal Code Chapter 6-6.404 requires businesses to implement applicable BMPs, as listed in the California Stormwater Best Management Practice Handbooks, or the current San Bernardino County Stormwater Program's Report of Waste Discharge, to reduce pollutants in stormwater runoff and reduce non-stormwater discharges to the City's stormwater drainage system to the maximum extent practicable. Prior to the issuance of any grading permit, projects shall submit and have approved a Stormwater Quality Management Plan to the City of Ontario Engineer. The Stormwater Quality Management Plan shall identify all BMPs that would be incorporated into the Project to control stormwater and non-stormwater pollutants during and after construction.

3.9.3.1.5.4 City of Ontario Urban Water Management Plan

The City of Ontario 2020 UWMP (City of Ontario 2021b) reflects the City's current supply and demand situation along with an updated presentation of future supplies, demand forecasts and measures to monitor and control future demand. The UWMP, along with the City's Water Master Plan and other City planning documents, is used by the City staff to guide the City's water use and management efforts through the year 2045. The City's 2020 UWMP incorporates water supply reliability determinations that could result from potential prolonged drought, regulatory revisions, and/or changing climatic conditions. The UWMP provides the City with a planning document for long-term resource planning to ensure adequate water supplies are available to meeting existing and future water supply needs.

3.9.3.1.6 Ontario International Airport Authority

Ontario International Airport Authority (OIAA) requires for all projects that disturb the existing landscape at or near the ONT to implement stormwater management practices and to comply with local, state, and federal environmental regulations (OIAA 2019b). Contractors are responsible for following proper permitting procedures and for implementing and maintaining best management practices of stormwater runoff.

3.9.4 Methodology

Data for this section were obtained from the California Department of Water Resources, FEMA floodplain mapping, Santa Ana Regional Water Quality Control Board (Santa Ana RWQCB), San Bernardino County General Plan (2020), San Bernardino County Code, the City of Rancho Cucamonga General Plan (2021a), the City of Rancho Cucamonga Municipal Code, the CVWD 2020 UWMP documents (Cucamonga Valley Water District 2021), the City of Ontario General Plan (2022), the City of Ontario Municipal Code, the City of Ontario 2020 UWMP documents, and other relevant documents related to hydrology and water quality.

3.9.5 CEQA Thresholds of Significance

According to Appendix G of the 2024 CEQA Guidelines, implementation of the proposed Project may result in a potentially significant impact if it would:

- Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality.
- Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.
- 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 result in substantial erosion or siltation on- or off- site; substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; 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; and/or impede or redirect flood flows.
- In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation.
- Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

3.9.6 Existing Settings

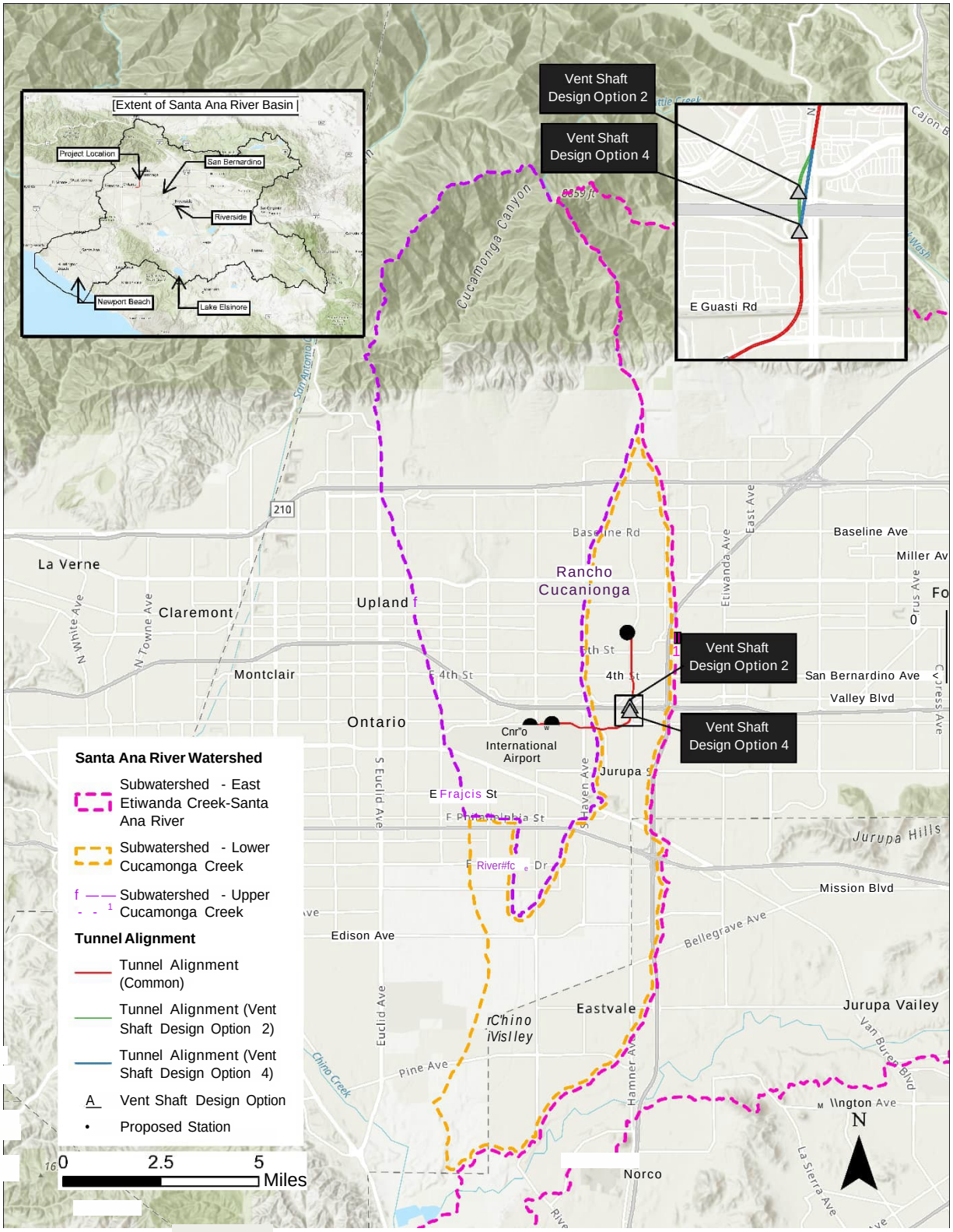
3.9.6.1 Water Resources Study Area

Water resources in the proposed Project area are governed by Santa Ana RWQCB. The proposed Project falls within the Santa Ana River Watershed, specifically Middle Santa Ana Watershed. The subset of the watershed is the Cucamonga Creek Watershed (Upper and Lower). The watersheds and local surface water bodies are described in Section 3.9.7.2 (Watershed Setting and Surface Water Bodies) of this Draft EIR. In relation to groundwater resources, the Chino Subbasin of the Santa Ana Valley Groundwater Basin underlies the proposed Project site and is further described in Section 3.9.7.5 (Groundwater Supplies and Recharge) of this Draft EIR.

3.9.6.2 Watershed Setting and Surface Water Bodies

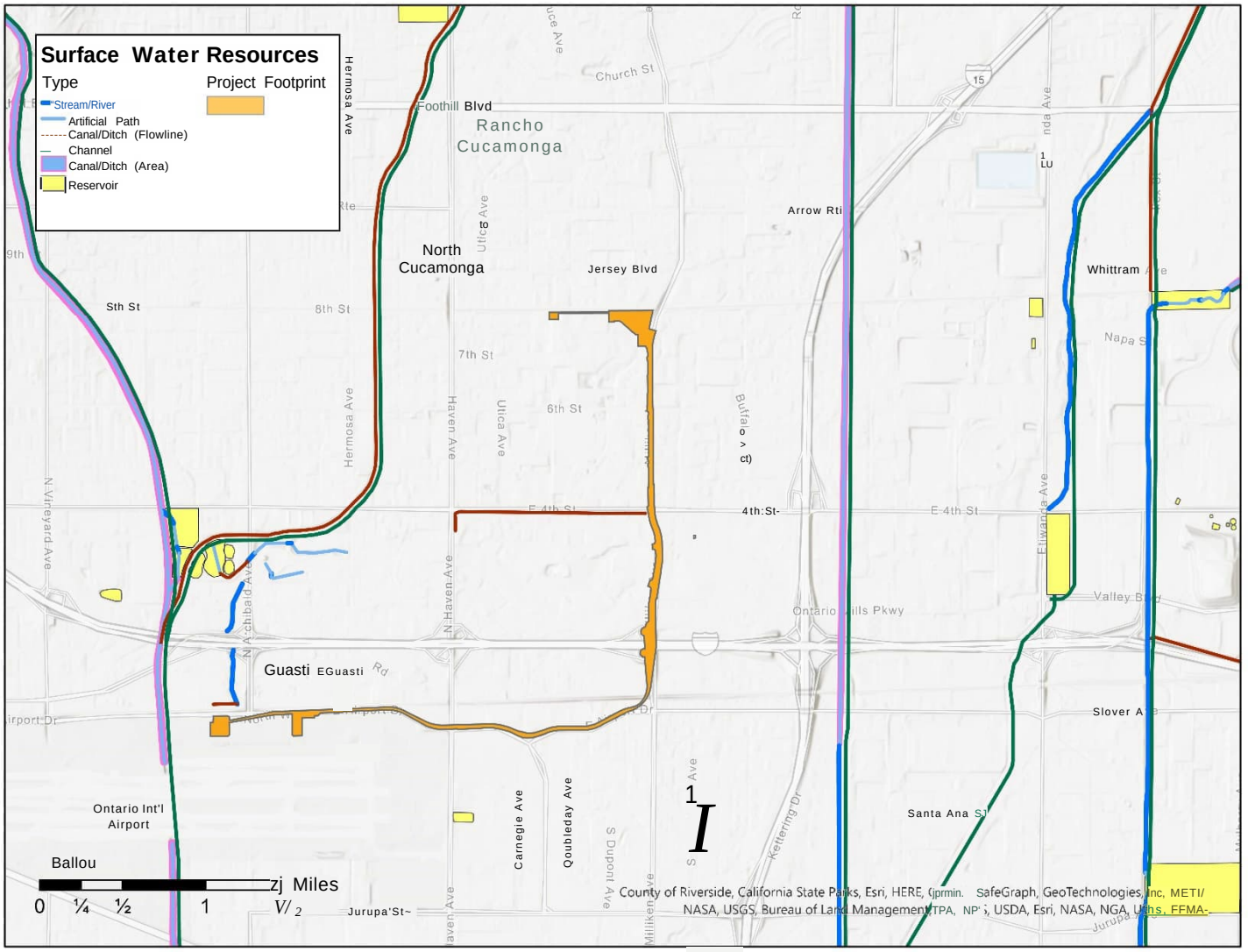
The proposed Project site is located within the boundaries of the Santa Ana River Watershed, which covers approximately 2,800 square miles in Southern California. Figure 3.9-1 shows the proposed Project bounded within the Santa Ana River Watershed. Figure 3.9-2 shows surface water sources near the proposed Project site. The Santa Ana River Watershed hosts major population centers in Southern California including Orange, Riverside, and San Bernardino Counties, as well as a small area of eastern Los Angeles County. The Santa Ana River and its principal tributaries originate in the San Gabriel and San

Figure 3.9-1 Santa Ana River Watershed



Source: U.S. Geological Survey (USGS). *USGS The National Map Viewer*, June 2022

Figure 3.9-2 Surface Water Resources



Source: United States Geological Survey 2022

Bernardino Mountains, flow through the San Bernardino Valley, Chino Basin, and the central part of Orange County, and ultimately flow to the Pacific Ocean at Newport Bay. The upper watershed, or headwaters, including the highest point in the drainage system, is delineated by the east–west ridgeline of the San Gabriel and San Bernardino Mountains. The San Jacinto River starts in the San Jacinto Mountains, runs west through Canyon Lake, and ends in Lake Elsinore.

The Santa Ana River Watershed has been divided into ten Watershed Management Areas (WMAs) by Santa Ana RWQCB. Each WMA provides a management approach to ensure water quality within its designated area of the Watershed. The proposed Project is within the Middle Santa Ana WMA. The proposed Project site is specifically within the Middle Santa Ana River Watershed. The Middle Santa Ana River Watershed covers approximately 488 square miles and lies largely in the southwestern corner of San Bernardino County and the northwestern corner of Riverside County. This Middle Santa Ana River Watershed extends from Prado Dam (near the Cities of Corona and Norco) to the foothills of the San Bernardino and San Gabriel Mountains (Santa Ana RWQCB 2019).

The climate of the Middle Santa Ana River Watershed is considered Mediterranean with hot, dry summers, and cooler, wetter winters. Average annual precipitation ranges from 12 inches per year in the coastal plain to 18 inches per year in the inland alluvial valleys, reaching 40 inches or more per year in the San Bernardino Mountains. Most of the precipitation occurs between November and March in the form of rain and variable amounts of snow in the higher mountains of the Watershed. The climatological cycle of the region includes high surface water flows in the spring and early summer period, followed by typically low flows during the dry season. Floods generated by precipitation in the high mountains are not uncommon during winter and spring. During the dry season, the high mountains periodically have severe thunderstorms that could generate torrential floods in local streams (Santa Ana Watershed Project Authority 2005).

The amount of precipitation that flows from rivers and streams that is diverted and used represents about 9 percent (%) of the total water supply (Santa Ana Watershed Project Authority 2018). Local surface water is largely seasonal and most of the water comes in the wet or rainy season. During the dry season, the water comes from snowmelt, natural springs, and treated wastewater flows. Facilities such as dams and flood control detention basins divert and slow storm runoff, providing additional opportunity for groundwater replenishment. In the upper watershed, only a portion of storm runoff is being diverted and used as surface water. Much of the runoff from the upper watershed is captured by the Prado Dam and later is used by the lower watershed. Additionally, the Santa Ana Watershed relies on water imported from the Colorado River Aqueduct and State Water Project (SWP) for a little more than one-third of its water supply (Santa Ana Watershed Project Authority 2018). Water is imported into the area by Metropolitan Water District of Southern California, San Gorgonio Pass Water Agency, and San Bernardino Valley Municipal Water District.

The underground pore space between soil granules provides space to store water, referred to as groundwater, which can be later extracted using wells. The watershed's underground storage space functions like a series of underground reservoirs. These underground reservoirs, or basins, range from a few hundred to over 1,000 feet in thickness. In general, the watershed relies on precipitation stored as groundwater to provide about 50% of the water supply (Santa Ana Watershed Project Authority 2018). These basins provide storage space for local and imported water supplies that can be used during droughts or other shortages. The amount of storage space in the lower watershed is based on the storage volume that could be available in approximately 8 out of 10 years.

Cucamonga Creek is a tributary to the Santa Ana River and includes the Upper Cucamonga Creek and Lower Cucamonga Creek. Figure 3.9-1 shows the location of Upper Cucamonga Creek and Lower Cucamonga Creek, which bounds the proposed Project. The Cucamonga Creek Watershed is a subset of the Santa Ana River Watershed and is approximately 92 square miles in size. The Cucamonga Creek Watershed includes portions of the Cities of Chino, Ontario, Rancho Cucamonga, and Upland and sections of unincorporated Riverside and San Bernardino Counties. As with the other waters in the Santa Ana Region, dry-weather flow is the predominant flow condition in Cucamonga Creek. Precipitation-derived runoff typically occurs for only relatively short episodic periods during and shortly after rainfall events in the watershed. As is typical of this area, rainfall events almost always occur in the wet season (mid-October through mid-April).

3.9.6.3 Water Quality

Surface water quality in developed areas is affected by various point-source and non-point-source pollutants. Point-source pollutants are those emitted at a specific point, such as a pipe, while non-point-source pollutants are typically generated by surface runoff from unconfined sources, such as streets, paved areas, or landscaped areas. As a general rule, point-source pollutants are more easily monitored; thus, pollutant discharge standards (also referred to as WDRs) are more easily enforced, while non-point-source pollutants, such as those found in runoff, are more difficult to monitor and enforce. Even though non-point-source pollutants are difficult to monitor, they are important contributors to surface water quality, especially in developed areas.

Constituents and concentrations within runoff water vary according to land uses, topography, and the amount of impervious cover, as well as intensity and frequency of irrigation or rainfall. Runoff in developed areas may typically contain oil, grease, and metals accumulated in streets, driveways, parking lots, and rooftops, as well as pesticides, herbicides, particulate matter, nutrients, animal waste, and other oxygen-demanding substances from landscaped areas. Concentrations of pollutants in runoff generated during the dry season by landscape irrigation and street washing (dry-weather runoff) are typically lower than concentrations found in wet-weather runoff (runoff generated by precipitation during the wet season).

3.9.6.4 Urban Runoff

There is a strong correlation between decreasing water quality and increasing urban development. As land uses intensify, and more impermeable surfaces are created, groundwater recharge is reduced and the volume, rate, and quality of surface water runoff are degraded. Urban runoff pollutants include a wide array of environmental, chemical, and biological compounds from both point and non-point sources. In the urban environment, stormwater characteristics depend on site characteristics (e.g., land use, perviousness, pollution prevention, types and amounts of BMPs), rain events (duration, amount of rainfall, intensity, and time between events), operations and maintenance practices (e.g., street sweeping), soil type and particle sizes, multiple chemical conditions, the amount of vehicular traffic, and atmospheric deposition. Short-term runoff from construction sites, without adequate erosion and runoff control measures, can contribute more sediment to receiving waters than that which is deposited by natural processes over a period of several decades.

The quality of urban runoff in the city is typical of most urban areas and includes a variety of common contaminants. These pollutants consist primarily of suspended sediments, fertilizers and pesticides, animal waste, and contaminants that are commonly associated with automobiles (e.g., petroleum compounds such as oil, grease, and hydrocarbons). In addition, urban stormwater often contains high levels of soluble and particulate heavy metals generated from traffic, industrial facilities, and occasionally, residential sources.

Dry-weather urban runoff occurs when there is no precipitation-generated runoff. Typical sources include landscape irrigation runoff; driveway and sidewalk washing; non-commercial vehicle washing; groundwater seepage; fire flow; potable water line operations and maintenance discharges; and permitted or illegal non storm water discharges. Irrigation runoff and washing processes generally contribute to dry-weather urban runoff only during the dry season (typically April through September). It can be a significant source of bacteria and other constituents that can be introduced through day-to-day urban activities as well as illicit discharges, dumping, or spills.

Wet-weather urban runoff refers collectively to non-point source discharges that result from precipitation events. Wet-weather discharges include all stormwater runoff. Stormwater discharges are generated by runoff from land and impervious areas such as paved streets, parking lots, and building rooftops during rainfall and snow events (e.g., such as might occur in mountainous regions of the watershed) that often contain pollutants in quantities that could adversely affect water quality. Most urban stormwater discharges are considered diffuse sources and are regulated by the Stormwater NPDES Permit or Construction General Permit (as discussed in Section 3.9.2 [Regulatory Framework] of this Draft EIR).

Wet- and dry-weather runoff typically contain similar pollutants of concern. However, except for the initial stormwater runoff concentrations (first flush) following a long dry period between rainfall events, the concentrations of pollutants found in wet-weather flows are typically lower than those found in

dry-weather flows because the larger wet-weather flows dilute the number of pollutants in runoff waters. Storm events may dislodge or carry pollutants over different surfaces than the lower dry-weather flows.

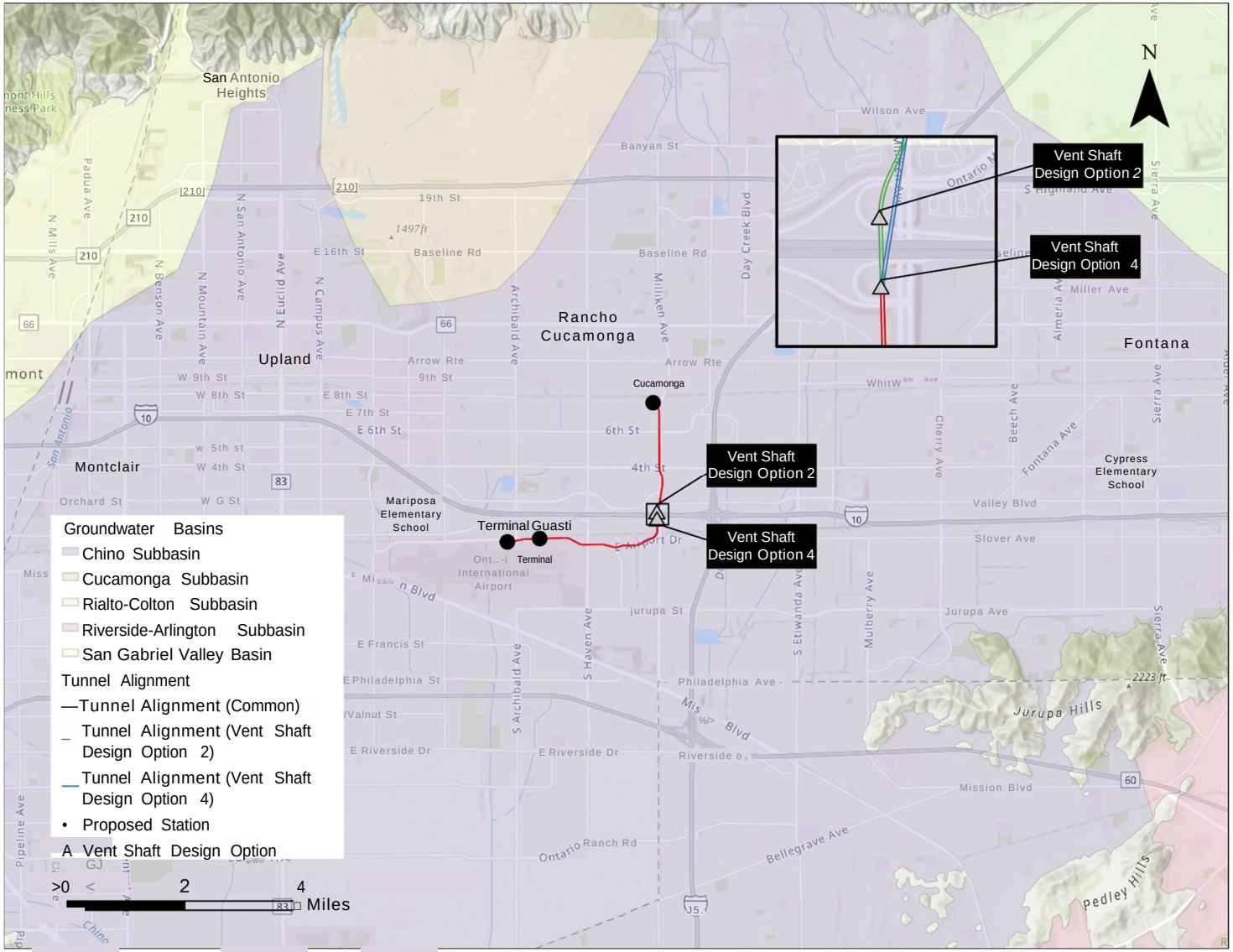
3.9.6.5 Groundwater Supplies and Recharge

The surrounding environment for the proposed Project is primarily built out and has been substantially altered by human activity; it no longer functions as a natural hydrologic system. As shown in Figure 3.9-3, the proposed Project overlies the Upper Santa Ana Valley Groundwater Basin and the Chino Basin in San Bernardino County. The Chino Subbasin is one of the largest groundwater basins in southern California, covering approximately 240 square miles. Groundwater flows in a south-southwest direction from the primary areas of recharge in the northern parts of the Chino Basin toward the Prado Basin in the south (Inland Empire Utilities Agency 2018).

According to the Chino Basin Watermaster (2021), groundwater is encountered at depths in excess of 250 feet below ground surface near the proposed Project. Recently reported groundwater depths to the west and south of the proposed Project site are approximately 260 to 320 feet below ground surface on average. Groundwater beneficial uses for the Chino Basin are MUN (Municipal and Domestic Supply), AGR (Agricultural Supply), IND (Industrial Service Supply), and PROC (Industrial Process Supply). The management of nitrates in groundwater and local surface waters is a component of the watershed's salinity management plan. In the Chino–North Groundwater Management Zone, the Santa Ana RWQCB established (in the Basin Plan) maximum-benefit objectives for total dissolved solids (TDS) and nitrate that allow for programs of recycled water reuse and imported water and recycled water recharge. The maximum-benefit objectives are contingent on the implementation of specific projects and programs that ensure the long-term protection of the beneficial uses of the Chino Basin, including the following:

- The construction and operation of 40,000 acre-feet per year of groundwater desalination facilities in the southern portion of the Chino Basin;
- The construction and operation of artificial recharge facilities to enhance the recharge of high-quality stormwater and imported water;
- The management of the TDS and nitrate concentrations in artificial recharge to less than or equal to the objectives;
- The management of TDS and nitrate concentrations in recycled water;
- The management of groundwater levels in the southern portion of the Chino Basin to limit rising-groundwater outflow of poor-quality groundwater to the Santa Ana River, which protects the beneficial uses of the river in Orange County; and
- The implementation of groundwater and surface-water monitoring programs and triennial estimation of ambient TDS and nitrate concentrations in Chino Basin groundwater.

Figure 3.9-3 Chino Groundwater Basin



Source: Chino Basin Watermaster. *Chino Basin Watermaster Interactive Maps*, 2022.

3.9.6.6 Drainage

Based on aerial imagery, land in the County and Cities within the proposed Project site are urbanized and largely covered with impervious surfaces, such as areas of asphalt, concrete, buildings, and other land uses which concentrate storm runoff. The Cities own, operate, and maintain a storm drainage system for the purpose of conveying storm runoff to reduce or eliminate flooding under peak storm flow conditions. While the primary purpose of the storm drain system is to reduce or eliminate flood hazards, the system carries both dry- and wet-weather urban runoff and the pollutants associated with activities from urban land use. Urban runoff (both dry- and wet-weather) discharges into storm drains.

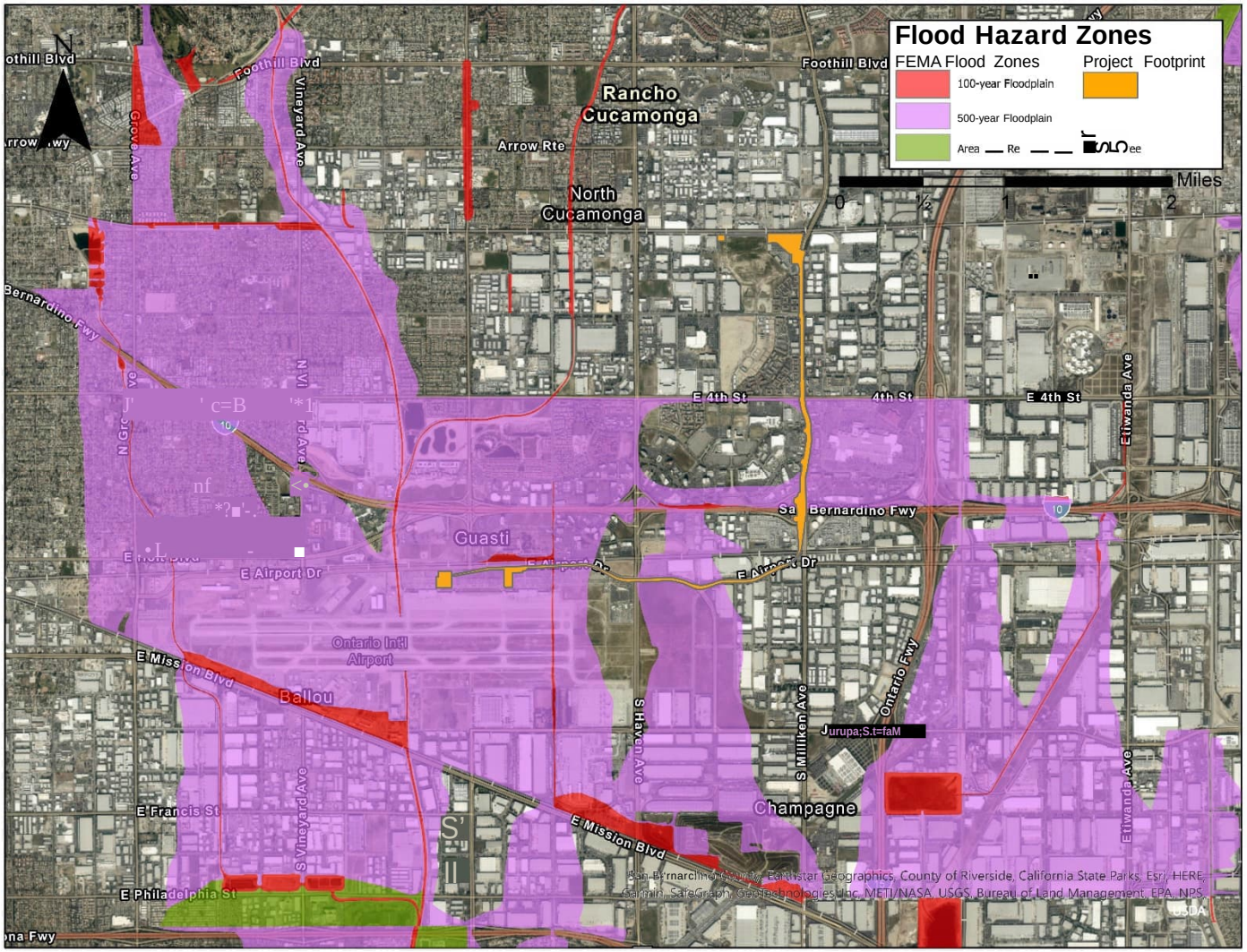
Stormwater and other surface water runoff are conveyed to a municipal storm drain. Most local drainage networks are controlled by structural flood control measures. The majority of the length of the proposed Project is along major arterials with curb and gutter features. There are multiple storm drains and drainage features within the proposed Project site. Major storm drains featured in the proposed Project includes the Cucamonga Creek on a 10-foot-by-83-foot reinforced concrete box storm drain owned and operated by San Bernardino County Flood Control District (SBCFCD). This outfall storm drain is located approximately 280 feet west of Airport Drive and Commerce Parkway.

3.9.7 Flooding

The City of Ontario and the City of Rancho Cucamonga are in a relatively flat alluvial plain, lying on uplift terraces bounded by impermeable rocks of mountains, hills, and faults. FEMA has prepared flood maps identifying areas in San Bernardino County and surrounding cities within the County that would be subject to flooding during 100-year and 500-year storm events. As shown in Figure 3.9-4, the southern portion of the proposed Project, at the ONT, includes a small strip of FEMA-designated 100-year floodplains. More specifically, the proposed Project includes a small strip of FEMA-designated 100-year floodplain where Turner Avenue would cross the ONT.

Portions of the proposed Project falls within a FEMA designated Zone X. Zone X is for areas of moderate flood hazard, usually the area between the limits of the 100-year and 500-year floods. Zone X is where the site is within an area subject to the 0.2% chance of flooding (500-year flood event) and is protected from the 1% chance of flooding (100-year storm event) by levees, dikes, or other structures. In addition, portions of the proposed Project site are located within a FEMA-designated Special Flood Hazard Area with and without base flood elevation. The base flood elevation is the water surface elevation resulting from a flood that has a 1% chance of equaling or exceeding that level in any given year. Zone A consists of areas with a 1% annual chance of flooding. Zone A99 consists of areas with a 1% annual chance of flooding that would be protected by a federal flood control system where construction has reached specified legal requirements. The Special Flood Hazard Area is the area where the NFIP's floodplain management regulations must be enforced and the area where the mandatory purchase of flood insurance applies. For the purpose of determining Community Rating System premium discounts, all AR and A99 zones are treated as non-Special Flood Hazard Area.

Figure 3.9-4 FEMA Flood Zone



Source: 1) Federal Emergency Management Agency (FEMA). *FEMA Flood Map Service Center*, 2022. 2) Ontario, City of. *2050 The Ontario Plan*, *Figure S0-3 Flood Hazard Zone*, 2021. 3) Rancho Cucamonga, City of. *Local Hazard Mitigation Plan, Figure 3-8: FEMA Flood Hazard Zones*. 2021

SBCFCD is responsible for operating and maintaining the County's major flood control channels and drainage system, including required improvements. Individual municipalities are often charged with maintaining local and tributary flood control systems. The principal functions of SBCFCD are flood protection on major streams, water conservation, and storm drain construction. The SBCFCD's Flood Control Permit Section provides relevant permit information and processes encroachment permit applications for work within the SBCFCD's right-of-way. The SBCFCD's Flood Control Permit Section coordinates departmental reviews and issues permits for activities such as construction projects, land use permits, and general encroachment within district rights-of-way.

3.9.8 Inundation

3.9.8.1 Dam or Levee Failure Inundation

The San Antonio Dam is located 8.11 miles northwest of the proposed Project area at the Cucamonga Metrolink Station and 7.46 miles northwest of the proposed Project area at the ONT. Built in 1956, the San Antonio Dam is owned by USACE and is operated by the USACE's Los Angeles District (USACE 2022). The dam is 160 feet in height (130 feet in hydraulic height) and 3,850 feet long. The San Antonio Dam has a drainage area of 27 square miles and has a maximum storage capacity of approximately 11,880 acre-feet of water (USACE 2022).

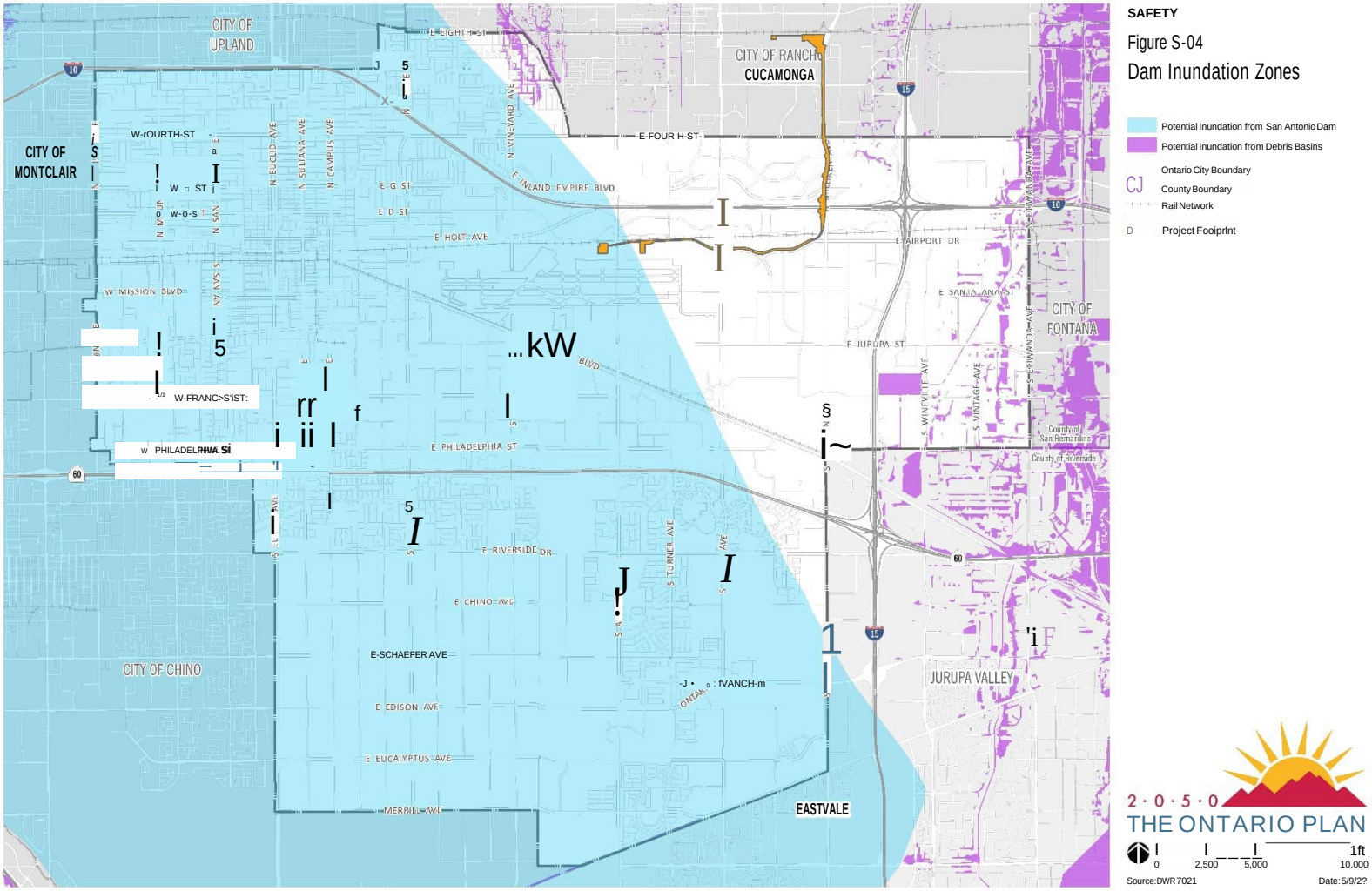
As shown in Figure 3.9-5, the southwestern portion of the proposed Project area is located within a designated San Antonio Dam Inundation Zone. Earthquake-induced failure of upgradient dams, flood-control facilities, or other water-retaining structures could cause inundation. The San Antonio Dam is in a seismically active region and may be subject to earthquakes. Table 3.9-1 identifies the faults near the proposed Project site.

Table 3.9-1 Summary of Faults Near Proposed Project Site

Fault Name	Distance from Proposed Project Site (miles)	Maximum Moment Magnitude (M_W)
Cucamonga Fault	5	6.0 to 7.0
Etiwanda Avenue Fault	4.5	6.0 to 7.0
Red Hill Fault	3	6.0 to 7.0
Chino Hill Fault	8.7	6.0 to 7.0
Central Avenue Fault	8.5	6.7
Sierra Madera Fault	6.5	6.0 to 7.0
San Jacinto Fault	6.8	6.5 to 7.5
San Jose Fault	8.23	6.0 to 6.5
San Andreas Fault	13.5	6.8 to 8.0

Source: Southern California Earthquake Data Center (2022a, 2022b, 2022c, 2022d, 2022e, 2022f); City of Pomona (2012)

Figure 3.9-5 Dam Inundation Zone City of Ontario



Source: Ontario, City of. *2050 The Ontario Plan*, *Figure S-04 Dam Inundation Zones*, 2021.

The San Antonio Dam is located 0.58 miles northwest of the Cucamonga Alquist-Priolo Fault Zones. Strong ground-shaking occurs as energy is released during an earthquake; the intensity is dependent upon the distance between the site and the earthquake, the magnitude of the earthquake, and the geologic conditions underlying and surrounding the site. The major cause of structural damage from earthquakes is ground-shaking. Greater movement can be expected at sites on poorly consolidated materials, in proximity to the causative fault, or in response to an earthquake of great magnitude.

The San Antonio Dam provides more than 100-year flood protection to the western end of the San Bernardino Valley of the San Bernardino County (San Bernardino County 2011). This earthen dam serves primarily as a major flood control structure rather than as a facility for the storage of water for potable uses. The San Antonio Dam does not store large quantities of water except during periods of heavy rain. However, when full, failure or rupture of the San Antonio Dam would release waters and result in the flooding of areas of the southwestern portion of the proposed Project area.

The San Antonio Dam received a "HIGH" potential classification from the November 12, 2020, inspection. The dam's potential hazard rating does not relate to the likelihood of dam failure. Rather, it refers to the potential downstream impacts of such a failure and the immediate nexus is the number of people and the amount and value of property located within the potential inundation area. According to USACE, all dams located in the Los Angeles metropolitan area have a similar rating because of the size of the population and density of downstream development.

The USACE Los Angeles District Reservoir Regulatory Section considers the failure potential of the San Antonio Dam to be extremely remote given that the dam reservoir area is ordinarily dry. During periods of significant precipitation, USACE implements controlled releases of water from the dam reservoir into the adjacent concrete-lined flood channel that carries stormwater safely downstream or diverts water to adjacent spreading grounds. The San Antonio Dam received a "LOW (4)" risk assessment on May 23, 2020. The San Antonio Dam is currently inspected every five years (USACE 2022).

In preparation of dam failure emergencies, USACE works closely with local emergency managers to share what is known about the dam and support the development of local emergency and evacuation plans. USACE works with upstream and downstream emergency managers and members of the public to raise awareness of the dam and support actions to prepare and be ready to respond in the case of a dam-related emergency. An Emergency Action and Notification Plan (Emergency Action Plan) was established by USACE to protect residents and businesses of the affected area in case of dam failure and is regularly updated. The Emergency Action Plan for the San Antonio Dam was last revised and updated on May 28, 2020, which meets FEMA guidelines (USACE 2022).

3.9.8.2 Tsunami, Seiche, or Mudflow

The proposed Project area is not located in an area subject to tsunami hazards. A tsunami is a sea wave caused by a submarine earthquake, landslide, or volcanic eruption. Tsunamis are tidal waves generated

in large bodies of water by fault displacement or major ground movement. The proposed Project is located more than 35 miles from the Pacific Ocean.

Seiches are waves caused by large-scale, short-duration phenomena that result from the oscillation of confined bodies of water (such as reservoirs and lakes) that also may damage low-lying adjacent areas, although not as severely as a tsunami. Seiches are changes or oscillations of water levels (i.e., standing waves) within a confined or semi-confined body of water due to fluctuations in the atmosphere, tidal currents, or earthquakes. The closest enclosed bodies of water that could result in earthquake-induced seiches are Lake Mathews located over 17 miles southeast of the proposed Project site, and Lake Arrowhead located over 22 miles northeast of the proposed Project site. The proposed Project site is not located next to an enclosed or semi-enclosed body of water. There are no major bodies of water near the proposed Project area that could be subjected to seiche.

Mudflow hazards typically occur where unstable hill slopes are located above gradient or where site soil is unstable and subject to liquefaction, and when substantial rainfall saturates soil, causing failure. The proposed Project site is not located near steep unstable hill slopes susceptible to mudslides. In fact, the closest hillsides upgradient from the proposed Project site are over five miles to the north and are separated from the proposed Project site by urban development, including residential uses, streets, and storm drain systems, which makes it unlikely that the proposed Project site would experience any effects caused by mudslides if they occurred.

3.9.9 Impact Evaluation

3.9.9.1 Would the Project violate any water quality standards or waste discharge requirements, or otherwise substantially degrade surface or ground water quality?

3.9.9.1.1 No Project Alternative

The No Project Alternative includes planned expansion, improvement projects and routine maintenance activities for the existing roadway system and transit facilities. These projects would be required to adhere to applicable regulatory requirements, and the construction activities associated with the No Project Alternative would not violate water quality standards, cause an exceedance of water quality standards or contribute to or cause a violation of WDRs due to sediment-laden runoff, contaminated groundwater from dewatering activities, or the incidental or accidental release of construction materials.

Operation of the No Project Alternative could contribute to violations of water quality standards or WDRs, or otherwise degrade water quality if it has the potential to degrade the quality of surface receiving waters through the introduction of new impervious surfaces that contribute to stormwater runoff volumes and from the mobilization of pollutants in stormwater that would be generated by the proposed land uses. However, implementation of the No Project Alternative would not result in a substantial change in the types and concentrations of pollutants in stormwater runoff because the site is already developed, and the planned land uses are not anticipated to produce extensive impervious surfaces. The No Project

Alternative would not result in stormwater peak flows or volumes that would substantially differ from existing conditions. In addition, runoff constituents would be similar to existing conditions. Stormwater and wastewater from the No Project Alternative site would continue to discharge into the existing sewer system, and no separate system would be constructed. Overall flows from the site during wet weather would continue to the existing sewer system. It is not anticipated that there would be a net increase in wet-weather flows compared to existing conditions. Therefore, the No Project Alternative would not violate water quality standards or WDRs, and construction and operational stormwater runoff water quality impacts would be less than significant.

3.9.9.1.2 Proposed Project

3.9.9.1.2.1 Construction Impacts

During construction, soil would be exposed to natural processes such as precipitation (depending on the time of year) and runoff. Stormwater discharges generated during construction activities would cause an array of physical, chemical, and biological water quality impacts. Specifically, the physical, chemical, and biological integrity of surface runoff water could become compromised. The interconnected process of erosion, sediment transport, and delivery is the primary pathway for introducing key pollutants, such as nutrients (particularly phosphorous), metals, and organic compounds into aquatic systems.

The delivery, handling, and storage of construction materials and wastes, as well as the use of construction equipment, could introduce contaminants into storm drains. Spills or leaks from heavy equipment and machinery can result in oil and grease contaminations. Staging areas or building sites can also be the source of pollution due to the use of paints, solvents, cleaning agents, and metals during construction. Impacts associated with oil, grease, and metals in stormwater include toxicity to aquatic organisms and the potential contamination of drinking supplies. Larger pollutants, such as trash, debris, and organic matter, are additional pollutants that could be associated with construction activities.

As the proposed Project would require construction/grading on a site greater than one acre, construction of the proposed Project would be subject to the General Construction Permit. Incorporation of required BMPs for materials and waste storage and handling, equipment and vehicle maintenance and fueling, as well as for outdoor work areas, would reduce potential discharge of stormwater pollutants during construction. The proposed Project, therefore, would not violate water quality standards, or otherwise degrade water quality.

In the event dewatering is determined to be necessary during construction, construction dewatering (if any) has the potential to introduce pollutants into the storm drain systems. For example, groundwater from dewatering could contain sediment that, if not properly managed, could be discharged to the storm drain system. For substantial dewatering, the Project contractor would be required to obtain coverage under the SWRCB Control Board Construction Dewatering General Permit. The Construction Dewatering General Permit would include discharge quantity and quality limitations based on site and groundwater characteristics. Implementation of MM-HWQ-1 requires that if construction dewatering on the proposed

Project site is required, San Bernardino County Transportation Authority (SBCTA) would obtain a construction dewatering permit to reduce potential pollutants entering the storm drain system.

Tunnel boring machines (TBMs) are large-diameter horizontal drills that continuously excavate circular tunnel sections. Both Earth Pressure Balance and slurry TBMs apply a balancing pressure to the excavation face to stabilize the ground and balance the groundwater pressure in front of the excavation face. Operating both types of TBMs, the excavated materials are removed through the tunnel using rail-mounted muck cars, conveyor belts, or closed spoil transport pipelines. The invert of the tunnel would be up to approximately 70 feet in depth. Fluctuations in groundwater levels occur in response to temperature and rainfall. Groundwater is generally expected to be well below the tunnel invert, except in localized areas where water may be present due to pumping or leakage. However, in the event dewatering is determined necessary during construction, MM-HWQ-1 would require a dewatering permit prior to grading activities.

Implementation of MM-HWQ-1 would regulate stormwater flows to a prescribed level, which would ensure the rate of pollutants entering the storm drain system in stormwater does not represent a substantial increase over existing conditions. Compliance with existing regulations and implementation of MM-HWQ-1 would ensure that the proposed Project would not violate water quality standards or WDRs, and construction stormwater runoff water quality impacts would be less than significant.

3.9.9.1.2.2 Operational Impacts

The proposed Project site is fully developed and is almost entirely impervious, consisting of asphalt parking areas and building foundations. These impervious surfaces generate stormwater runoff containing urban pollutants. Nutrients that may be present in stormwater runoff include nitrogen and phosphorous resulting from fertilizers applied to landscaping and atmospheric deposition. Excess nutrients can impact water quality by promoting excessive and/or a rapid growth of aquatic vegetation, which reduces water clarity and results in oxygen depletion. Pesticides can also enter stormwater runoff after application on landscaped areas and can be toxic to aquatic organisms and accumulate in certain tissues in larger species, such as birds and fish. Oil and grease can enter stormwater from vehicle leaks, traffic, and maintenance activities. Metals may enter stormwater runoff as surfaces corrode, decay, or leach. Potential non-chemical pollutants associated with operational activities include clippings associated with landscape maintenance, street litter, and pathogens (bacteria). Pathogens (from sanitary sewer overflows, spills, and leaks from portable toilets, pets, wildlife, and human activities) can impact water contact recreation, non-contact water recreation, and shellfish harvesting.

The proposed Project would not result in stormwater peak flows or volumes that would substantially differ from existing conditions. Pollutants associated with the operational phase of the proposed Project would be typical of urban development and would include nutrients, oil and grease, metals, organics, pesticides, and non-chemical pollutants (including trash, debris, and bacteria).

The proposed Project would not result in a substantial change in the types and concentrations of pollutants in stormwater runoff because the site is already developed. Runoff constituents would be similar to existing conditions. Municipal Stormwater Permit conditions are required to be codified in the local agency/municipality codes and ordinances. Compliance with the County and Cities' regulatory process for ensuring that appropriate BMPs are included in proposed Project design and complying with the applicable federal CWA NPDES program and state NPDES requirements under the Porter Cologne Water Quality Act would also help minimize pollutants in runoff. Therefore, the proposed Project would not violate water quality standards or WDRs, and operational stormwater runoff water quality impacts would be less than significant.

3.9.9.2 Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

3.9.9.2.1 No Project Alternative

The No Project Alternative includes planned expansion, improvement projects and routine maintenance activities for the existing roadway system and facilities. Construction activities associated with the No Project Alternative are not anticipated to include extensive excavation and would not interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level. Additionally, operation of the No Project Alternative would not utilize groundwater as a source of water supply or substantially deplete groundwater supplies. Therefore, there would no net deficit in aquifer volume or a lowering of the local groundwater table level during construction and operation of the No Project Alternative, and this impact would be less than significant.

3.9.9.2.2 Proposed Project

3.9.9.2.2.1 Construction Impacts

Fluctuations in groundwater levels occur in response to temperature and rainfall. It is anticipated that excavations will be required for construction of the subterranean tunnel. In the event dewatering is determined necessary during construction, MM-HWQ-1 would require a dewatering permit prior to grading activities.

During excavation, the soils that underlie the proposed Project site could be unstable or susceptible to caving. A standard approach to reducing potential problems is to shore the excavation using drilled cast-in-place "soldier piles" spaced evenly across the excavation, with appropriate bracing and/or anchoring. The soldier piles would need to be drilled to depths that might encounter groundwater. Although numerous piles would be placed below groundwater, this would not act as a barrier to flow or redirect flows because the piles would be vertical features around which groundwater could continue to flow. With implementation of MM-HWQ-1, and because construction activities would not substantially

deplete groundwater supplies, lower the local groundwater table, or interfere substantially with groundwater recharge, this impact is considered to be less than significant.

3.9.9.2.2.2 Operational Impacts

The proposed Project would not involve the withdrawal of the existing groundwater, and no alteration in the amount of groundwater available for public water supplies would be expected. The proposed Project site does not provide a significant source of groundwater recharge because it is covered with impervious surfaces. As a result, redevelopment of the site would not adversely affect groundwater recharge potential. As such, during operation, the proposed Project would have a less than significant impact to groundwater.

3.9.9.3 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 result in substantial erosion or siltation on- or off- site; substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; 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; and/or impede or redirect flood flows?

3.9.9.3.1 No Project Alternative

The No Project Alternative would not alter the existing drainage pattern of the site in ways that would result in substantial erosion, siltation, or flooding on or off site. Implementation of the No Project Alternative would not contribute runoff water that would exceed the capacity of existing or planned storm sewer systems or provide substantial additional sources of polluted runoff as the existing stormwater system would accommodate runoff flows and treat runoff. San Bernardino County, City of Rancho Cucamonga and City of Ontario General Plans and its municipal codes include policies to minimize post-construction erosion impacts and reduce stormwater runoff. These policies ensure incorporation of stormwater detention facilities and design of drainage facilities to minimize adverse effects on water quality. Adherence to existing regulatory requirements would serve to minimize erosion and siltation associated with construction and operation of the No Project Alternative.

The No Project Alternative is located in an urbanized area and would not result in a significant change in land use and the potential for increased site runoff. Implementation of the No Project Alternative is not anticipated to result in the alteration of the course of a natural waterway nor substantially increase the rate or amount of surface runoff in a manner that would result in flooding on-site or off-site. With adherence to existing regulations, the No Project Alternative would minimize the impacts associated with flooding from surface runoff during construction.

Stormwater and wastewater from the No Project Alternative site during construction and operation would continue to discharge into the existing storm drainage system and no separated system would be constructed. The No Project Alternative would not create or contribute additional runoff that may exceed

the capacity of existing off-site storm drainage system or on-site storm drainage systems. Overall flows from the site during wet weather would continue to the existing storm drainage system. It is not anticipated that there would be a substantial increase in wet-weather flows compared to existing conditions. During construction, compliance with existing federal, state, and local regulations would ensure that runoff water that could exceed the capacity of existing or planned stormwater drainage systems would be minimized. The No Project Alternative would also be subject to regional and local regulations adopted to ensure compliance with federal requirements for the control of urban pollutants to stormwater runoff which enters the network of storm drains throughout the County and Cities.

During operation, the No Project Alternative would not be expected to result in an increase in runoff because the Project site is already mostly impervious surfaces and discharge is to a lined or underground storm drain system. The No Project Alternative area is already built out and, any increase in impervious surfaces resulting from the development of the No Project Alternative is anticipated to be minor in relation to existing conditions. The No Project Alternative would not substantially alter existing drainage patterns by increasing the amount of impervious surfaces routing on-site runoff through a storm drainage system and increase stormwater runoff rates and volumes. Stormwater and wastewater from the Project site would continue to discharge into the existing stormwater drainage system. Any increase in impervious surfaces resulting from the development of the No Project Alternative is anticipated to be minor in relation to existing conditions. Therefore, the potential net change in pervious/impervious surfaces is anticipated to be minimal. In summary, with adherence to existing federal, state, and local regulations and compliance with applicable permit requirements, the No Project Alternative would have a less than significant impact.

3.9.9.3.2 Proposed Project

3.9.9.3.2.1 Construction Impacts

The majority of the construction of the proposed Project would take place within existing impervious surface areas. The nearest stream/river is located approximately 0.93 miles west of the Project site separated by the Interstate 15 (I-15) Freeway. While construction activities often involve stockpiling, grading, excavation, dredging, paving, and other earth-disturbing activities resulting in the alteration of existing drainage patterns, the new construction resulting from implementation of the proposed Project would occur within a fully developed urban area with a completed and operational storm drain system. Implementation of the Construction General Permit requirements would include erosion and sediment controls during construction activities. The County and Cities' General Plans and their municipal codes also include policies designed to minimize post-construction erosion impacts and reduce stormwater runoff. These policies ensure incorporation of stormwater detention facilities and design of drainage facilities to minimize adverse effects on water quality.

The proposed Project site is located in an urbanized area, and construction activities for the proposed Project are not anticipated to result in the alteration of the course of a natural waterway nor substantially

increase the rate or amount of surface runoff in a manner that would result in flooding on-site or off-site. With adherence to existing regulations, significant impacts associated with flooding from surface runoff during construction would be minimized.

The proposed Project would not create or contribute additional runoff that may exceed the capacity of existing off-site storm drainage system or on-site storm drainage systems. The proposed Project would not substantially alter existing drainage patterns by increasing the amount of impervious surfaces routing on-site runoff through a storm drainage system and increase stormwater runoff rates and volumes. Stormwater and wastewater from the Project site would continue to discharge into the existing stormwater drainage system and no separated system would be constructed. Compliance with the County and Cities regulatory process for ensuring that appropriate BMPs are included in project design and complying with the applicable federal CWA NPDES program and state NPDES requirements under the Porter Cologne Water Quality Act would also help minimize pollutants in runoff. Adherences to existing federal, state, and local regulations would ensure that during construction activities, runoff water that could exceed the capacity of existing or planned stormwater drainage systems would be minimized.

Soil disturbance would temporarily occur from the proposed Project, due to earth-moving activities such as excavation and trenching for foundations and utilities, soil compaction, cut and fill activities, and grading. Disturbed soils are susceptible to high rates of erosion from wind and rain, resulting in sediment transport via stormwater runoff from the Project area. Erosion and sedimentation affect water quality through interference with photosynthesis, oxygen exchange, and respiration, growth, and reproduction of aquatic species. Runoff from construction sites would be typical of urban areas, and may include sediments and contaminants such as oils, fuels, paints, and solvents. Additionally, other pollutants such as nutrients, trace metals, and hydrocarbons can attach to sediment and be transported to downstream drainages and ultimately into collecting waterways, contributing to degradation of water quality.

Construction materials and waste handling, and the use of construction equipment, could also result in stormwater contamination and impact water quality. Spills or leaks from heavy equipment and machinery could result in oil and grease contamination. The removal of waste material during construction could also result in tracking of dust and debris and release of contaminants in existing structures. Staging areas or building sites can also be the source of pollution due to the use of paints, solvents, cleaning agents, and metals during construction. Pesticide use (including herbicides, fungicides, and rodenticides) associated with site preparation is another potential source of stormwater contamination. Larger pollutants, such as trash, debris, and organic matter could also be associated with construction activities. Water quality degradation could result in health hazards and aquatic ecosystem damage associated with bacteria, viruses, and vectors. Sediments and contaminants may be transported throughout site runoff to downstream drainages and ultimately into the collecting waterways, and potentially into the Pacific Ocean, thereby affecting surface water and offshore water quality. The Construction General Permit requirements would need to be satisfied prior to beginning construction on any project located on a site

greater than one acre. The proposed Project would also be subject to regional and local regulations adopted to ensure compliance with federal requirements for the control of urban pollutants to stormwater runoff which enters the network of storm drains throughout the County and Cities.

Adherence to existing federal, state, and local regulations would ensure that during construction activities, the proposed Project would result in a less than significant impact.

3.9.9.3.2.2 Operational Impacts

The proposed Project site is in an urban, developed area. Existing stormwater runoff from the proposed Project site and surrounding area is removed by way of street flows and storm drains. The proposed Project would not discharge to a water body that would be susceptible to erosion and siltation caused by alteration of drainage properties. The nearest stream/river is located approximately 0.93 miles west of the Project site separated by the I-15 freeway. Additionally, drainage patterns in the County and Cities would not be substantially altered in a manner that could cause or contribute to increased erosion or siltation.

The proposed Project would not result in a significant change in land use and the potential for increased site runoff. The proposed Project would not substantially alter the existing drainage pattern, or the storm drain system. Therefore, implementation of the proposed Project is not anticipated to result in the alteration of the course of a natural waterway nor substantially increase the rate or amount of surface runoff in a manner that would result in flooding on-site or off-site.

The proposed Project would not be expected to result in an increase in runoff because the Project site is already mostly impervious surfaces and discharge is to a lined or underground storm drain system. The proposed Project would not substantially alter existing drainage patterns by increasing the amount of impervious surfaces routing on-site runoff through a storm drainage system and increase stormwater runoff rates and volumes. Stormwater and wastewater from the Project site would continue to discharge into the existing stormwater drainage system and no separated system would be constructed.

During the operational phase of the proposed Project, the major source of pollution in stormwater runoff would be contaminants that have accumulated on rooftops and other impervious surfaces, such as driveways and pedestrian walkways. Pollutants associated with the operational phase of the proposed Project include nutrients, metals, organics, pesticides, and gross pollutants (including trash, debris, and bacteria). Aerially deposited metals, nutrients, and other constituents would also be expected to remain the same because of the same amount of impervious surfaces compared to existing conditions.

Operation of proposed Project could result in the addition of contaminants into the stormwater runoff entering the Cities' drainage system. The major source of pollution to runoff and infiltrating groundwater would be contaminants that have accumulated on the land surface over which stormwater passes. Between rainstorms, material would be deposited on the streets, paved areas, rooftops, and other

surfaces from debris dropped or scattered by individuals, wastes and dirt from construction and renovation or demolition, fecal droppings from animals, oil and various residues contributed by vehicular traffic, and fallout of airborne particles.

The proposed Project area is already built out; any increase in impervious surfaces resulting from the development of the proposed Project is anticipated to be minor in relation to existing conditions. Therefore, the potential net change in pervious/impervious surfaces is anticipated to be minimal.

With compliance with existing federal, state, and local regulations, the proposed Project would result in a less than significant impact.

3.9.9.4 In flood hazard, tsunami, or seiche zones, risk release of pollutant due to project inundation?.

3.9.9.4.1 No Project Alternative

The No Project Alternative includes planned expansion, improvement projects and routine maintenance activities for the existing roadway system and transit facilities. If the No Project Alternative is located within a FEMA-designated 100-year floodplain, the No Project Alternative would be required to comply with all federal, state, and local regulations and it would be required to reduce any potential impacts that could result from flood hazards. A portion of the No Project Alternative site is located within the San Antonio Dam failure inundation zone. The USACE regularly inspects and maintains the San Antonio Dam and Reservoir, as required by the *National Dam Inspection Act* (Public Law 92-367), which is intended to eliminate or reduce any risks caused by dam failure. A USACE adopted Emergency Action Plan, San Bernardino County's All-Hazard Mitigation Plan, the City of Ontario's Hazard Mitigation Plan, and the City of Rancho Cucamonga's Hazard Mitigation Plan would provide adequate warning for evacuation in order to prevent risk of loss, injury or death involving flooding by dam failure. The No Project Alternative would be required to comply with existing County and City policies for flood and dam failure preparation. In addition, with compliance with existing federal, state, and local regulations, the No Project Alternative would result in a less than significant impact to FEMA-designated flood hazard zone and dam inundation zone.

The No Project Alternative is not located within a seiche, tsunami, or mudflow zone and would result in no impact.

3.9.9.4.2 Proposed Project

3.9.9.4.2.1 Construction Impacts

Flood Hazards

During proposed Project construction, there is the potential for construction sites to experience flooding from a storm event or catastrophic dam failure. In particular, bored tunnels, cut-and-cover tunnels, and open trenches could be affected if temporary flow diversions fail, and flood flows could fill the excavations. However, because emergency response systems are in place to warn of pending flood

hazards, this analysis assumes construction workers would not be at risk because they would not be at the construction sites. Further, during flood events, it is unlikely construction would take place. There could be some risk of damage to partially completed features, and the risk would be commensurate with the disturbance area and type(s) of features; however, the likelihood of flood damage from the 100-year flood or from dam inundation would be limited because of the low probability of such occurrences.

Construction activities in floodplains have the potential to temporarily cause or contribute to localized increases in flood depths (water surface elevations), peak flow rates, and flow velocities, particularly during storm events, and expose people and structures to flood hazards. Loss of flood water storage capacity could directly affect local flood depths and indirectly affect up- and downgradient flooding. This risk can be reduced by encouraging construction to occur in the dry season, to the extent possible. Stockpiles, temporary construction structures, temporary excavations that must be protected from flood flows, and temporary grading and fill activities could also reduce the amount of flood water storage capacity. These effects would be temporary and would not affect the entire construction area.

The proposed Project includes a small portion of a FEMA-designated 100-year floodplain at the ONT. With implementation of MM-HWQ-2 and adherence to all federal, state, and local regulations, the proposed Project during construction would have a less than significant impact in regard to flooding associated with FEMA-designated 100-year flood hazard areas.

Dam

A portion of the proposed Project site is located within the San Antonio Dam failure inundation zone. The San Antonio Dam functions primarily as a flood control retention structure that holds water only when there is significant rain, and then only for short periods of time. The San Antonio Dam provides more than 100-year flood protection to the west end of the San Bernardino Valley in the San Bernardino County. The USACE is responsible for the operation and maintenance of the San Antonio Dam and regularly inspects and maintains all of their facilities, including the San Antonio Dam, as required by the *National Dam Inspection Act* (Public Law 92-367), which is intended to eliminate or reduce any risks caused by dam failure. The San Antonio Dam is inspected regularly every five years for dam safety.

The San Antonio Dam is located 0.58 miles northwest of the Cucamonga Alquist-Priolo Fault Zones. The USACE Los Angeles District Reservoir Regulatory Section considers the failure potential of the San Antonio Dam to be extremely remote given that the dam reservoir area is ordinarily dry. In addition, USACE works closely with local emergency managers to share what is known about the dam and support the development of local emergency and evacuation plans. USACE, with upstream and downstream emergency managers and members of the public, raises awareness of the dam and supports actions to prepare and be ready to respond in the case of a dam-related emergency. An Emergency Action Plan was established by the USACE to protect residents and businesses of the affected area in case of dam failure. USACE regularly updates the Emergency Action Plan for the dam. The Emergency Action Plan for the San Antonio Dam was last revised and updated on May 28, 2020, which meets FEMA guidelines.

In the worst-case scenario, there are numerous rock quarries and two below-grade freeways between the dam and dam inundation zone. These features would intercept and hold some water from the dam, which would serve to attenuate the impact of a dam failure on downstream properties, potentially retarding the speed of flows, reducing the extent of the inundation area and the depth of flooding.

The USACE developed an Emergency Action Plan which outlines the actions to be taken in the event of a threatened or actual dam failure. These actions include the immediate notification of both state and regional emergency management agencies and the implementation of local hazard response plans. Although dam failure is considered remote, MM-HWQ-3 would require that evacuation procedures are established for the proposed Project area in the event of failure of the San Antonio Dam.

Since the likelihood of a dam failure is remote, several Emergency Action Plans are in place (from the USACE, San Bernardino County, and the Natural Hazard Mitigation Plans for the City of Rancho Cucamonga and City of Ontario), as required by the General Plans of each jurisdiction. In addition, MM-HWQ-3 would be implemented for the proposed Project. With implementation of MM-HWQ-3 and adherence to all federal, state, and local regulations, the proposed Project during construction would have a less than significant impact in regard to flooding as a result of dam failure.

Seiche, Tsunami and/or Mudflow

Tsunamis are large sea waves generated by submarine earthquakes, or similar large-scale, short-duration phenomena, such as volcanic eruptions, that can cause considerable damage to low-lying coastal areas. Because the proposed Project site is located almost 35 miles inland of the Pacific Ocean, it would not be subject to tsunami inundation. The closest enclosed bodies of water that could result in earthquake-induced seiches are Lake Mathews, located over 17 miles southeast of the proposed Project site, and Lake Arrowhead located over 22 miles northeast of the proposed Project site. Therefore, any potential seiche activity, if any occurs, would not be expected to reach the proposed Project site and there would be no risk to the proposed Project site from seiches.

Mudflow hazards typically occur where unstable hill slopes are located above gradient or where site soils are unstable and subject to liquefaction, and when substantial rainfall saturates soils causing failure. The proposed Project site is not located near steep unstable hill slopes susceptible to mudslides. In fact, the closest hillsides upgradient from the proposed Project site are approximately five miles to the north and are separated from the proposed Project site by urban development, including residential uses, streets, and storm drain systems, which makes it unlikely that the proposed Project site would experience any effects caused by mudslides if they occurred. Hillsides below-gradient from the proposed Project site would not contribute mudslides to the proposed Project site (mudslides would have to completely fill in the lower elevation areas before reaching the proposed Project site). Therefore, the proposed Project site is not expected to be subject to a mudflow risk.

In summary, the proposed Project would have no impact to flooding by seiche, tsunami, or mudflows.

3.9.9.4.2.2 Operational Impacts

Flood Hazard

The southern portion of the proposed Project site, at ONT, includes a small area of FEMA-designated 100-year floodplains. More specifically, the proposed Project includes a small strip of FEMA-designated 100-year floodplain where Turner Avenue would cross ONT. FEMA designated 100-year floodplain areas are shown in Figure 3.9-4.

The City of Ontario's General Plan Policy S-2.4 prohibits the development of new essential and critical facilities in the 100-year floodplain. The City of Ontario requires that all standards of elevation and flood proofing demonstrate that a facility can be safe and operational during a flood event, implemented to the satisfaction of the Building Department. In addition, the San Bernardino County's General Plan Policy HZ-1.2 requires all new development to be located outside of the environmental hazard areas including 100-year flood zone and dam inundation areas. The County also requires any new development partially or entirely in 100-year flood zones or 100-year flood awareness areas to provide detailed floodplain mapping for 100- and 200-year storm events as part of the development approval process.

The proposed Project is mostly located outside of a 100-year flood hazard area and does not place any surface structures that would impede or redirect flood flow. The subterranean tunnel component of the proposed Project bypasses a small portion of the 100-year floodplain area. Implementation of MM-HWQ-2 would ensure that prior to the implementation of the proposed Project, SBCTA will work with the City of Ontario Building Department and the San Bernardino County's Public Works Department to ensure that design, construction, and operation meet all safety standards.

With Implementation of MM-HWQ-2 and adherence to all applicable federal, state, and local regulations, the proposed Project during operation would have a less than significant impact in regard to flooding associated with FEMA-designated 100-year flood hazard areas.

Dam

As discussed under section 3.9.8.1, the USACE regularly inspects and maintains the San Antonio Dam and Reservoir, as required by the *National Dam Inspection Act* (Public Law 92-367), which is intended to eliminate or reduce any risks caused by dam failure. A USACE adopted Emergency Action Plan, the County's All-Hazard Mitigation Plan, City of Ontario's Hazard Mitigation Plan, and the City of Rancho Cucamonga's Hazard Mitigation Plan would provide adequate warning for evacuation in order to prevent risk of loss, injury or death involving flooding by dam failure. MM-HWQ-3 would ensure that an Emergency Operation Plan for the proposed Project would be in place in preparation of the worst-case scenario of a dam failure. With the implementation of MM-HWQ-3 and adherence to existing County and Cities' policies for flood and dam failure preparation, the proposed Project during operation would have a less than significant impact in regard to flooding as a result of dam failure.

Seiche, Tsunami and Mudflow

As discussed in section 3.9.8.2 the proposed Project site is not expected to be subject to a tsunami, seiche or a mudflow risk. There would be no impact to people or structures at the proposed Project site during operation that would result in a significant risk of loss, injury, or death involving inundation by a seiche, tsunami, or mudflows.

3.9.9.5 Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

3.9.10 No Project Alternative

The No Project Alternative includes planned expansion, improvement projects and routine maintenance activities for the existing roadway system and transit facilities. The No Project Alternative would not conflict with or obstruct implementation of a water quality control plan and sustainable groundwater management plan, and the No Project Alternative would result in no impact.

3.9.11 Proposed Project

3.9.11.1 Construction Impacts

The proposed Project would be required to comply with regulatory processes for the County and Cities to ensure that appropriate BMPs are included in project design and complying with the applicable federal CWA NPDES program and state NPDES requirements under the Porter Cologne Water Quality Act. During construction, the proposed Project would not conflict with or obstruct implementation of a water quality control plan and sustainable groundwater management plan, and the proposed Project would result in no impact.

3.9.11.2 Operational Impacts

During operation, the proposed Project would not conflict with or obstruct implementation of a water quality control plan and sustainable groundwater management plan, and the proposed Project would result in no impact.

3.9.12 Mitigation Measures

The proposed Project would implement the following mitigation measures to ensure that impacts to hydrology and water quality remain less than significant.

MM-HWQ-1 to address temporary construction dewatering:

MM-HWQ-1: If temporary construction dewatering on the project site is required, San Bernardino County Transportation Authority shall obtain a dewatering permit prior to the issuance of a grading permit. Ponded water in excavations shall be tested prior to discharge to the storm drain system. If installation of foundation piles has the potential to intercept

groundwater and the water would be discharged to the excavation floor, groundwater testing to a minimum depth of 50 feet, or as otherwise determined by the City of Ontario or City of Rancho Cucamonga, shall be conducted to the satisfaction of the Water Resources Protection Program staff. If contaminated groundwater is determined to be present, treatment and discharge of the contaminated groundwater shall be conducted in compliance with applicable regulatory requirements including the Santa Ana Regional Water Quality Control Board standards.

MM-HWQ-2 to address FEMA 100-year floodplain:

MM-HWQ-2: San Bernardino County Transportation Authority shall submit the Project design plans to the City of Ontario Building Department and the San Bernardino County Building Department to obtain approval that the design, construction, and operation meets all safety standards for the portion of the project within the Federal Emergency Management Agency designated 100-year floodplain.

MM-HWQ-3 to address dam inundation zone:

MM-HWQ-3: San Bernardino County Transportation Authority shall prepare an Emergency Operations Plan. The Emergency Operations Plan shall include provisions for an evacuation action plan to respond to a notification of San Antonio Dam failure. The evacuation plan in the Emergency Operations Plan shall include action plans to evacuate all the people within the project area during a San Antonio Dam failure.

3.9.13 Impacts After Mitigation

3.9.14 Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality.

With compliance with existing regulations and implementation of MM-HWQ-1, the proposed Project would have less than significant impact.

3.9.15 Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that the project may impeded sustainable groundwater management of the basin.

With implementation of MM-HWQ-1, the proposed Project would have a less than significant impact.

3.9.16 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 result in substantial erosion or siltation on- or off- site; substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; 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; and/or impede or redirect flood flows

With adherence and compliance with existing regulations, the No Project Alternative would have a less than significant impact.

3.9.17 In flood hazard, tsunami, or seiche zones, risk release of pollutant due to project inundation.

With Implementation of MM-HWQ-2 and adherence to all federal, state, and local regulations, the proposed Project would have a less than significant impact in regard to flooding associated with FEMA-designated 100-year flood hazard areas.

With the implementation of MM-HWQ-3 and adherence to existing County and City policies for flood and dam failure preparation, the proposed Project would have a less than significant impact in regard to flooding as a result of dam failure.

No Mitigation measure would be required, and the proposed Project would have no impact to flooding by seiche, tsunami, or mudflows.

3.9.18 Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan,

No mitigation measure would be required, and the proposed Project would have no impact.

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3.10 LAND USE AND PLANNING

3.10.1 Introduction

This section of this Draft Environmental Impact Report provides a summary of the evaluation of the impacts to land uses as a result of implementation of the proposed Ontario International Airport (ONT) Connector Project (Project). Detailed information for land use and planning is included in the Community Impact Assessment Technical Report (SBCTA 2024a; Appendix E).

3.10.2 Regulatory Framework

3.10.2.1 Federal

Applicable federal regulations are contained primarily in Title 23 Code of Federal Regulations (CFR) Section 1508.8. Some of the major federal laws and issue areas include the following statutes (and regulations promulgated thereunder):

- Intermodal Surface Transportation Efficiency Act of 1991 which addresses highway systems and intermodal transfer facilities;
- Surface Transportation Reauthorization Act of 2021 which addresses social and economic impacts;
- Americans with Disabilities Act of 1990 which addresses protections of persons with disabilities;
- Section 163 of the Federal Aviation Administration Reauthorization Act of 2018 which addresses regulations of airport land; and
- The Uniform Relocation Assistance and Real Property Acquisitions Policies Act of 1970 which addresses the acquisition of real property or displacement of persons from their homes, businesses, or farm.

3.10.2.2 State

3.10.2.2.1 California Environmental Quality Act

California Environmental Quality Act (CEQA) (Sections 21000 et seq.) and CEQA Guidelines (Sections 15000 et seq.) require state and local agencies to identify the significant environmental impacts of their actions, including potential significant impacts associates with land use and planning, and to avoid or mitigate those impacts, when feasible.

3.10.2.2.2 California Government Code Section 65300 – 65303.4

California Government Code "Authority for and Scope of General Plans" [Sections 65300 - 65303.4] requires that each county and city adopt a General Plan with eight mandatory elements to guide the long-term growth of jurisdictions in the proposed Project area. The code states:

Each planning agency shall prepare and the legislative body of each county and city shall adopt a comprehensive, long-term general plan for the physical development of the county or city, and of any land outside its boundaries which in the planning agency's judgment bears relation to its planning. Chartered cities shall adopt general plans which contain the mandatory elements specified in Section 65302.

Mandatory elements dictated in Section 65302 and required for each county and city's general plan are land use, circulation, housing, conservation, open space, noise, safety, and environmental justice.

3.10.2.2.3 California Government Code Section 7260 – 7277 (California Relocation Assistance Act)

California Government Code "Relocation Assistance" [Sections 7260 - 7277] requires that a public entity acquiring real property for a public use must provide relocation advisory and financial assistance to any person, business, or farm operation displaced as a result of the acquisition.

3.10.2.3 Regional

3.10.2.3.1 Southern California Association of Governments Connect SoCal 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy

Southern California Association of Governments (SCAG) is the largest regional planning agency in the nation, functioning as the Metropolitan Planning Organization for six counties and 191 cities. Connect SoCal is a comprehensive 20-year transportation plan that provides a vision for the future of the SCAG region's multimodal transportation system and specifies how that vision can be achieved for the six-county area (SCAG 2020). As the Regional Transportation Plan and Sustainable Communities Strategy for the SCAG region, Connect SoCal is an important planning document that identifies major challenges as well as potential opportunities associated with growth projections for the region, and allows public agencies that implement transportation projects to do so in a coordinated manner while qualifying for federal and state funding.

Connect SoCal is supported by a combination of transportation and land use strategies that outline how the region can achieve California's greenhouse gas emission reduction goals and federal Clean Air Act requirements. The plan also strives to achieve broader regional objectives, such as the preservation of natural lands, improvement of public health, increased roadway safety, support for the region's vital goods movement industries, and more efficient use of resources. The following goals in Connect SoCal apply to the proposed Project:

- Encourage regional economic prosperity and global competitiveness;
- Improve mobility, accessibility, reliability, and travel safety for people and goods;
- Increase person and goods movement and travel choices within the transportation system; and
- Leverage new transportation technologies and data-driven solutions that result in more efficient travel.

3.10.2.4 Local

A list of relevant local goals and policies are discussed in the Community Impacts Assessment Technical Report (SBCTA 2024a; Appendix E). A summary of local goals and policies is provided as follows:

3.10.2.4.1 San Bernardino Countywide Transportation Plan

San Bernardino County Transportation Authority (SBCTA) is the transportation-planning commission for San Bernardino County, California, and is responsible for cooperative regional planning and furthering an efficient multimodal transportation system countywide. The purpose of the Countywide Transportation Plan (CTP) is to lay out a strategy for longterm investment in, and management of, the County's regional transportation assets. The CTP identifies the proposed Project within the document as a necessary project that would occur years in advance of, and at a dramatically lower cost than would have been possible with, conventional rail technology.

3.10.2.4.2 City of Rancho Cucamonga General Plan

The City of Rancho Cucamonga's General Plan contains the following elements: Land Use and Community Character, Focus Areas, Open Space, Mobility and Access, Housing, Public Facilities and Services, and Environmental Performance. The City of Rancho Cucamonga's General Plan includes the following goals and policies applicable to the proposed Project:

- Goal MA-1 supports a multimodal transportation hub that connects regional and local destinations.
- Policy MA-1.2 supports the redevelopment in and around the Cucamonga Metrolink Station to encourage transit-oriented development.
- Policy MA-5.1 seeks to reduce vehicle miles traveled through land use planning, enhanced transit access, localized attractions, and access to non-automotive modes.
- Policy MA-5.2 addresses investments to infrastructure and pilot programs to leverage proven new transportation technology.
- Policy RC-7.13 addresses energy-efficient models and technology for new city infrastructure.

3.10.2.4.2.1 City of Rancho Cucamonga Specific Plan and Master Plan Areas

The City of Rancho Cucamonga has adopted several specific plans which provide development standards, design guidelines, and other long-range planning information for certain areas within the City of Rancho Cucamonga. Table 3.10-1 (City of Rancho Cucamonga Specific Plans) identifies the specific plan adopted by the City of Rancho Cucamonga that is partially or entirely covers the proposed Project area.

Table 3.10-1 City of Rancho Cucamonga Specific Plans

Specific Plan	Description	Goals/Policies Related to the proposed Project Area
The Resort Specific Plan (City of Rancho Cucamonga 2022g; 2022h)	Formerly known as the "Empire Lakes Specific Plan" or "Industrial Area Specific Plan (IASP) Sub-Area 18," The Resort Specific Plan covers the region at the southern edge of the City of Rancho Cucamonga, adjacent to the City of Ontario. The area is bounded by 4th Street on the south, Milliken Avenue on the east, Cucamonga Metrolink Station to the north, and Cleveland Avenue and Utica Street on the west.	The Resort Specific Plan identifies the following objectives that are related to the proposed Project. • Take advantage of the proposed Project site's location at the southern edge of the IASP, adjacent to major arterials, by promoting a more marketable commercial focus and enhancing the potential to create jobs and revenue. • Promote local and regional transit usage by integrating Cucamonga Metrolink Station with surrounding parcels and providing convenient retail/services to rail transit users. • Promote the City of Rancho Cucamonga objectives by enhancing the development potential of the proposed Project site.

3.10.2.4.3 City of Rancho Cucamonga Municipal Code

Title 17 of the Rancho Cucamonga Municipal Code, the City of Rancho Cucamonga Development Code (Development Code), is an effort intended to protect and promote the public health, safety, morals, comfort, convenience, and general welfare of the City of Rancho Cucamonga. The Development Code identifies the permitted land uses on all parcels in the City of Rancho Cucamonga through assigned land use designations and associated land use regulations and development standards. As such, the Development Code only allows for development that is consistent with the General Plan Land Use Map and the programs and standards of the General Plan's Land Use Chapter. The stated purpose of the Development Code is to:

- Implement the goals and objectives of the general plan and to guide and manage the future growth of the city in accordance with such plan.
- Protect the physical, social, and economic stability of residential, commercial, industrial, and other land uses within the city to assure its orderly and beneficial development.
- Reduce hazards to the public resulting from the inappropriate location, use, or design of buildings and other improvements.
- Attain the physical, social, and economic advantages resulting from comprehensive and orderly land use and resource planning.

3.10.2.4.4 City of Ontario

3.10.2.4.4.1 The Ontario General Plan

The City of Ontario General Plan is a broad policy document that identifies the City's land use, circulation, environmental, economic, and social goals, and policies as they relate to land use development, thereby providing guidance to citizens, developers, and decision-makers on the City's "ground rules" for development activity within the City's planning area (City of Ontario 2022a). The City of Ontario's General Plan includes the following goals and policies that are applicable to the proposed Project:

- Policy LU 5-7 addresses compliance with state law related to the policies and criteria set forth within an Airport Land Use Compatibility Plan.
- Policy ER 4-3 seeks to reduce greenhouse gas emissions in accordance with regional, state, and federal regulations.
- Policy ER 4-6 support efforts to reduce particulate matter to meet state and federal Clean Air Standards.
- Policy ER 4-7 encourages collaboration with other agencies within the South Coast Air Basin to improve regional air quality at the emission source.
- Policy S 4-6 addresses new noise sources near noise sensitive land uses within airport noise impact zones.
- GOAL M5 addresses implementation of strategies that address regional transportation challenges.

3.10.2.4.4.2 City of Ontario Specific Plans

The City of Ontario has adopted several specific plans which provide development standards, design guidelines, and other long-range planning information for certain areas within the City of Ontario (City of Ontario 2022b). Appendix E identifies the specific plans adopted by the City of Ontario that are partially or entirely within the proposed Project area.

3.10.2.4.4.3 City of Ontario Municipal Code

Title 9 of the City of Ontario Municipal Code (City of Ontario 2021) adopts the City of Ontario Development Code, as published by the Planning Department. The City of Ontario Development Code is designed to promote and protect the public health, safety, and general welfare in the community. Chapter 5 of the City of Ontario Development Code, Zoning and Land Use, establishes zoning designations and development standards to regulate orderly development.

3.10.2.4.4.4 Ontario International Airport Land Use Compatibility Plan

The Airport Land Use Compatibility Plan (ALUCP) was adopted by Ontario City Council on April 19, 2011 (City of Ontario 2011). The basic function of the ALUCP is to promote compatibility between ONT and the surrounding land uses.

3.10.2.4.5 Omnitrans Strategic Plan

Omnitrans is the public transit agency serving the San Bernardino Valley region, covering 15 cities and portions of the unincorporated areas of the San Bernardino County. The Omnitrans Strategic Plan (2021) serves as a guidance for the agency to connect communities with safe and exceptional service, maintain financial sustainability, and expand economic opportunity and mobility across the region.

3.10.3 Methodology

The proposed Project area evaluated consists of the proposed Project site (the maximum disturbance limits) and a 0.5-mile buffer in which potential secondary or indirect impacts are evaluated. Data used to prepare this section were taken from the San Bernardino County General Plan (2020), the City of Rancho Cucamonga General Plan (2021), and the City of Ontario General Plan (2022) and other relevant documents related to land use and planning.

3.10.4 CEQA Thresholds of Significance

According to Appendix G of the 2024 CEQA Guidelines, implementation of the proposed Project may result in a potentially significant impact if it would:

- Physically divide an established community; and
- 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.

3.10.5 Existing Settings

3.10.5.1 Existing Land Uses

Existing land uses in the proposed Project area are shown on Figure 3.10-1. The proposed Project area is surrounded by large-scale industrial, manufacturing, transportation, surface parking, office, commercial, multi-family residential, hotel, and airport-related land uses. Large areas of vacant or undeveloped lands are located adjacent to the northwestern quadrant southwest of the existing Cucamonga Metrolink Station, as well as in the south adjacent to and east of ONT. Multi-family residential uses are primarily located on the western side of Milliken Avenue, from approximately 7th Street south to 4th Street. Several hotels are located on the eastern side of Milliken Avenue, from 5th Street south to 4th Street.

Concentrated areas of commercial uses and restaurants are primarily located on both sides of Milliken Avenue, from 4th Street south to Interstate 10 (I-10). This includes Ontario Mills, which is a regional shopping mall complex. Some hotels are also located adjacent to the shopping mall and immediately north

of I-10 in this area. South of I-10 are large-scale industrial and manufacturing uses, along with trucking facilities, rental car facilities, parking lots, some hotels, and other uses related to the airport. In addition, the community of Guasti, which is located within the City of Ontario limits and is historically known for its large vineyards, is located directly north of the proposed Project area.

ONT, including Terminal 4 and Terminal 2, is located directly south of the proposed Project area in the southwestern quadrant. Facilities at ONT include two passenger terminals, general aviation facilities, air freight buildings, parking lots, and numerous airport and aircraft maintenance and support services. The airfield at ONT has two parallel runways that are oriented in an east-west direction, taxiways/taxi lanes, two commercial terminal aprons, a general aviation apron, and two primary air cargo ramps. United Parcel Service facilities are located in the southeastern quadrant of ONT (with most of their facilities outside of and adjacent to ONT property), and FedEx facilities are in the northwestern quadrant. The topography of the proposed Project footprint is generally flat, with an elevation ranging from approximately 900 to 1,118 feet above sea level.

3.10.5.2 Planned Land Uses

3.10.5.2.1 City of Rancho Cucamonga

General Plan land use designations for the portion of the proposed Project area within the City of Rancho Cucamonga are presented in Figure 3.10-2, and Figure 3.10-3 identifies zoning designations and the City of Rancho Cucamonga-adopted Specific Plans boundaries within the limits of the City of Rancho Cucamonga. As shown on Figure 3.10-2, the City of Rancho Cucamonga General Plan land use designations within the proposed Project include the following: Urban Neighborhood, City Center, 21st Century Employment District, Neo-Industrial Employment District, General Open Space and Facilities, and City Corridor High (City of Rancho Cucamonga 2022e). As shown on Figure 3.10-3, the City of Rancho Cucamonga Zoning designations within the proposed Project area include Center 2 Zone, Corridor 2 Zone, Center 2 Limited, Industrial Employment, Mixed Employment 2 Zone, Neo Industrial, Open Space, Flood Control, Utility Corridor, and Resort Specific Plan (City of Rancho Cucamonga 2022e). The Resort Specific Plan, formerly the Empire Lakes Specific Plan, is within the proposed Project area and includes planned land uses such as the following: Transit, Mixed Use, Urban Neighborhood, Core Living, Village Neighborhood, and Recreation.

3.10.5.2.2 City of Ontario

Within the proposed Project area, 4th Street generally serves as the boundary between the City of Rancho Cucamonga (north of 4th Street) and the City of Ontario (south of 4th Street). General Plan land use designations for the portion of the proposed Project area within the City of Ontario are illustrated on Figure 3.10-4 and Figure 3.10-5 identifies zoning designations and the City of Ontario-adopted Specific Plans' boundaries within the limits of the City of Ontario. As shown on Figure 3.10-4, the City of Ontario General Plan land use designations within the proposed Project area include the following: Mixed Use, Office Commercial, Hospitality, Public Facility, Industrial, Business Park, Airport, Open Space

(non-recreational), and Railroad Right-Of-Way (ROW) (City of Ontario 2022c). As shown on Figure 3.10-5, the City of Ontario Zoning designations within the proposed Project area include the following: General Industrial, Light Industrial, Utilities Corridor, High Intensity Office, Convention Center Support Commercial, Regional Commercial, Civic, Rail Corridor, ONT, and Specific Plan (City of Ontario 2016).

3.10.6 Impact Evaluation

3.10.6.1 Physically divide an established community?

3.10.6.1.1 No Project Alternative

The No Project Alternative includes planned expansion, improvement projects, and routine maintenance activities for the existing roadway system and transit facilities. Physical division of an establish community is not anticipated resulting from the No Project Alternative. Construction activities associated with the No Project Alternative would be subject to project and site-specific evaluation including an environmental review process. Any potential impacts associated with physical division of an established community would require mitigation measures. Adherence to existing regulations and implementation of site-specific mitigation would ensure that the impact related to the division of an established community would be less than significant.

3.10.6.1.2 Proposed Project

3.10.6.1.2.1 Construction Impacts

The I-10, East Airport Drive, and Milliken Avenue are major throughfares within the proposed Project areas. Temporary access restrictions and detours may impact nearby businesses and residents who commute into and out of the area for employment or airport operations at ONT. None of the temporary construction easements would divide an established community. Construction-related closures, although very minimal, could impede movement in and through the proposed Project area, which would result in temporary access impacts. Although ONT would be operational and community members would have access to community services and facilities during the construction period, there would be some degree of inconvenience due to construction-related delays, temporary closures, and construction equipment operation.

MM-TRA-1 would be implemented for the proposed Project. Access would be maintained for residents and businesses affected by the proposed Project via implementation of MM-TRA-1, which would include designated detours for affected roads, pedestrian, and bicycle facilities. At the areas of tunnel egress, tunnel ingress, ventilation shaft locations, and maintenance and storage facility (MSF), sidewalk and road detours would be directed in a way to allow for unimpeded access to the surrounding areas during active construction times. During construction, activities would primarily occur underground except for above ground construction staging areas for the proposed stations, MSF, and vent shaft, and trucks moving to and from the construction sites and the designated haul routes. With implementation of MM-TRA-1, impacts related to the division of an established community during construction would be less than significant.

Figure 3.10-1 Existing Land Uses

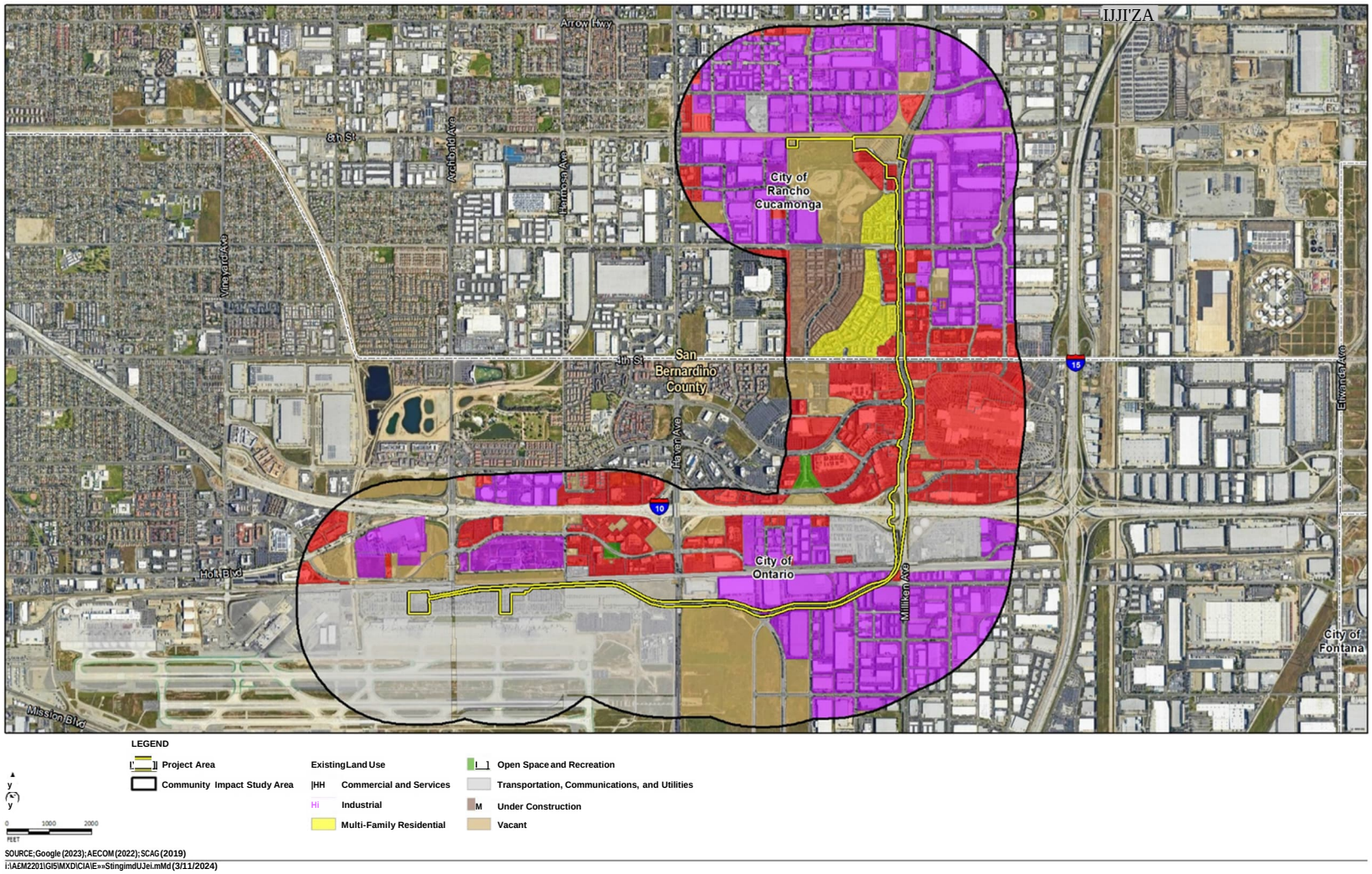


Figure 3.10-2 City of Rancho Cucamonga Planned Land Uses

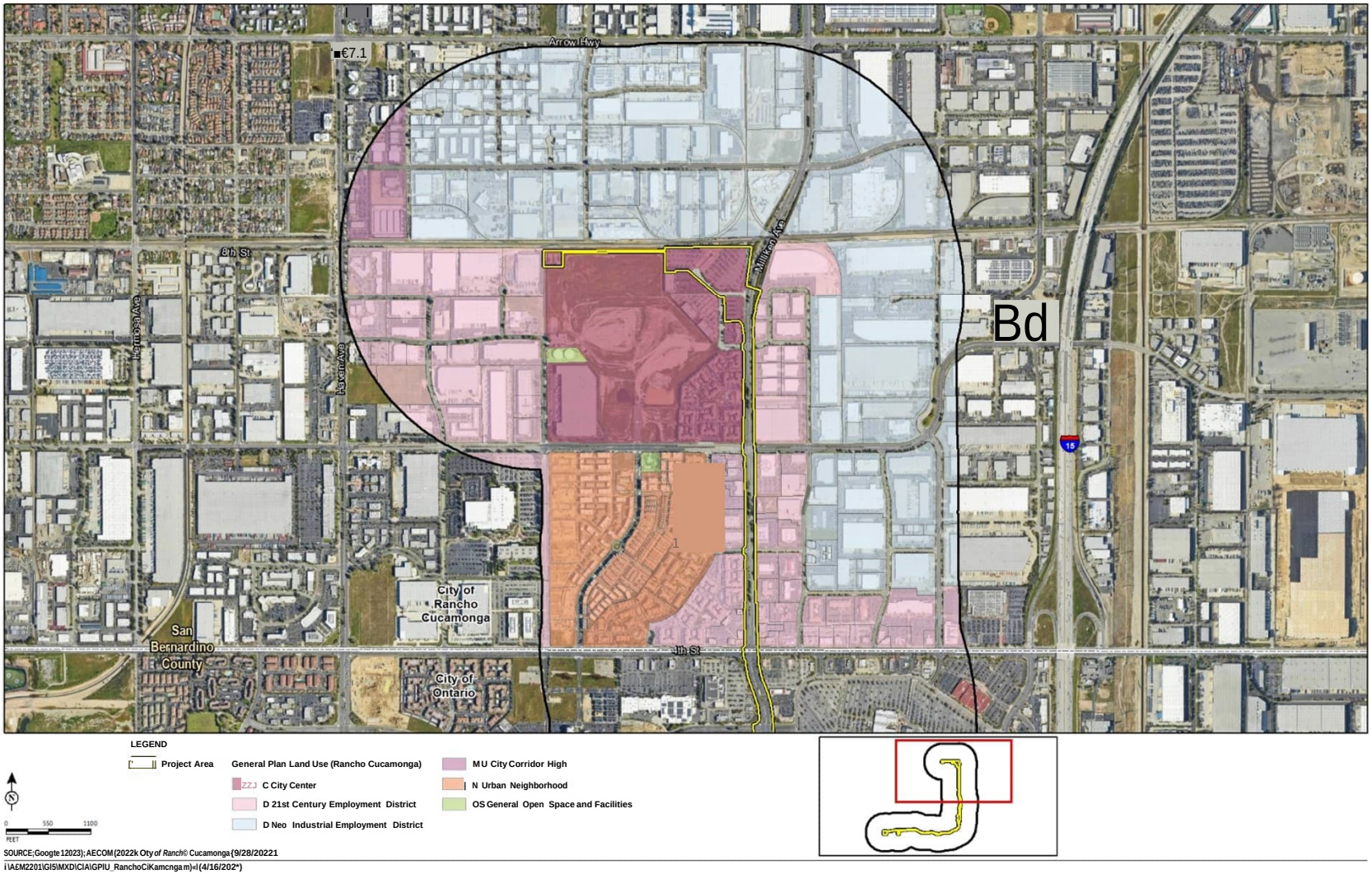


Figure 3.10-3 City of Rancho Cucamonga Specific Plan and Zoning Map

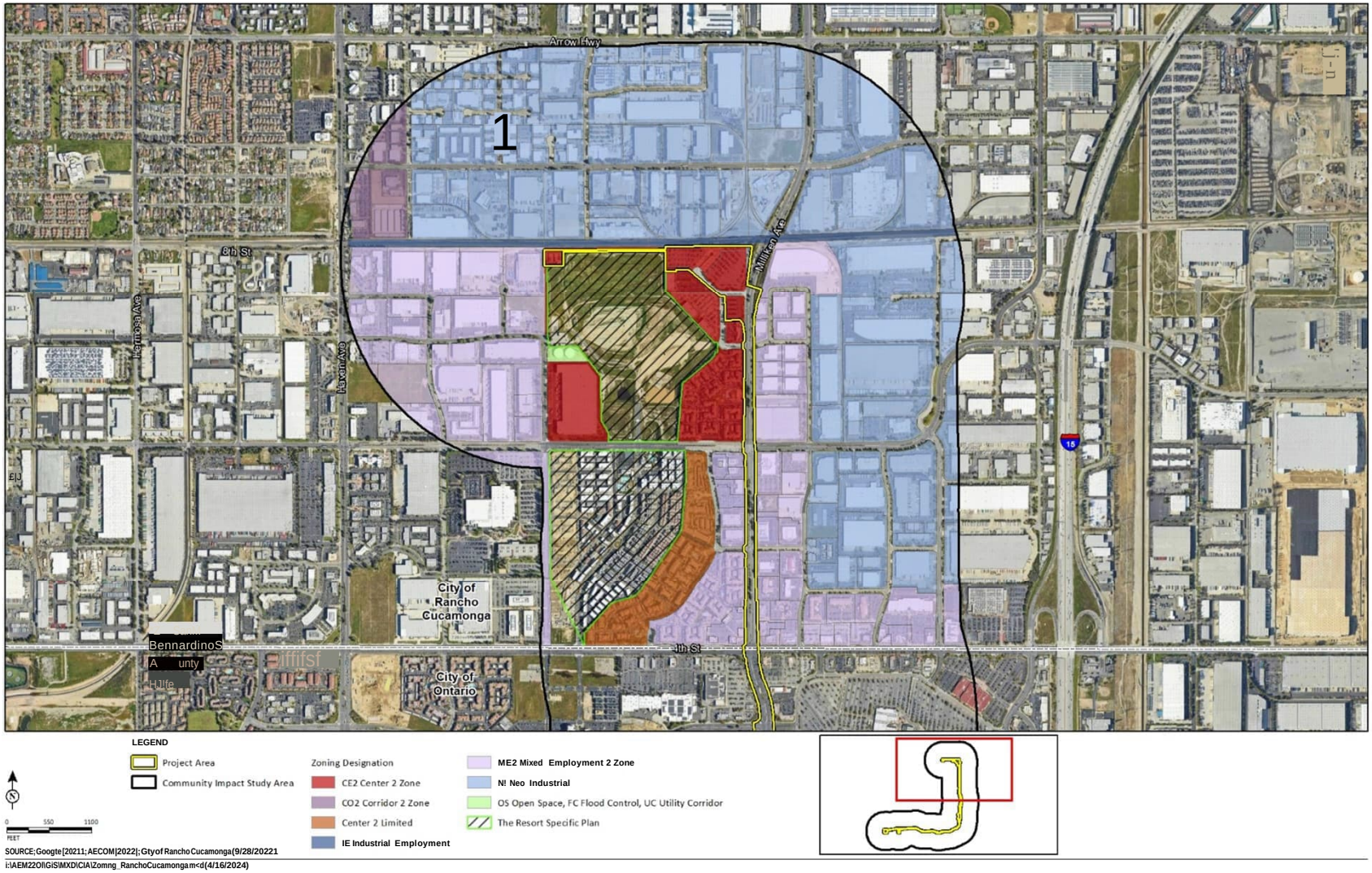


Figure 3.10-4 City of Ontario Planned Land Uses

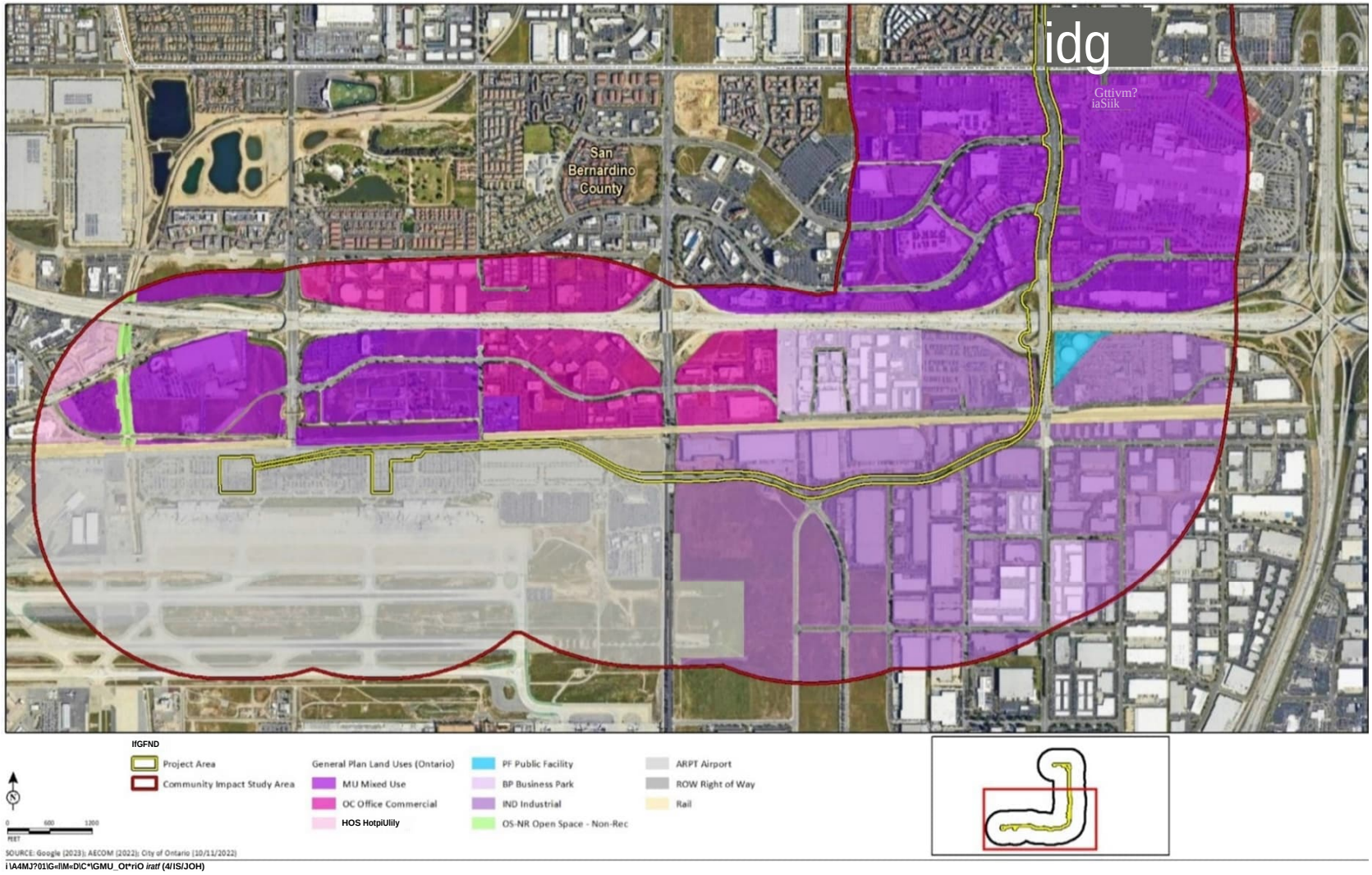
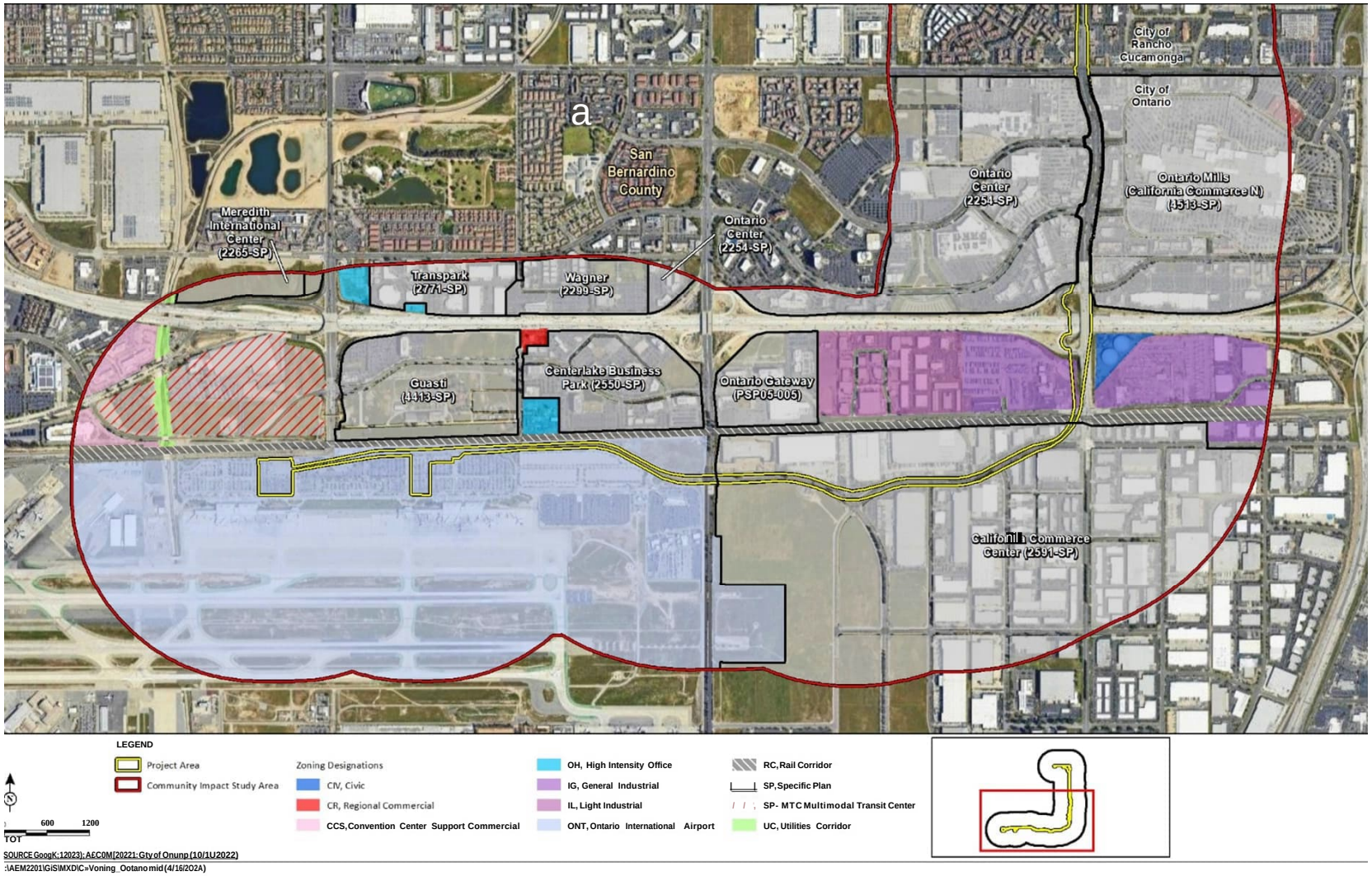


Figure 3.10-5 City of Ontario Specific Plan and Zoning Maps



3.10.6.1.2.2 Operational Impacts

The proposed Project would not disrupt or physically divide an established community. Most of the proposed Project would be located underground and generally follow the public ROW. The proposed Project would not displace any residents or businesses and there are no acquisitions to disrupt or divide the community during operation. The proposed Project would provide a new transportation connection between the Metrolink system and ONT. The proposed Project is designed to provide connectivity and would not cut off an existing or proposed transportation route and would be compatible with existing uses. Therefore, impact related to the division of an established community for the operation of the proposed Project would be less than significant.

3.10.6.2 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?

3.10.6.2.1 No Project Alternative

The No Project Alternative includes planned expansion, improvement projects, and routine maintenance activities for the existing roadway system and transit facilities. Planned projects would conform to land use plans, policies, and regulations. The No Project Alternative would be subject to project and site-specific evaluation of conformity to land use regulations, and for any potential impacts, mitigation would be required to reduce any potentially significant impacts. With adherence to land use regulations, the No Project Alternative, during construction and operation, would have a less than significant impact.

3.10.6.2.2 Proposed Project

3.10.6.2.2.1 Construction Impacts

A discussion of project compatibility with relevant land use goals and policies applicable to the proposed Project are provided in Table 3.10-2.

Table 3.10-2 Consistency with Local Plans

Policy	Proposed Project
Ontario General Plan	
Policy Land Use (LU)--5-3: Cooperate with agencies to maximize resources to mitigate the impacts and hazards related to airport operations.	Consistent. The proposed Project would be subject to review by appropriate agencies to determine consistency with ONT Airport ALUCP. In addition, the proposed Project would be required to adhere to all existing regulations and policies that addresses hazards related to airport operation such as CFR Title 14 Part 77.13. Therefore, the proposed Project would be consistent with this policy.
Policy LU-5-7: Comply with state law that requires general plans, specific plans, and all new development to be consistent with the policies and criteria set forth within an Airport Land Use Compatibility Plan for any public use airport.	Consistent. The proposed Project would be subject to review by appropriate agencies to determine consistency with ONT Airport ALUCP. Therefore, the proposed Project would be consistent with this policy.

Policy	Proposed Project
Policy Environmental Resources (ER)--3-5: Purchase and use vehicles and equipment that are fuel efficient and meet or surpass state emissions requirements and/or use renewable sources of energy.	Consistent. Vehicles and technology that meets or exceeds State requirements would be purchased, subject to review by the appropriate agencies. Therefore, the proposed Project would be consistent with this policy.
Policy ER-4-3: Reduce greenhouse gas emissions in accordance with regional, state, and federal regulations.	Consistent. The proposed Project would implement a direct connection via electric mediums between ONT and Cucamonga Metrolink Station, which would contribute toward reducing greenhouse gas emissions from vehicles. Therefore, the proposed Project would be consistent with this policy.
Policy ER-4-6: Support efforts to reduce particulate matter to meet State and Federal Clean Air Standards.	Consistent. The proposed Project's use of emerging technology and electric vehicles would contribute toward efforts to reduce particulate matter. Therefore, the proposed Project would be consistent with this policy.
Policy ER-4-7: Collaborate with other agencies within the South Coast Air Basin (SCAB) to improve regional air quality at the emission source.	Consistent. The proposed Project would require cooperation across many agencies and jurisdictions to ensure that regional air quality is improved by reducing potential emissions at the source. Therefore, the proposed Project would be consistent with this policy.
Goal Safety (s)-1: Minimize risk of injury, loss of life, property damage, and economic and social disruption caused by earthquake-induced and other geologic hazards.	Consistent. Construction plans for the proposed Project would be subject to review to ensure that tunneling activities do not cause excessive disruptions to the surrounding area, economy, and properties. Therefore, the proposed Project would be consistent with this goal.
Policy S-2-4: Prohibit the development of new essential and critical facilities in the 100-year floodplain.	Consistent. The proposed Project is not located within the 100-year floodplain for the City of Ontario and the City of Rancho Cucamonga. Therefore, the proposed Project would be consistent with this policy.
Policy S-4-6: Utilize information from Airport Land Use Compatibility Plans to prevent the construction of new noise sensitive land uses within airport noise impact zones.	Consistent. The proposed Project would not implement new noise sensitive land uses within ONT's airport noise impact zones. Therefore, the proposed Project would be consistent with this policy.
Policy Mobility (M)-3-8: Work with regional transit agencies to secure convenient feeder service from the Metrolink station and the proposed multimodal transit center to employment centers in Ontario.	Consistent. The proposed Project involves transit agencies such as Omnitrans for providing service between Cucamonga Metrolink Station to employment centers in the City of Ontario, such as ONT. Therefore, the proposed Project would be consistent with this policy.
Goal Mobility-5: Identify and facilitate implementation of strategies that address regional transportation challenges.	Consistent. Prior studies for potential solutions to regional transportation challenges, including SCAG Regional Transportation Plan, considered the design of this proposed Project. Therefore, the proposed Project would be consistent with this goal.

Policy	Proposed Project
ONT Airport Land Use Compatibility Plan	
Safety Policy 2: Occupancy limits for Nonresidential Development	Consistent. The proposed Project would be subject to review by the Ontario International Airport Authority to ensure that occupancy limits are not exceeded. Therefore, the proposed Project would be consistent with this policy.
Noise Policy 3: Nonresidential Development	Consistent. The proposed Project would not result in implementation of incompatible land uses and is therefore consistent with this policy.
Airspace Protection Policy Airspace (A)-2: Airspace Obstruction Surfaces	Consistent. Construction plans would be subject to review by the appropriate agencies to ensure that Airspace Obstruction Surface would not be penetrated. Therefore, the proposed Project would be consistent with this policy.
Airspace Protection Policy A-3: Flight Hazards	Consistent. The proposed Project station features would be subject to review by the appropriate agencies to ensure that land uses would not pose flight hazards to ONT. Therefore, the proposed Project would be consistent with this policy.
Rancho Cucamonga General Plan	
Policy Mobility and Access (MA) -1.2: Support redevelopment in and around the Cucamonga Station to support transit-oriented development.	Consistent. The proposed Project may influence development around the Metrolink station due to the proposed direct connection to and from ONT and does not preclude additional development projects that may occur within the vicinity of the Metrolink station. Therefore, the proposed Project would be consistent with this policy.
Policy MA-5.1: Work to reduce vehicle miles traveled (VMT) through land use planning, enhanced transit access, localized attractions, and access to non-automotive modes.	Consistent. The proposed Project provides an opportunity to reduce VMT by implementing a direct non-automotive connection to and from ONT to the Metrolink station. Therefore, the proposed Project would be consistent with this policy.
Policy MA-5.2: Prioritize investments in critical infrastructure and pilot programs to leverage proven new transportation technology.	Consistent. The proposed Project include an important investment in providing a direct connection to and from ONT and the Metrolink station and provides an opportunity to demonstrate emerging technology. Therefore, the proposed Project would be consistent with this policy.
Policy Resource Conservation (RC) -7.13: Whenever possible, use energy-efficient models and technology when replacing or providing new city infrastructure such as streetlights, traffic signals, water conveyance pumps, or other public infrastructure.	Consistent. The proposed Project uses emerging technology and existing energy-efficient technology to provide a direct connection to and from ONT and the Metrolink station. Therefore, the proposed Project would be consistent with this policy.

Sources: City of Ontario 2009; ONT-OIC 2018; City of Rancho Cucamonga 2021

As detailed in Table 3.10-2, the proposed Project would be consistent with the goals and policies identified. Therefore, the proposed Project would not conflict with any plan, policy, or regulation adopted

for the purpose of avoiding or mitigating an environmental effect during construction, and the proposed Project would result in no impact.

3.10.6.2.2.2 Operational Impacts

The proposed Project would be consistent with the goals and policies related to improving connectivity between ONT and Cucamonga Metrolink Station by implementing a direct connection via autonomous electric vehicle technologies that would support greenhouse gas reduction goals. The proposed Project would also demonstrate the applicability of autonomous electric shuttle projects, which can be used for other transportation improvement projects throughout the region.

As detailed in Table 3.10-2, the proposed Project would be consistent with the goals and policies identified. The proposed Project is consistent with the City of Rancho Cucamonga General Plan, as the proposed Project supports transit-oriented development in the Cucamonga Metrolink Station (Policy MA-1.2), works to reduce vehicle miles traveled (Policy MA-5.1), provide new transportation technology (Policy MA-5.2), and focuses on energy-efficient models and technology for the new city infrastructure (Policy RC-7.13). The proposed Project is consistent with the City of Ontario General Plan, as the proposed Project is consistent with the ALUCP (Policy LU-5-7), the operation reduces greenhouse gas emissions (Policy ER 4-3) by reducing VMT, supports the Clean Air Act standards (Policy ER-4-6) and regional air quality improvement efforts. Therefore, the proposed Project would be consistent with applicable local and regional plans. Operation of the proposed Project would not conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect, and the proposed Project would result in no impact.

3.10.7 Mitigation Measures

MM-TRA-1, as discussed in the Transportation Technical Report (SBCTA 2024b; Appendix Q), would apply to construction impacts for physical division of an established community.

3.10.8 Impacts After Mitigation

3.10.8.1 Physically divide an established community?

With implementation of MM-TRA-1, the proposed Project would have a less than significant impact to the division of an established community.

3.10.8.2 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?

No mitigation measure would be required and the proposed Project would result in no impact.

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3.11 NOISE AND VIBRATION

3.11.1 Introduction

This section of this Draft Environmental Impact Report (EIR) provides a summary of the evaluation of the impacts on noise and vibration resulting from the implementation of the proposed Ontario International Airport (ONT) Connector Project (Project). Detailed information for noise and vibration is included in the Noise and Vibration Technical Report (SBCTA 2024; Appendix O).

3.11.2 Regulatory Framework

3.11.2.1 Federal

3.11.2.1.1 Federal Transit Administration

As a transit project, the primary source used for the prediction and assessment of impacts associated with noise and vibration for the proposed Project would come from the Federal Transit Administration (FTA) Noise and Vibration Impact Assessment Manual, which provides prediction methodology and impact assessment guidance for both construction and operational phases of the proposed Project as outlined in the following section (FTA 2008).

3.11.2.1.1.1 Construction Noise and Vibration

FTA-recommended construction noise impact criteria are presented in Table 3.11-1, as a function of land use.

Table 3.11-1 Federal Transit Administration Construction Noise Impact Criteria

Land Use	$L_{eq\text{-}equip\ (8\text{-}hr)}$, dBA Day	$L_{eq\text{-}equip\ (8\text{-}hr)}$, dBA Night	$L_{eq\text{-}equip\ (30\text{-}day)}$, dBA 30-Day Average
Residential	80	70	75
Commercial	85	85	80*
Industrial	90	90	85*

Notes:
dBA = A-weighted decibels
hr = hour
$L_{eq\text{-}equip}$ = Equivalent sound level for equipment
**Use $L_{eq\ (24\text{-}hr)}$ instead of L_{dn}-equip (30 day)*
Day: 7 a.m. to 10 p.m.
Night: 10 p.m. to 7 a.m.
Source: FTA 2018, Table 3-1, Table 7-3

For vibration associated with construction activity, FTA guidance provides impact criteria for two different impact types, potential building damage and potential human annoyance, both categorized by building type or land use, which are presented in Table 3.11-2 and Table 3.11-3, respectively.

Table 3.11-2 Federal Transit Administration Construction Vibration Damage Criteria

Building/Structural Category	PP PPV, in/sec	Approximate L_v*
I. Reinforced-concrete, steel or timber (no plaster)	0.5	102
II. Engineering concrete and masonry (no plaster)	0.3	98
III. Non-engineered timber and masonry buildings	0.2	94
IV. Buildings extremely susceptible to vibration damage	0.12	90

Source: FTA 2018, Table 7-5
Notes:
*Root mean square (RMS) velocity in decibels (dB), vibration velocity level (VdB) re 1 micro-inch per second
PPV = peak particle velocity
in/sec = inches per second
L_v = vibration level

Table 3.11-3 Federal Transit Administration Indoor Ground-Borne Vibration (GBV) and Ground-Borne Noise (GBN) Impact Criteria for General Vibration Assessment

Land Use Category	GBV Impact Levels (VdB re 1 micro-inch/sec)			GBN Impact Levels (dBA re 20 micro-Pascals)		
	Frequent Events	Occasional Events	Infrequent Events	Frequent Events	Occasional Events	Infrequent Events
Category 1: Buildings where vibration would interfere with interior operations	65 VdB *	65 VdB *	65 VdB *	N/A **	N/A **	N/A **
Category 2: Residences and buildings where people normally sleep	72 VdB	75 VdB	80 VdB	35 dBA	38 dBA	43 dBA
Category 3: Institutional land uses with primarily daytime use	75 VdB	78 VdB	83 VdB	40 dBA	43 dBA	48 dBA

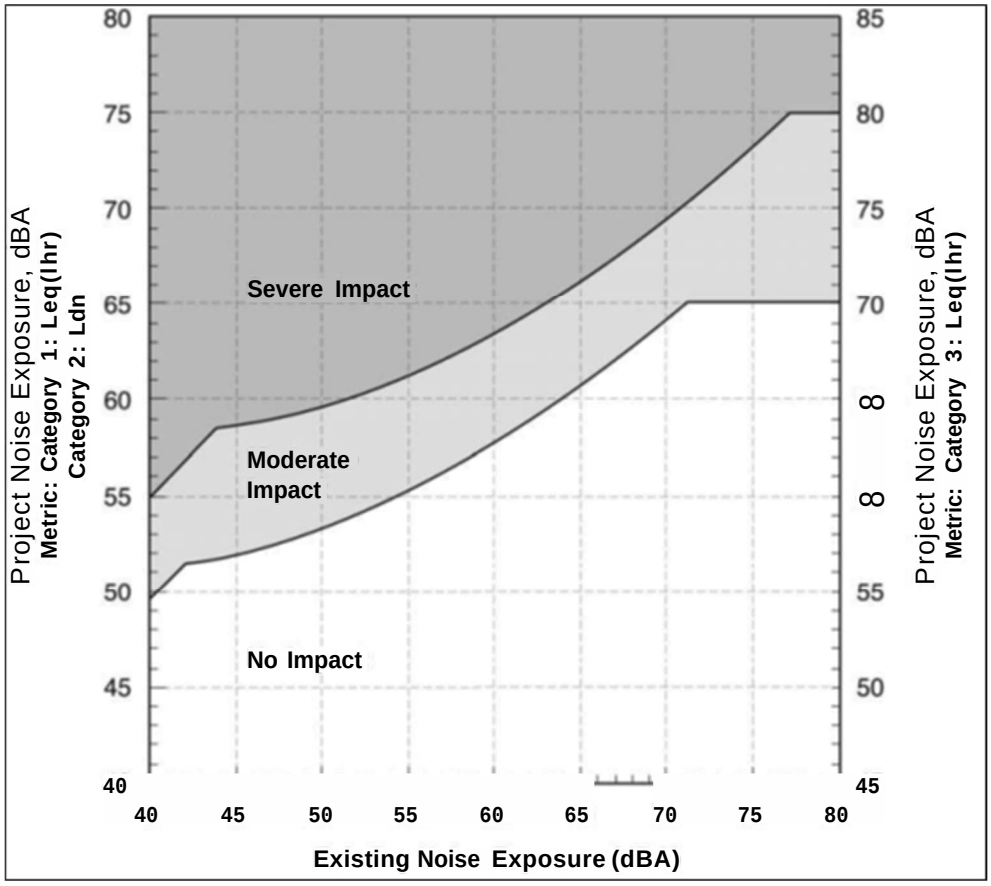
Source: FTA 2018, Table 6-3
Notes:
**This criterion limit is based on levels that are acceptable for most moderately sensitive equipment such as optical microscopes. For equipment that is more sensitive, a Detailed Vibration Analysis must be performed.*
***Vibration-sensitive equipment is generally not sensitive to GBN; however, the manufacturer's specifications should be reviewed for acoustic and vibration sensitivity.*
N/A = not applicable

3.11.2.1.1.2 Operational Noise and Vibration

FTA operational noise impacts are determined as a function of the predicted project noise and existing noise exposure and land use category, as shown in Figure 3.11-1. Generally, the higher the existing noise exposure is, the higher the limit for moderate and severe impacts. For example, at a Category 2 (residential) receptor location with an existing noise exposure level of 55 dBA day-night noise level (L_{dn}), a moderate noise impact would be triggered with a project noise exposure of 56 dBA L_{dn} and a severe impact at a project noise level of 61 dBA L_{dn}. However, for the same receiver location with an existing exposure of 60 dBA L_{dn}, a moderate impact would exist at a project noise level of 58 dBA L_{dn} and a severe

impact at 63 dBA L_{dn}. Operational GBV impact criteria are the same as for construction activity, as shown in Table 3.11-3.

Figure 3.11-1 Federal Transit Administration Operational Noise Impact Criteria



Source: FTA 2018

3.11.2.2 State

3.11.2.2.1 California Environmental Quality Act

California Environmental Quality Act (CEQA; Sections 21000 et seq.) and CEQA Guidelines (Sections 15000 et seq.) require state and local agencies to identify the significant environmental impacts of their actions, including potential significant impacts associates with noise and vibration, and to avoid or mitigate those impacts, when feasible.

3.11.2.2.2 California Government Code Section 65302

California Government Code Section 65302 requires each c y and city in the state to prepare and adopt a comprehensive long-range General Plan for i ıysical development, with California Government Code Section 65302(f) requiring a noise elemer ɔe included in the General Plan.

3.11.2.3 Local

3.11.2.3.1 San Bernardino County

3.11.2.3.1.1 San Bernardino County Countywide Plan

The San Bernardino County Countywide Plan (General Plan) is a collection of planning tools intended to guide future decisions, investments, and improvements throughout the San Bernardino County (San Bernardino County 2020). The General Plan's Hazards Element contains the following goal and policies related to noise that are applicable to the proposed Project:

- Goal HZ-2: People and the natural environment protected from exposure to hazardous materials, excessive noise, and other human-generated hazards.
    - Policy HZ-2.7: Encourage truck delivery areas to be located away from residential properties and require associated noise impacts to be mitigated.
    - Policy HZ-2.9: Prioritize noise mitigation measures that control sound at the source before buffers, sound walls, and other perimeter measures.

3.11.2.3.2 City of Rancho Cucamonga

3.11.2.3.2.1 City of Rancho Cucamonga General Plan

The Noise Chapter of the City of Rancho Cucamonga General Plan specifies outdoor noise level limits for land uses impacted by transportation noise sources. The City of Rancho Cucamonga requires that new developments be designed to meet these standards (City of Rancho Cucamonga 2021a; 2021b). The following goal and policies from the Noise Chapter of the General Plan are applicable to the proposed Project:

- Goal N-1: A city with appropriate noise and vibration levels that support a range of places from quiet neighborhoods to active, exciting districts.
    - Policy N-1.1: Require new development to meet the noise compatibility standards identified in Table N-1.
    - Policy N-1.2: Require the use of integrated design-related noise reduction measures for both interior and exterior areas prior to the use of noise barriers, buffers, or walls to reduce noise levels generated by or affected by new development.
    - Policy N-1.4: Require development proposing to add people in areas where they may be exposed to major noise sources (e.g., roadways, rail lines, aircraft, industrial or other non-transportation noise sources) to conduct a project level noise analysis and implement recommended noise reduction measures.
    - Policy N-1.8: Require new development to reduce vibration to 85 VdB or below within 200 feet of an existing structure.

3.11.2.3.2.2 City of Rancho Cucamonga Municipal Code

The City of Rancho Cucamonga Municipal Code, Section 17.66.050 (Noise Standard), establishes the maximum permissible noise level that may intrude into a neighbor's property (City of Rancho Cucamonga 2023). The Noise Ordinance establishes the following designated noise zones:

- Noise Zone I: All single- and multiple-family residential properties, and
- Noise Zone II: All commercial properties.

Exterior Noise Standards - The Noise Ordinance of the City of Rancho Cucamonga Municipal Code establishes the following exterior noise standards:

> It shall be unlawful for any person at any location within the city to create any noise or allow the creation of any noise on the property owned, leased, occupied, or otherwise controlled by such person, which causes the noise level when measured on the property line of any other property to exceed the basic noise level as defined below:
>
> a) Basic noise level for a cumulative period of not more than 15 minutes in any one hour; or
>
> b) Basic noise level plus five dBA for a cumulative period of not more than ten minutes in any one hour; or
>
> c) Basic noise level plus 14 dBA for a cumulative period of not more than five minutes in any one hour; or
>
> d) Basic noise level plus 15 dBA at any time.

Residential Noise Standards - Table 3.11-4 includes the maximum noise limits in residential zones. These are the noise limits when measured at the adjacent residential property line (exterior) or within a neighboring home (interior).

Table 3.11-4 City of Rancho Cucamonga, Residential Noise Limits (Maximum Allowable)

Location of Measurement	10:00 pm to 7:00 am	7:00 am to 10:00 pm
Exterior	60 dBA	65 dBA
Interior	45 dBA	50 dBA

Sources: City of Rancho Cucamonga 2023
Notes:
a.m. = ante meridiem
p.m. = post meridiem

Noise sources associated with, or vibration created by, construction, repair, remodeling, or grading of any real property or during authorized seismic surveys could occur with adherence to the following guidelines:

a. When adjacent to a residential land use, school, church or similar type of use, the noise-generating activity does not take place between the hours of 8:00 p.m. and 7:00 a.m. on weekdays, including Saturday, or at any time on Sunday or a national holiday, and provided noise levels created do not exceed the noise standard of 65 dBA when measured at the adjacent property line.

b. When adjacent to a commercial or industrial use, the noise-generating activity does not take place between the hours of 10:00 p.m. and 6:00 a.m. on weekdays, including Saturday and Sunday, and provided noise levels created do not exceed the noise standards of 70 dBA when measured at the adjacent property line.

3.11.2.3.3 City of Ontario General Plan

The Safety and Land Use Elements of the City of Ontario's General Plan set forth goals, policies, and land use guidelines to protect residential neighborhoods and noise-sensitive receptors from excessive noise levels (City of Ontario 2022a). The City of Ontario uses the Noise Level Exposure and Land Use Compatibility Guidelines when siting new development and making land use decisions. The following goals from the General Plan Safety Element are applicable to the proposed Project:

- Goal S-4: An environment where noise does not adversely affect the public's health, safety, and welfare.
- Goal S-4.1: Utilize the City's Noise Ordinance, building codes, and subdivision and development codes to mitigate noise impacts.
- Goal S-4.2: Collaborate with airport owners, FAA, Caltrans, SANBAG (SBCTA's former name), SCAG[1], neighboring jurisdictions, and other transportation providers in the preparation and maintenance of, and updates to transportation-related plans to minimize noise impacts and provide appropriate mitigation measures.
- Goal S-4.4: Manage truck traffic to minimize noise impacts on sensitive land uses.
- Goal S-4.5: Design streets and highways to minimize noise impacts.

3.11.2.3.4 City of Ontario Municipal Code

The City of Ontario Municipal Code, Chapter 29 (Noise) establishes the maximum permissible noise level that may intrude into a neighbor's property. The Noise Ordinance establishes noise level standards for various land use categories affected by stationary noise sources. Land use categories in the City of Ontario are defined in five noise zones. Table 3.11-5 and Table 3.11-6 provide the City of Ontario's maximum

[1] FAA, Caltrans, SANBAG, and SCAG are Federal Aviation Administration, California Department of Transportation, San Bernardino Associated Governments, and Southern California Association of Governments, respectively.

exterior and interior noise standard based on the noise zone and the time period, respectively (City of Ontario 2022b).

1. Noise Zone I: All single-family residential properties,
2. Noise Zone II: All multi-family residential properties and mobile home parks,
3. Noise Zone III: All commercial property,
4. Noise Zone IV: The residential portion of mixed-use properties, and
5. Noise Zone V: All manufacturing or industrial properties and all other uses.

Table 3.11-5 City of Ontario, Exterior Noise Standards

Noise Zone	Allowable Exterior Noise Level[1]	Allowed Equivalent Noise Level, L_{eq}[2]	
	Type of Land Use	7 a.m. to 10 p.m.	10 p.m. to 7 a.m.
I	Single-Family Residential	65 dBA	45 dBA
II	Multi-family Residential, Mobile Home Parks	65 dBA	50 dBA
III	Commercial Property	65 dBA	60 dBA
IV	Residential Portion of Mixed-use	70 dBA	70 dBA
V	Manufacturing and Industrial, Other Uses	70 dBA	70 dBA

Footnotes:
[1] If the ambient noise level exceeds the resulting standard, the ambient noise level shall be the standard.
[2] Measurements for compliance are made on the affected property pursuant to Section 5-29.15.
Additional Notes:
(b) It is unlawful for any person at any location within the incorporated area of the City of Ontario to create noise, or to allow the creation of any noise on property owned, leased, occupied or otherwise controlled by such person, which noise causes the noise level, when measured at any location on any other property, to exceed either of the following:

(1) The noise standard for the applicable zone for any 15-minute period; and

(2) A maximum instantaneous (single instance) noise level equal to the value of the noise standard plus 20 dBA for any period of time (measured using A-weighted slow response).

(c) In the event the ambient noise level exceeds the noise standard, the maximum allowable noise level under such category shall be increased to reflect the maximum ambient noise level.
(d) The Noise Zone IV standard shall apply to that portion of residential property falling within 100 feet of a commercial property or use, if the noise originates from that commercial property or use.
(e) If the measurement location is on a boundary between two different noise zones, the lower noise level standard applicable to the noise zone shall apply.
Source: (Refer to "Section 2, Ordinance 2888, effective on March 6, 2008") [City of Ontario 2022b)

Table 3.11-6 City of Ontario, Interior Noise Standards

Noise Zone	Allowable Interior Noise Level[1]	Allowed Equivalent Noise Level, L_{eq}[2]	
	Type of Land Use	7 a.m. to 10 p.m.	10 p.m. to 7 a.m.
I	Single-Family Residential	45 dBA	40 dBA
II	Multi-Family Residential, Mobile Home Parks	45 dBA	40 dBA
IV	Residential Portion of Mixed Use	45 dBA	40 dBA

Source: City of Ontario 2022b
Footnotes:
(1) If the ambient noise level exceeds the resulting standard, the ambient noise level shall be the standard.
(2) Measurements for compliance are made on the affected property pursuant to § 5-29.15.
(b) It is unlawful for any person at any location within the incorporated area of the City to create noise, or to allow the creation of any noise on property owned, leased, occupied, or otherwise controlled by such person, which noise causes the noise level, when measured at any location on any other property, to exceed either of the following:
(1) The noise standard for the applicable zone for any fifteen-minute (15) period;
(2) A maximum instantaneous (single instance) noise level equal to the value of the noise standard plus twenty (20) dBA for any period of time (measured using A-weighted slow response).
(c) In the event the ambient noise level exceeds the noise standard, the maximum allowable noise level under such category shall be increased to reflect the maximum ambient noise level.
(d) The Noise Zone IV standard shall apply to that portion of residential property falling within one hundred (100) feet of a commercial property or use if the noise originates from that commercial property or use.
(e) If the measurement location is on a boundary between two (2) different noise zones, the lower noise level standard applicable to the noise zone shall apply.

The City of Ontario Noise Ordinance provides the following regulations for construction activity:

(a) No person, while engaged in construction, remodeling, digging, grading, demolition, or any other related building activity, shall operate any tool, equipment or machine in a manner that produces loud noise that disturbs a person of normal sensitivity who works or resides in the vicinity, or a Police or Code Enforcement Officer, on any weekday except between the hours of 7:00 a.m. and 6:00 p.m. or on Saturday or Sunday between the hours of 9:00 a.m. and 6:00 p.m.

(b) No landowner, construction company owner, contractor, subcontractor, or employer shall permit or allow any person or persons working under their direction and control to operate any tool, equipment, or machine in violation of the provisions of this section.

(c) Exceptions:

(1) The provisions of this section shall not apply to emergency construction work performed by a private party when authorized by the City Manager or his or her designee;

(2) The maintenance, repair or improvement of any public work or facility by public employees, by any person or persons acting pursuant to a public works contract, or by any person or persons performing such work or pursuant to the direction of, or on behalf of, any public agency; provided, however, this exception shall not apply to the City, or its employees, contractors, or agents, unless:

(i) The City Manager or a department head determines that the maintenance, repair, or improvement is immediately necessary to maintain public services,

(ii) The maintenance, repair or improvement is of a nature that cannot feasibly be conducted during normal business hours, or

(iii) The City Council has approved project specifications, contract provisions, or an environmental document that specifically authorizes construction during hours of the day that would otherwise be prohibited pursuant to this section; and

(3) Any construction that complies with the interior and exterior noise limits.

3.11.2.3.4.1 Ontario International Airport Land Use Compatibility Plan

The ONT Land Use Compatibility Plan (ALUCP) was adopted on April 19, 2011, and amended in July 2018, by the Ontario City Council to address airport impacts and provide implementation techniques to ensure the development of compatible land uses around airports (Ontario International Airport – Inter Agency Collaborative [ONT-IAC] 2018a). The ALUCP implements relevant policies and guidelines for land use compatibility and specific findings of compatibility or incompatibility of land uses within the Airport Noise Impact Zone. The ALUCP limits land uses that might be harmful to the people near or within the Airport Noise Impact Zone. Additional information on the Airport Noise Impact Zone is in Section 3.11.5.2 of this Draft EIR.

3.11.3 Methodology

3.11.3.1 Resource Study Area

Based on conservatively calculated screening distances, such as the FTA screening distances for potential noise and vibration impacts (or estimated from reference vibration damage and annoyance thresholds), the resource study area limits for noise and vibration are provided in Table 3.11-7.

Table 3.11-7 Resource Study Area Limits for Noise and Vibration

Project Phase	Impact Type	Land Use/Building Type	Distance to Impact (feet)	Measured from
Construction Noise	Human Annoyance	Residential Land Uses	500	Construction areas and truck haul routes
Construction Vibration	Building Damage	Modern buildings	32	Underground tunnel sections
		Older buildings	60	
		Extremely fragile buildings	80	
	Human Annoyance	Residential	325	Underground tunnel sections
		Institutional	250	
Operational Noise	Human Annoyance	residential	250	Aboveground stations
Operational Vibration	Human Annoyance	Sensitive buildings	100	Underground tunnel sections
		Residential	50	

Source: AECOM 2024

3.11.3.2 Basics of Sound

Noise is typically defined as unwanted sound. The following is a brief discussion of fundamental environmental noise concepts.

3.11.3.2.1 Sound, Noise, and Acoustics

Sound can be described as the mechanical energy of a vibrating object transmitted by pressure waves through a liquid or gaseous medium (e.g., air) to a hearing organ, such as a human ear. Noise is defined as loud, unexpected, or annoying sound.

In the science of acoustics, the fundamental model consists of a sound (or noise) source, a receptor, and the propagation path between the two. The loudness of the noise source and obstructions or atmospheric factors affecting the propagation path to the receptor determine the sound level and characteristics of the noise perceived by the receptor. The field of acoustics deals primarily with the propagation and control of sound.

3.11.3.2.2 Frequency

Continuous sound can be described by frequency (pitch) and amplitude (loudness). A low-frequency sound is perceived as low in pitch. Frequency is expressed in terms of cycles per second, or hertz (Hz) (e.g., a frequency of 250 cycles per second is referred to as 250 Hz). High frequencies are sometimes more conveniently expressed in kilohertz (kHz), or thousands of Hertz. The audible frequency range for humans is generally between 20 Hz and 20,000 Hz.

3.11.3.2.3 Sound Pressure Levels and Decibels

The amplitude of pressure waves generated by a sound source determines the loudness of that source. Sound pressure amplitude is measured in µPa. One µPa is approximately 100-billionth (0.00000000001) of normal atmospheric pressure. Sound pressure amplitudes for different kinds of noise environments can range from less than 100 to 100,000,000 µPa. Because of this huge range of values, sound is rarely expressed in terms of µPa. Instead, a logarithmic scale is used to describe sound pressure level in terms of dB. The threshold of hearing for young people is about 0 dB, which corresponds to 20 µPa.

3.11.3.2.4 Addition of Decibels

Because dB are logarithmic units, Sound Pressure Level (SPL) cannot be added or subtracted through ordinary arithmetic. Under the dB scale, a doubling of sound energy corresponds to a 3-dB increase. In other words, when two identical sources are each producing sound of the same loudness, the resulting sound level at a given distance would be 3 dB higher than one source under the same conditions. For example, if one automobile produces an SPL of 70 dB when it passes an observer, two cars passing simultaneously would not produce 140 dB—rather, they would combine to produce 73 dB. Under the dB scale, three sources of equal loudness together produce a sound level 5 dB louder than one source.

3.11.3.2.5 A-weighted decibels

The dB scale alone does not adequately characterize how humans perceive noise. The dominant frequencies of a sound have a substantial effect on the human response to that sound. Although the intensity (energy per unit area) of the sound is a purely physical quantity, the loudness or human response is determined by the characteristics of the human ear.

Human hearing is limited in the range of audible frequencies as well as in the way it perceives the SPL in that range. In general, people are most sensitive to the frequency range of 1,000 to 4,000 Hz and perceive sounds within that range better than sounds of the same amplitude at higher or lower frequencies. To approximate the response of the human ear, sound levels of individual frequency bands are weighted, depending on the human sensitivity to those frequencies. Then, an "A-weighted" sound level (expressed in units of dBA) can be computed based on this information.

The A-weighting network approximates the frequency response of the average young ear when listening to most ordinary sounds. When people make judgements of the relative loudness or annoyance of a sound, their judgements correlate well with the A-scale sound levels of those sounds. Other weighting networks have been devised to address high noise levels or other special problems (e.g., B-, C-, and D-scales), but these scales are rarely used in conjunction with regular noise conditions. Noise levels for this report are in terms of dBA. Table 3.11-8 describes typical A-weighted noise levels for various noise sources.

3.11.3.2.6 Human Response to Changes in Noise Levels

As previously discussed, doubling sound energy results in a 3-dB increase in sound level. However, given a sound level change measured with precise instrumentation, the subjective human perception of a doubling of loudness will usually be different than what is measured.

Under controlled conditions in an acoustical laboratory, the trained, healthy human ear is able to discern 1-dB changes in sound levels, when exposed to steady, single-frequency ("pure-tone") signals in the midfrequency (1,000 Hz to 8,000 Hz) range. In typical noisy environments, changes in noise levels of 1 to 2 dB are generally not perceptible. However, it is widely accepted that people are able to begin to detect sound level increases of 3 dB in typical noisy environments. Further, a 5-dB increase is generally perceived as a distinctly noticeable increase, and a 10-dB increase is generally perceived as a doubling of loudness. Therefore, a doubling of sound energy (e.g., doubling the volume of traffic on a highway), that would result in a 3-dB increase in sound level, would generally be perceived as barely detectable.

3.11.3.2.7 Noise Descriptors

Noise in human daily environment fluctuates over time. Some fluctuations are minor, but others are substantial. Some noise levels occur in regular patterns, but others are random. Some noise levels fluctuate rapidly, but others slowly. Some noise levels vary widely, but others are relatively constant. Various noise descriptors have been developed to describe time-varying noise levels. The following are the noise descriptors used in this noise analysis.

Equivalent Sound Level (L_{eq}): L_{eq} represents an average of the sound energy occurring over a specified period. In effect, L_{eq} is the steady-state sound level containing the same acoustical energy as the time-varying sound that actually occurs during the same period. The 1-hour A-weighted equivalent sound level ($L_{Aeq(h)}$) is the energy average of A-weighted sound levels occurring during a 1-hour period and is the basis for noise abatement criteria for many agencies.

Daytime Equivalent Sound Level ($L_{eq(day)}$): $L_{eq(day)}$ is the L_{eq} average of the A-weighted sound levels occurring during daytime hours from 7:00 am to 10:00 pm.

Nighttime Equivalent Sound Level ($L_{eq(night)}$): $L_{eq(night)}$ is the L_{eq} average of the A-weighted sound levels occurring during nighttime hours from 10:00 pm. to 7:00 am.

Table 3.11-8 Typical A-Weighted Sound Levels

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	— 110 —	Rock band
Jet fly-over at 1000 feet		
	— 100 —	
Gas lawn mower at 3 feet		
	— 90 —	
Diesel truck at 50 feet at 50 miles per hour		Food blender at 3 feet
	— 80 —	Garbage disposal at 3 feet
Noisy urban area, daytime		
Gas lawn mower, 100 feet	— 70 —	Vacuum cleaner at 10 feet
Commercial area		Normal speech at 3 feet
Heavy traffic at 300 feet	— 60 —	
		Large business office
Quiet urban daytime	— 50 —	Dishwasher next room
Quiet urban nighttime	— 40 —	Theater, large conference room (background)
Quiet suburban nighttime		
	— 30 —	Library
Quiet rural nighttime		Bedroom at night, concert hall (background)
	— 20 —	
		Broadcast/recording studio
	— 10 —	
Lowest threshold of human hearing	— 0 —	Lowest threshold of human hearing

Source: Caltrans 2020

Day-Night Noise Level (L_{dn}): L_{dn} is the energy average of A-weighted sound levels occurring over a 24-hour period, with a 10-dB penalty applied to sound levels occurring during nighttime hours between 10:00 p.m. and 7:00 a.m. This metric is often used to assess human annoyance to community noise.

Community Noise Equivalent Level (CNEL): CNEL is the average of A-weighted sound levels occurring over a 24-hour period, with a 5-dB penalty applied to sound levels occurring during evening hours between 7:00 p.m. and 10:00 p.m., and a 10-dB penalty applied to sound levels occurring during nighttime hours between 10:00 p.m. and 7:00 a.m.

Sound Power Level (L_w): L_w is a quantity that describes the acoustical energy that is emitted by a sound source independent of the receptor's distance from the object (similar to the wattage of a light bulb). L_w is not usually referenced in regulations describing maximum allowable noise levels, but rather, is used in some calculations and design standards to achieve a desired or allowable noise level.

Maximum Sound Level (L_{max}): L_{max} is the maximum instantaneous sound level reached during a given period of time. This metric is commonly used in vehicle and construction equipment noise specifications.

3.11.3.2.8 Sound Propagation

When sound propagates over a distance, it changes in level and frequency content. The manner in which noise reduces with distance depends on the following factors.

3.11.3.2.8.1 Geometric Spreading

Sound from a localized source (i.e., a point source) propagates uniformly outward in a spherical pattern. The sound level attenuates (or decreases) at a rate of 6 dB for each doubling of distance from a point source. Highways consist of several localized noise sources on a defined path and, hence, can be treated as a line source, which approximates the effect of several point sources. Noise from a line source propagates outward in a cylindrical pattern, often referred to as cylindrical spreading. Sound levels attenuate at a rate of 3 dB for each doubling of distance from a line source.

3.11.3.2.8.2 Ground Absorption

The propagation path of noise from a highway to a receptor is usually very close to the ground. Noise attenuation from ground absorption and reflective wave-canceling adds to the attenuation associated with geometric spreading. Traditionally, the excess attenuation has also been expressed in terms of attenuation per doubling of distance. This approximation is usually sufficiently accurate for distances of less than 200 feet. For acoustically hard sites (i.e., sites with a reflective surface between the source and the receptor, such as a parking lot or body of water), no excess ground attenuation is assumed. For acoustically absorptive or soft sites (i.e., those sites with an absorptive ground surface between the source and the receptor, such as soft dirt, grass, or scattered bushes and trees), an excess ground-attenuation value of 1.5 dB per doubling of distance is normally assumed. When added to the cylindrical spreading, the excess ground attenuation results in an overall drop-off rate of 4.5 dB per doubling of distance.

3.11.3.2.8.3 Atmospheric Effects

Receptors located downwind from a source can be exposed to increased noise levels relative to calm conditions, whereas locations upwind can have lowered noise levels. Sound levels can be increased at large distances (e.g., more than 500 feet) from the highway or rail noise due to atmospheric temperature inversion (i.e., increasing temperature with elevation). Other factors such as air temperature, humidity, and turbulence can also have significant effects.

3.11.3.2.8.4 Shielding by Natural or Human-Made Features

A large object or barrier in the path between a noise source and a receptor can substantially attenuate noise levels at the receptor. The amount of attenuation provided by shielding depends on the size of the object and the frequency content of the noise source. Natural terrain features (e.g., hills and dense woods) and human-made features (e.g., buildings and solid walls) can substantially reduce noise levels. Walls are often constructed between a source and a receptor specifically to reduce noise. A barrier that breaks the line-of-sight between a source and a receptor will typically result in at least 5 dBA of noise reduction. Taller barriers provide increased noise reduction. Vegetation between the highway and receptor is rarely effective in reducing noise because it does not create a solid barrier.

3.11.3.3 **Basics of Vibration**

3.11.3.3.1 Characteristics of Vibration

Vibration is an oscillatory motion through a solid medium, such as soil or concrete, in which the motion's amplitude can be described in terms of displacement, velocity, or acceleration. Vibration is also acoustic energy transmitted as waves through the solid medium. The rate at which pressure changes occur is called the frequency of the vibration, measured by the number of oscillations per second or Hz. Vibration may be in the form of a single pulse of acoustical energy, a series of pulses, or a continuous oscillating motion.

The way that vibration is transmitted through the ground depends on the soil type, the presence of rock formations or manmade features, and the topography between the vibration source and the receptor location. As a general rule, vibration waves tend to dissipate and reduce in magnitude with distance from the source. Also, the high-frequency vibrations are generally attenuated rapidly as they travel through the ground, so that the vibration received at locations distant from the source tends to be dominated by low-frequency vibration. The frequencies of GBV most perceptible to humans are in the range from less than 1 Hz to 100 Hz.

Vibration can be a serious concern, causing buildings to shake and rumbling sounds to be heard. It is unusual for vibration from sources such as buses and trucks to be perceptible, even in locations close to major roads. Some common sources of vibration are trains, buses on rough roads, and construction activities, such as blasting, pile driving, and heavy earth-moving equipment.

High levels of vibration may cause physical personal injury or damage to buildings. However, GBV levels rarely affect human health. Instead, most people consider GBV to be an annoyance that can affect concentration or disturb sleep. In addition, high levels of GBV can damage fragile buildings or interfere with equipment that is highly sensitive to GBV (e.g., electron microscopes).

3.11.3.3.2 Vibration Descriptors

There are several different methods used to quantify vibration.

Peak particle velocity (PPV) is defined as the maximum instantaneous peak of the vibration signal. PPV is most frequently used to describe vibration impacts to buildings and is usually measured in in/sec.

Root mean square (RMS) amplitude is most frequently used to describe the effect of vibration on the human body. RMS amplitude is defined as the square root of the mean of the squared amplitude of the velocity signal. The dB notation for vibration level (VdB) is commonly used to measure RMS. The use of VdB compresses the range of numbers required to describe vibration. Vibration level (L_v) is expressed in velocity level decibels (L_v, VdB).

3.11.3.3.3 Effects of Vibration

When GBV arrives at a building, a portion of the energy will be reflected or refracted away from the building, and a portion of the energy will typically continue to penetrate through the ground-building interface. However, once the vibration energy is in the building structure, it can be amplified by the resonance of the walls and floors. Occupants can perceive vibration as motion of the building elements (particularly floors) and also rattling of lightweight components, such as windows, shutters, or items on shelves. At very-high amplitudes (energy levels), low-frequency vibration can cause damage to buildings.

Unlike noise, GBV is not a phenomenon that most people experience every day. Most perceptible indoor vibration is caused by sources within buildings, such as operation of mechanical equipment, movement of people or slamming of doors. Typical outdoor sources of perceptible GBV are construction equipment and traffic on rough roads. If the roadway is smooth, the vibration from traffic is rarely perceptible.

3.11.3.4 Field Noise Measurements and Prediction of Noise and Vibration Levels

3.11.3.4.1 Field Noise Measurements

Noise measurements were collected at the proposed Project site and selected nearby noise-sensitive locations on June 13, and 14, 2022, with American National Standards Institute Type 1 sound level meters within their manufacturer's recommended 1-year calibration period. Measurements were collected and documented in keeping with standard environmental noise measurement procedures, including field calibration checks, maintenance of detailed field data sheets, and measurement set-up photographs for each measurement location (all available upon request). Weather conditions during the measurement

period were generally typical for this location during this time of year (temperatures ranging between 65- and 80- degrees Fahrenheit, wind speeds between 0 and 10 miles per hour, relative humidity of 50 to 75 percent (%), and partly cloudy to sunny skies) (Appendix O).

Noise measurements were collected at five locations in the vicinity of the proposed Project site, including one long-term (LT) measurement location for an entire 24-hour period, and four short-term (ST) locations with durations of approximately 20 to 30 minutes each.

3.11.3.4.2 Prediction of Project Noise and Vibration Levels

The general procedure for assessing noise and vibration impacts for a project is to predict the future noise and vibration levels associated with a project and then compare those predicted levels to the appropriate identified significant impact thresholds in accordance with applicable local, state, and federal policies. The noise and vibration impact analysis for this proposed Project includes two primary phases: noise and vibration for construction of the proposed Project components, and ongoing operational noise.

The methodology for predicting future noise and vibration levels associated with the construction and operation of the proposed Project follow the procedures outline in the FTA Transit Noise and Vibration Impact Assessment Manual, unless noted otherwise (FTA 2018).

3.11.3.4.3 Construction Noise and Vibration

3.11.3.4.3.1 On-site Construction Noise

Potential construction noise impacts were determined by calculating the proposed Project-related construction noise levels at representative sensitive receptors and comparing these values to existing ambient noise levels (i.e., noise levels without construction noise from the proposed Project). Construction noise associated with the proposed Project was analyzed based on the worst-case construction equipment and processes expected to be in use during the proposed Project's construction phases. The construction noise model for the proposed Project is based on the Federal Highway Administration (FHWA) roadway construction noise model (RCNM; FHWA 2006).

The methodology used to analyze on-site construction activities starts with the reference noise level and usage factor for each type of construction equipment to be used under conservative worst-case conditions for each identified construction phase. These reference noise levels are then adjusted for the distance from the source to the noise-sensitive receptor, the fractional portion of time (acoustic usage factor [AUF]) that the equipment is operating at full power (L_{max}), and any acoustical shielding that may be present (such as buildings or terrain), and then summing together the contributed noise from all pieces of equipment.

Construction equipment rosters and usage are provided by the proposed Project contractor to represent typical noise conditions over the course of a workday for worst-case conditions. The acoustical

contribution (or the equivalent sound level) for each piece of equipment at each construction area is calculated using the following standard equation:

$$L_{eq} = L_{max(ref)} - 20\,log\left(\frac{D}{D_{ref}}\right) + 10\,log\left(\frac{AUF\%}{100}\right) + 10\,log(N) - S \quad (eq.1)$$

Where:

L_{eq} = equivalent sound level energy-averaged over the period of time over which the equipment is operating, in dBA

$L_{max(ref)}$ = maximum operating equipment sound level operating at full power as measured at the reference distance

D = distance between the operating equipment and the noise-sensitive receptor location (distances conservatively assumed to be the shortest distance from source to receptor at any given site for worst-case conditions)

D_{ref} = reference distance for the $L_{max(ref)}$, typically 50 feet

AUF% = acoustic usage factor (typical percentage value of time that equipment is operating at full power)

N = number of similar pieces of equipment operating in the same area

S = estimated noise reduction shielding value between that source and noise-sensitive receptor, in dBA

The acoustic contribution for all equipment assumed to be operating during the defined construction phase is summed together on an energy basis as the estimated combined noise level for each specific noise-sensitive receptor, and then adjusted for distance and acoustical shielding from intervening structures such as buildings or terrain in accordance with FTA methodology for estimating barrier insertion loss (FTA 2018, Table 4-28).

The list of construction equipment available to be used for the various construction phases of the proposed Project are selected from the full RCNM equipment list, including L_{max} and AUF as shown in Table 3.11-9. Noise from Tunnel Boring Machines (TBMs) are not analyzed because the TBMs operate below ground, and there is typically not a significant air-borne path between the TBMs and above ground areas. Generally, noise from TBM's are typically not a concern when they operate at depth of more than 20 feet.

Table 3.11-9 Acoustical Properties of Construction Equipment

Equipment Type	$L_{max\text{-}Ref}$ dBA (50 feet)	AUF%
Auger Drill	84	20
Backhoe	78	40
Boring Jack Power Unit	83	50
Chain Saw	84	20
Compactor (ground)	83	20
Compressor (air)	78	40
Concrete Mixer Truck	79	40
Concrete Pump Truck	81	20
Concrete Saw	90	20
Crane	81	16
Dozer	82	40
Drill Rig Truck	79	20
Drum Mixer	80	50
Dump Truck	76	40
Excavator	81	40
Flat Bed Truck	74	40
Front End Loader	79	40
Generator (greater than 25KVA)	81	50
Generator (less than 25KVA)	73	50
Gradall	83	40
Grader	85	40
Horizontal Boring Jack	82	25
Hoe Ram	90	20
Jackhammer	89	20
Man Lift	75	20
Pavement Scarafier	90	20
Paver	77	50
Pickup Truck	75	40
Pneumatic Tools	85	50
Pumps	81	50
Roller	80	20
Scraper	84	40
Shears (on backhoe)	96	40
Tractor	84	40
Vacuum Excavator	85	40
Vacuum Street Sweeper	82	10
Ventilating Fan	79	100
Vibrating Hopper	87	50
Vibratory Concrete Mixer	80	20

Equipment Type	$L_{max\text{-}Ref}$ dBA (50 feet)	AUF%
Warning Horn	83	5
Welder/Torch	74	40

Source: FHWA 2006, Table 1; actual measured L_{max}
KVA = Kilovolt-Ampere (electrical power measured in watts)

3.11.3.4.3.2 Off-site Construction Noise

In addition to the construction equipment identified above, there would be some additional traffic on the local roadway network to and from the construction sites associated with construction equipment movements, worker trips, and material delivery and removal. An off-site noise analysis was conducted using the FHWA Traffic Noise Model (TNM) Version 2.5 to predict and evaluate additional noise contributed by construction-related traffic noise at typical receptor distances. The TNM is the current Caltrans standard computer noise model for traffic noise studies. The model allows for the input of roadway, noise receivers, and sound barriers, if applicable. The existing traffic volumes for haul route roadways were obtained from the proposed Project's traffic consultant. The additional construction related off-site heavy truck volumes were obtained from the proposed Project contractors in coordination with the proposed Project's traffic consultant (Noise and Vibration Technical Report [SBCTA 2024; Appendix O]).

The TNM was used to calculate existing traffic noise levels at typical receptor distances of 50 and 100 feet from the roadway centerline for the area streets used for haul routes, and then compared to calculated noise levels for the existing traffic plus proposed Project traffic to assess significant increases in traffic noise levels as a result of the proposed Project construction traffic.

3.11.3.4.3.3 Construction Vibration

GBV impacts due to the proposed Project's construction activities were evaluated for both on-site and off-site construction activities by identifying potential vibration sources (i.e., construction equipment), estimating the vibration levels at the potentially affected receptor, and comparing the proposed Project's activities to the applicable vibration significance thresholds. The methodology for calculating the construction vibration levels is described as follows:

Construction-related vibration is assessed using two different metrics: 1) to assess potential structural damage from vibration, and 2) to assess human annoyance from vibration. PPV in in/sec is used to assess potential structural damage. VdB is used to assess human annoyance. These are calculated using the following equations:

Structural Damage Equation (PPV):

$PPV=PPV_{ref}*(25/D)^{1.5}$ *(eq.2)*

Where:

PPV = peak particle velocity at the nearest structure
PPV_{ref} = reference PPV value for a piece of equipment at reference distance of 25 feet
D = distance from the construction equipment to the structure

Human Annoyance Equation (L_v)

$L_v=L_{v(ref)} -30 \log (D/25)$ *(eq.3)*

Where:

L_v = vibration velocity level at the nearest structure
$L_{v(ref)}$ = reference L_v value for a piece of equipment at a reference distance of 25 feet
D = distance from the construction equipment to the structure

Not all construction equipment produces significant GBV. Construction equipment types expected to be used on the proposed Project that cause GBV are listed in Table 3.11-10. As shown in Table 3.11-10 (Reference Vibration Properties of Construction Equipment), the equipment with the highest reference vibration level would be "Vibratory Roller" which has reference values of PPV_{ref} equal to 0.21 in/sec at 25 feet, and $L_{v(ref)}$ equal to 94 VdB at 25 feet. Vibration from Tunnel Boring Machine (TBMs) are discussed separately within Section 3.11.3, Methodology, on page 3.11-22.

Table 3.11-10 Reference Vibration Properties of Construction Equipment

Equipment Type	PPV at 25 feet, in/sec	L_v, VdB at 25 feet
Vibratory Roller	0.21	94
Hoe-Ram	0.089	87
Large Bulldozer	0.089	87
Caisson/Auger Drilling	0.089	87
Loaded Trucks	0.076	86
Jackhammer	0.035	79
Small Bulldozer	0.003	58

Source: FTA 2018, Table 7-4

Potential vibration impacts for both damage and human annoyance are typically assessed using the closest distance to the potentially impacted structure.

3.11.3.4.4 Operational Noise and Vibration

Operational noise and vibration levels are predicted using techniques provided in the FTA Transit Noise and Vibration Impact Assessment Manual (FTA 2018).

3.11.3.4.4.1 Operational Noise

Operational noise levels for the aboveground station activity are calculated using equations and reference levels from Section 4.4 of the FTA 2018 manual, assuming something similar to a Transit Center or Park and Ride Lot facility. FTA (2018) Table 4-13 and Table 4-14 were used for reference levels and computation of hourly noise levels, summarized below.

$$L_{eq(1hr)} \text{ at 50 feet} = SEL_{ref} + C_N - 35.6 \quad (eq.4)$$

Where:

SEL_{ref} = 101 dBA for Transit Center or Park and Ride Lot
C_N = volume adjustment calculated as: $10*\log(N_A/1000 + N_B/24)$
N_A = average number of automobiles per hour
N_B = average number of buses per hour

Operational Vibration

In-tunnel operational vibration levels are calculated using reference levels and prediction equations provided in Chapter 6 of the FTA manual, as summarized below (assuming rubber-tired transit projects).

Predicted vibration velocity level for rubber-tired vehicles (FTA 2018, Tables 6 through 10).

$$L_v = 66.08 + 34.28*\log(D) - 30.25*\log(D)^2 + 5.40*\log(D)^3 \quad (eq.4)$$

Where:

L_v = vibration velocity, VdB
D = distance in feet

Tunnel Boring Machines

Vibration propagation due to tunneling was predicted using methodology outlined in the article titled Vibrations induced by tunnel boring machine in urban areas: In situ measurements and methodology of analysis, published in the Journal of Rock Mechanics and Geotechnical Engineering (Rallu et al. 2022). This article presented case studies of vibration produced by TBMs and developed an equation for predicting vibration propagation over distances from various TBMs and soil types:

$$PPV_{surface} = \beta/d^{\alpha}$$

Where:

β = constant for TBM and soil type
α = damping factor due to distance
d = distance from TBM to receptor

For this analysis, the constants β and α were set equal to 0.7 and 0.6, respectively, which are representative of the Earth Pressure Balance TBM to be used, and the alluvium soil of the proposed Project area. Thus, vibration levels at the receptors due to tunneling were able to be predicted.

3.11.4 CEQA Thresholds of Significance

In accordance with Appendix G of the 2024 CEQA Guidelines, the proposed Project would have a potentially significant impact on noise and vibration if it would result in the following:

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?

b) Generation of excessive ground-borne vibration or ground-borne noise levels?

c) For a project location within the vicinity of a private airstrip or an airport land use 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?

Referencing the relevant policy information presented in Section 3.11.2 (Regulatory Setting) of this Draft EIR, the Thresholds of Significance were developed to provide a conservative analysis based on relevant policies. The analysis utilizes factors and considerations identified in the City of Ontario Municipal Code, Chapter 29: Noise; the City of Rancho Cucamonga Municipal Code, Section 17.66.050 Noise Standards; the FTA's GBV and noise criteria; and Caltrans' construction vibration damage and annoyance thresholds for assessing potential impacts relating to building damage and human annoyance. These factors and considerations are used, as appropriate, to assist in assessment of the Thresholds of Significance from the Appendix G of the CEQA Guidelines. The construction and operation thresholds that are applicable to the proposed Project are included below.

3.11.4.1 **Construction Impact Thresholds**

3.11.4.1.1 Construction Noise Thresholds

City of Ontario: Construction activities exceeding the exterior and interior noise limits as shown in Table 3.11-5 and Table 3.11-6, respectively, would result in a significant impact.

City of Rancho Cucamonga: Construction activities exceeding the 65-dBA noise limit for residential land use, and 70 dBA for commercial or industrial land use, would result in a significant impact.

FTA Guidance: Construction activities exceeding a daytime L_{eq} of 80 dBA at a residential property or 85 dBA at a commercial, school, church or park use would result in a significant impact.

3.11.4.1.2 Construction Vibration Thresholds

The City of Ontario and the City of Rancho Cucamonga do not currently have adopted standards, guidance, or thresholds relative to GBV. Therefore, available guidance from FTA are utilized to assess impacts due to GBV during construction.

From FTA guidance, a significant vibration impact would exist if:

- For human annoyance, ground vibration levels exceed 72 VdB at residential structures, or 75 VdB at Institution land uses.
- For potential structural damage, ground vibration levels exceed:
  - 0.5 PPV, in/sec, for Category 1 buildings (reinforced-concrete, steel or timber [no plaster]);
  - 0.3 PPV, in/sec, for Category 2 buildings (engineered concrete and masonry [no plaster]);
  - 0.2 PPV, in/sec, for Category 3 buildings (non-engineered timber and masonry buildings); or
  - 0.12 PPV, in/sec, for Category 4 buildings (buildings extremely susceptible to vibration damage).

3.11.4.2 **Operational Impact Thresholds**

From the City of Rancho Cucamonga Noise Ordinance, a significant noise impact would exist if:

- The existing ambient noise level is exceeded by 15 dBA when measured on the property line of any other property.

From FTA guidance, a significant noise impact would exist if:

- The project noise level would result in a “severe impact” at levels ranging from 55 to 80 dBA. Depending on existing noise exposure, in accordance with FTA Guidance Figure 3.11-1.

3.11.5 Existing Settings

3.11.5.1 **Existing Noise Measurements**

Noise measurements were collected at the proposed Project site and selected nearby noise-sensitive locations on June 13 and 14, 2022. Noise measurements were collected at five locations in the vicinity of the proposed Project site according to the noise measurement methodology described in the Methodology section. Noise measurement locations are described in Table 3.11-11 and shown visually in Figure 3.11-2.

Table 3.11-11 Noise Measurement Locations

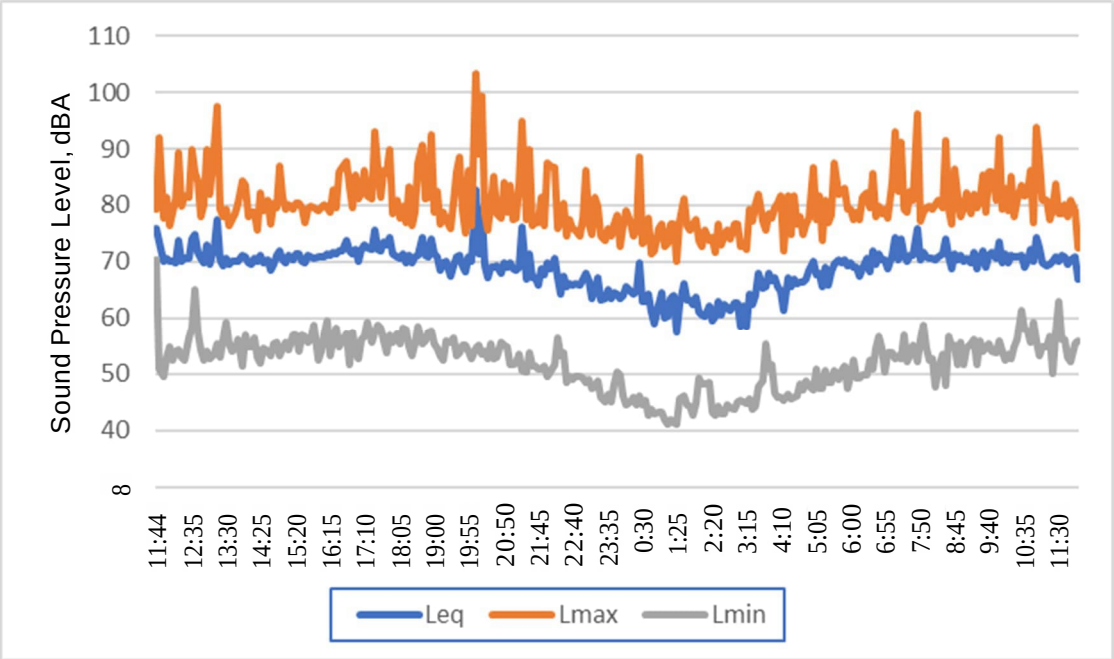
Identification (ID)	Location	Existing Noise Sources
LT-1	Commercial development east of Milliken Avenue and about 250 feet north of 4th Street	Traffic on Milliken Avenue
ST-1	Multi-family residential development, exterior area, southwest of the intersection of Milliken Avenue and 7th Street	Traffic on Milliken Avenue
ST-2	Multi-family residential development, exterior area western side of Milliken Avenue, 450 feet south of 5th Street	Traffic on Milliken Avenue
ST-3	Hotel on the eastern side of Milliken Avenue, exterior area near entrance, about 600 feet south of 5th Street	Traffic on Milliken Avenue
ST-4	Multi-family residential development north of the intersection of Duesenberg Drive and Concours Street	Light traffic on Concours Street, dog barking and distant aircrafts

Notes: ID = identification
Source: AECOM 2024

3.11.5.1.1 Noise Measurements Results

The results of the LT (24-hour) noise measurements at LT-1 are shown graphically in Figure 3.11-2. These results indicate noise levels at this area averaging about 70 dBA, L_{eq} during the day and dropping down to about 60 dBA, L_{eq} in the early morning hours. Table 3.11-12 provides a summary of the measured LT and ST data, along with key calculated noise metrics, including the average L_{eq} for the entire measurement period, $L_{eq\text{-}day}$, $L_{eq\text{-}night}$ and L_{dn} for each measurement location.

Figure 3.11-2 Long-Term Noise Measurement Data



Source: AECOM 2024

3.11.5.1.2 Noise and Vibration Sensitive Receptors

For the noise and vibration impact analysis, a number of specific receptor locations were selected to assess potential impacts. These generally consisted of land uses that could be sensitive to elevated noise or vibration levels that are located within about 500 feet of proposed Project components, such as future station location construction sites, truck haul routes, tunnel corridors, and ventilation shaft (vent shaft). The sensitive receptor locations also include residential properties (including hotels), places of worship, and some businesses with outdoor use areas. The selected sensitive receptors are described in Table 3.11-12 and shown in Figure 3.11-3. It is noted that Receptor R8, remaining structures at Old Guasti Winery, are included as potentially sensitive structures, but are only assessed for potential vibration damage.

Figure 3.11-3 identifies important proposed Project components for the entire proposed Project study area, including future station locations, construction zones, tunnel alignments, haul routes, and the proposed vent shaft, as well as noise measurements conducted for the analysis. Figure 3.11-4 through Figure 3.11-7 show greater detail for specific proposed Project components, including future station/construction sites, vent shaft location, haul routes, and tunnel sections near sensitive receptors.

Table 3.11-12 Noise and Vibration-Sensitive Receptor Locations

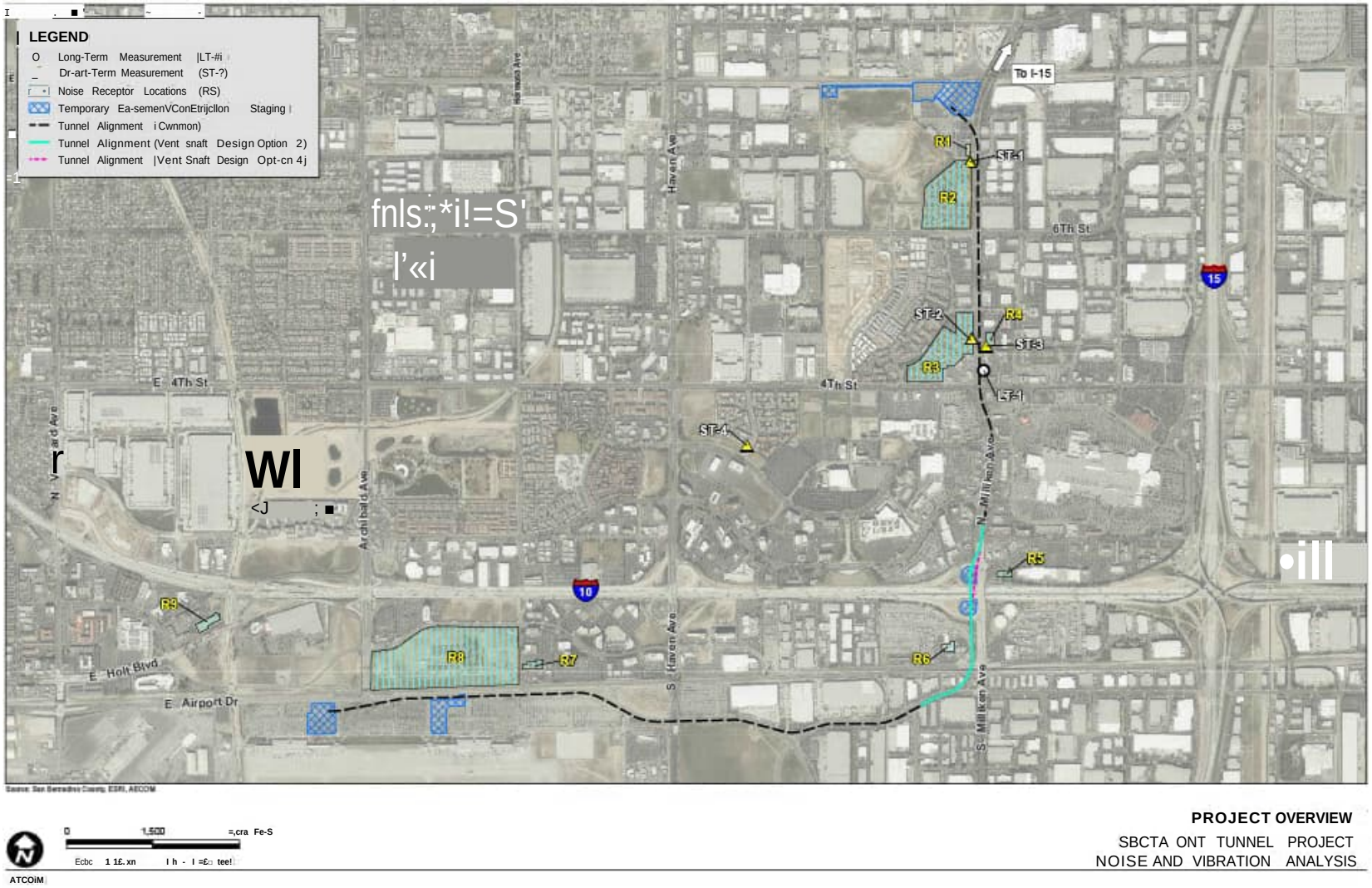
ID	Description	Location	Noise and Vibration Sources
R1	Fairway Village, shops with outdoor seating	Western side of Milliken Avenue between Azusa Court and 7th Street	Above-ground construction noise and vibration, haul route noise
R2	Solamonte Apartments, with street-facing units with balconies and patios	Western side of Milliken Avenue between 7th and 6th Streets	Above-ground construction noise and vibration, tunnel construction vibration, haul route noise
R3	Reserve at Empire Lakes Apartments with street facing units with balconies and patios	Western side of Milliken Avenue between 5th and 4th Streets	Tunnel construction vibration, haul route noise
R4	Holiday Inn Express with exterior use areas	9585 Milliken Avenue between 5th and 4th Streets	Tunnel construction vibration haul route noise
R5	In-N-Out, Chick Fil-A with outdoor seating	Milliken Avenue at Ontario Mills Parkway	Haul route noise
R6	TA Travel Center with outdoor seating	Milliken Avenue at Guasti Road	Haul route noise
R7	San Secondo d'Asti Church with exterior use areas	250 North Turner Avenue	Above-ground construction noise and vibration
R8	Remaining structures at Old Guasti winery (no longer in use)	East Guasti Road, between Archibald Avenue and North Turner Road	Construction and tunneling vibration only, not noise sensitive.
R9	Holiday Inn with exterior use areas	2155 East Convention Center Way	Above-ground construction noise

Source: AECOM 2024

3.11.5.2 Airport Noise

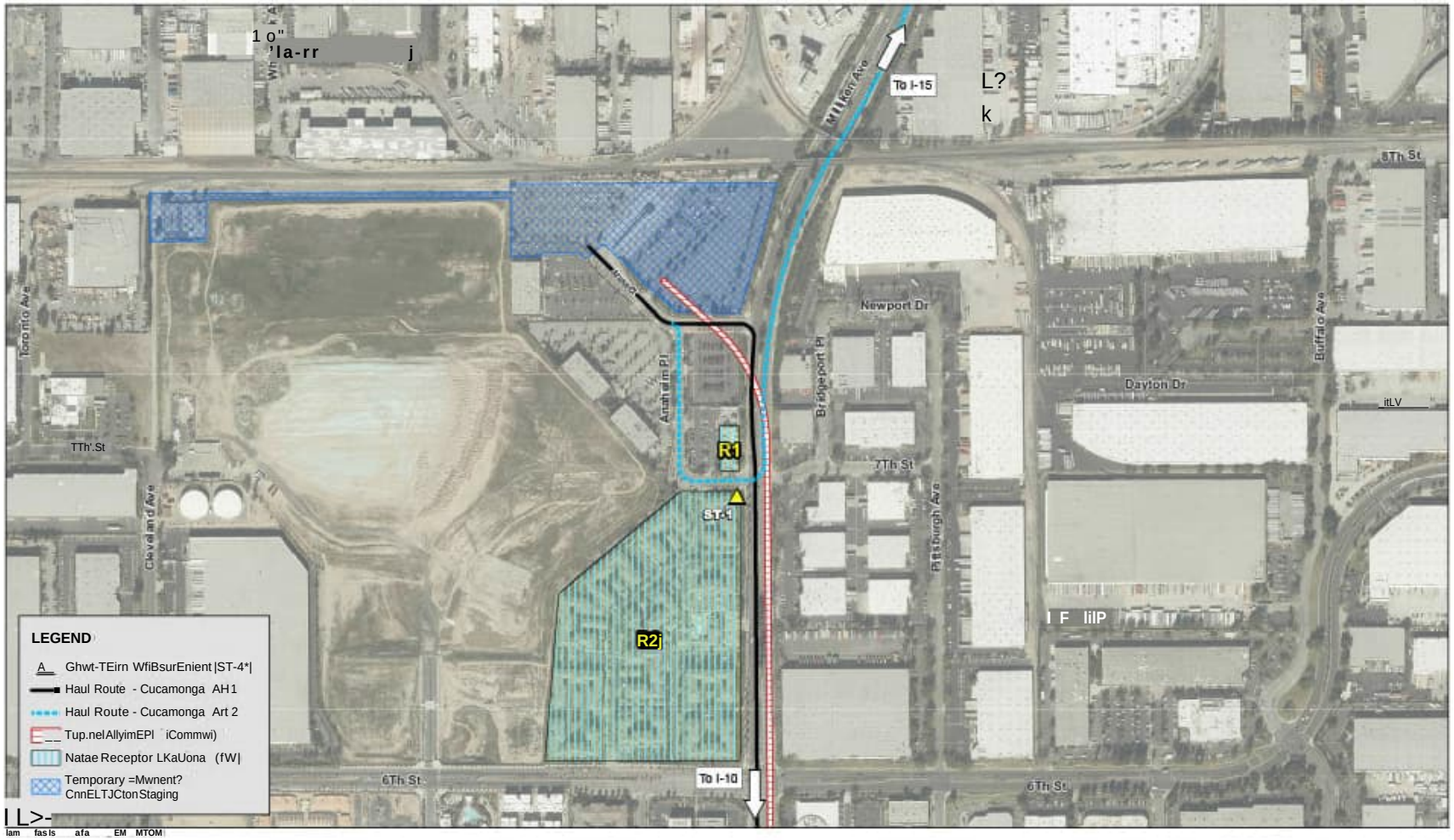
ONT is located at 2500 East Airport Drive in the City of Ontario. The southern portion of the proposed Project terminates at the ONT parking lots at Terminal 2 and Terminal 4. The ONT ALUCP was adopted on April 19, 2011, and amended in July 2018. The ALUCP implements relevant policies and guidelines for land use compatibility and specific findings of compatibility or incompatibility of land uses within the airport Noise Impact Zones. Figure 3.11-8 depicts the Noise Impact Zones, and the proposed Project falls within the Noise Impact Zone 60-65 dB CNEL and Zone 65-70 dB CNEL (ONT-IAC 2018b).

Figure 3.11-3 Noise and Vibration Study Areas



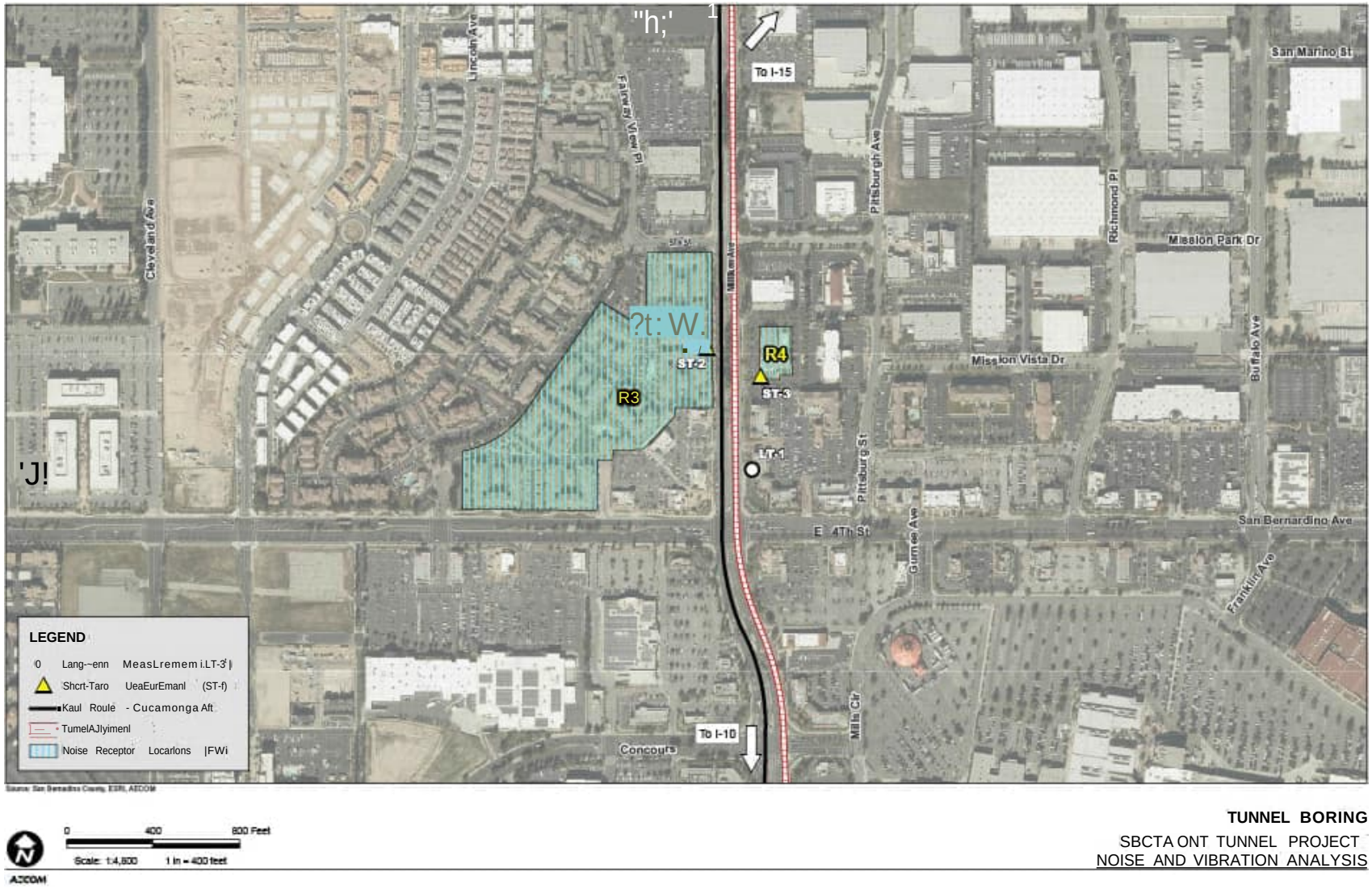
Source: AECOM 2024

Figure 3.11-4 Cucamonga Station Construction Area, Receptors R1 and R2



Source: AECOM 2024

Figure 3.11-5 Tunnel Construction Area, Receptors R3 and R4



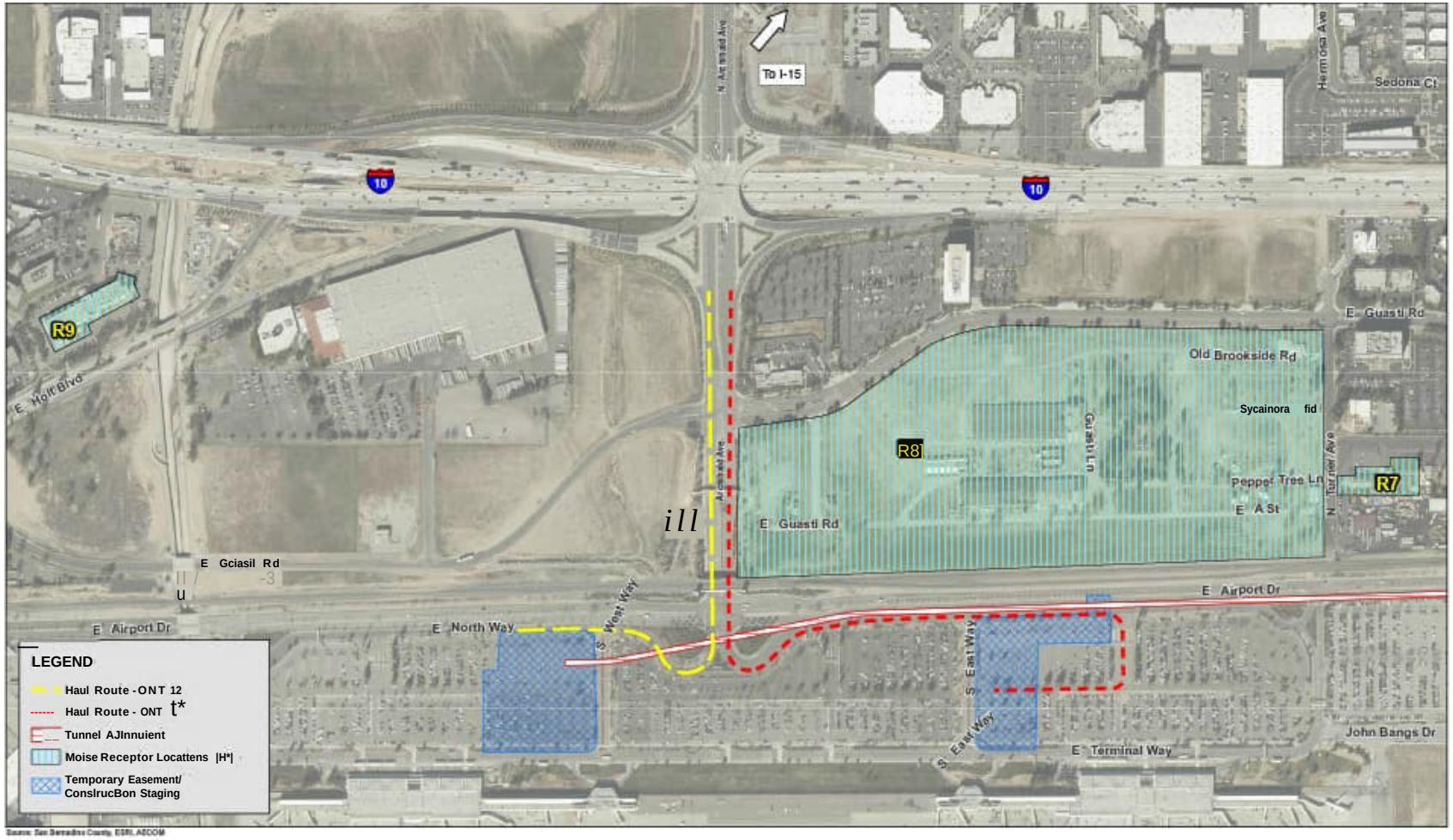
Source: AECOM 2024

Figure 3.11-6 Vent Shaft Construction Area, Receptors R5 and R6



Source: AECOM 2024

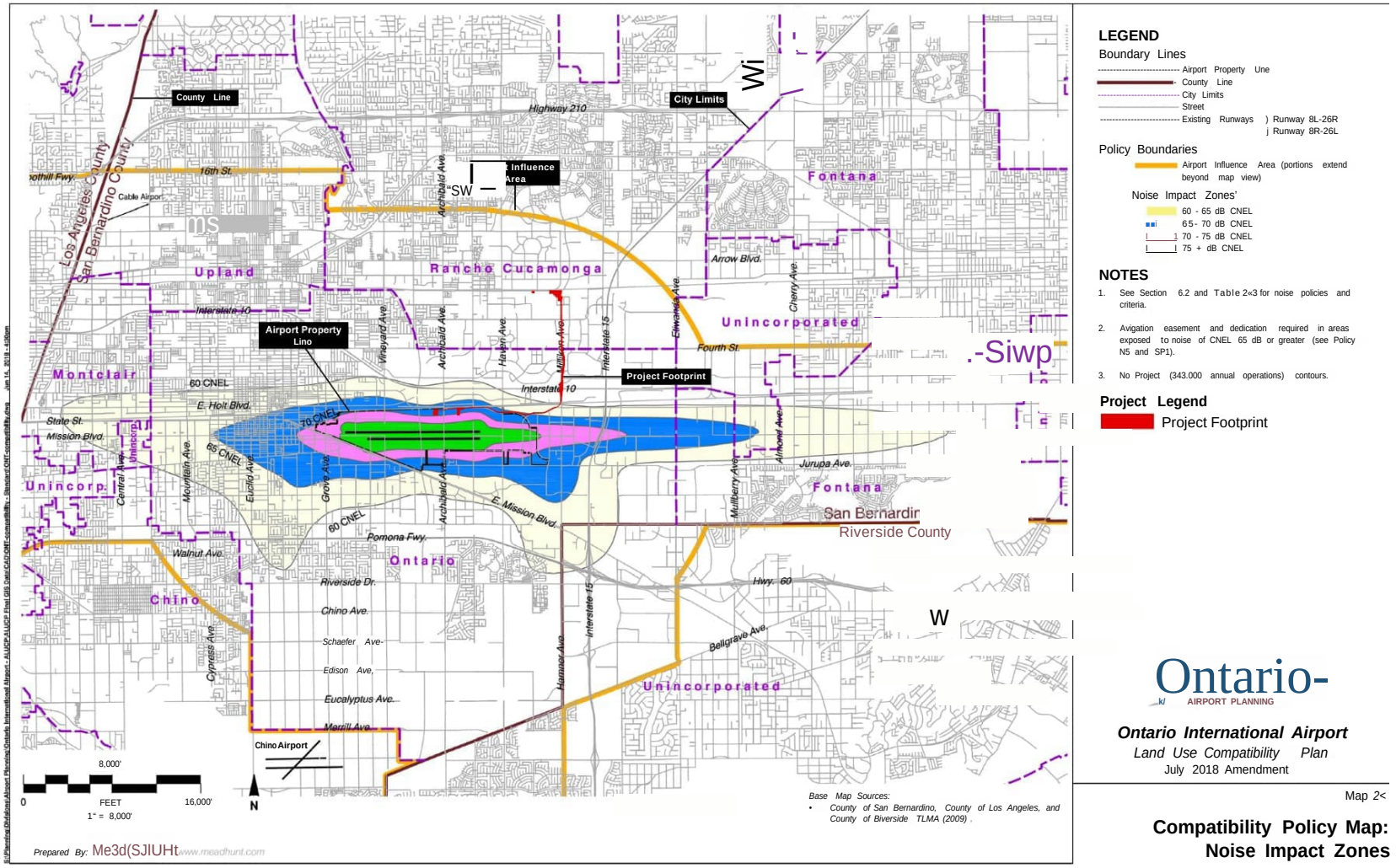
Figure 3.11-7 Ontario Airport Station Construction Areas, Receptors R7, R8, R9



TUNNEL BORING
S8CTA ONT TUNNEL PROJECT
NOISE AND VIBRATION ANALYSIS

Source: AECOM 2024

Figure 3.11-8 Airport Noise Impact Zone



Source ONT-IAC. 2018c

3.11.6 Impact Evaluation

3.11.6.1 **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?

3.11.6.1.1 No Project Alternative

The No Project Alternative includes planned expansion, improvement projects, and routine maintenance activities for the existing roadway system and transit facilities. Construction activities for the No Project Alternative would expose sensitive receptors to increased noise levels on the site and in existing residential neighborhoods adjacent to the site. Construction and operation activities would need to comply with the City of Rancho Cucamonga Noise Ordinance, which generally prohibits construction and ambient noise between 8:00 p.m. and 7:00 a.m. and limits noise from exceeding the noise standard of 65 dBA when measured at the adjacent property line when adjacent to residential property. When adjacent to a commercial or industrial use, the City of Rancho Cucamonga prohibits construction between 7:00 a.m. and 6:00 p.m. on weekdays and between the hours of 9:00 a.m. and 6:00 p.m. on weekends. Table 3.11-5 and Table 3.11-6, identify the noise standards and restrictions for the City of Ontario. The City of Rancho Cucamonga's and City of Ontario's Municipal Codes would require the proposed Project to implement construction best management practices (BMPs) to reduce construction noise and limit the hours of construction. With compliance with existing regulations, the No Project Alternative during construction and operation would have a less than significant impact.

3.11.6.1.2 Proposed Project

3.11.6.1.2.1 Construction Impacts

The proposed Project's construction noise levels presented in this section were predicted using the methodology developed in the Noise and Vibration Technical Report (SBCTA 2024; Appendix O). A list of the noise sensitive- receptors is presented in Table 3.11-13.

Noise impacts from the proposed Project construction activities would be a function of the noise generated by construction equipment, the location of the equipment, the timing and duration of the noise-generating construction activities, and the relative distance to noise-sensitive receptors. Each phase of construction would involve the use of various types of construction equipment and would, therefore, have its own distinct noise characteristics. Construction noise levels would fluctuate throughout a given workday as construction equipment moves within the various construction sites.

The construction equipment that is anticipated to be used during construction of the proposed Project includes: piling rigs, crawling cranes, vertical conveyors, tunnel fans, concrete trucks, muck trucks, compressor generator, wheel washers, wheel loaders, excavators, vent fans, and the TBM.

3.11.6.1.2.1.1 Above-Ground Project Components

To determine construction noise impacts at above-ground construction sites (maintenance and storage facility [MSF], stations, and vent shafts), sound-generating equipment was modeled at representative sensitive receptor locations within the proposed construction area for each construction phase to determine the respective sound levels due to construction activity. The results of the analysis for noise sensitive receptors in proximity to the three primary above-ground construction areas (Cucamonga Station / MSF; the vent shaft; and the two ONT stations) are presented in Table 3.11-13.

Table 3.11-13 Daytime/Nighttime Construction Noise Impacts from Above-ground Construction Sites

Construction Area	Construction Phase	Receiver Location	FTA Daytime/Nighttime Impact Threshold (dBA, L_{eq})	Predicted Noise Level (dBA, L_{eq})	Impact
Cucamonga Station / MSF	Tunneling	R1. Fairway Village	85/85	61.8	None
		R2. Solamonte Apartments	80/70	59.9	None
	Station/MSF Construction	R1. Fairway Village	85/85	62.1	None
		R2. Solamonte Apartments	80/70	60.1	None
Vent Shaft	Shaft Construction, Vent Shaft Design Option 2	R5. Restaurants, Outdoor seating	85/85	71.0	None
		R6. TA Travel Center, outdoor seating	85/85	62.9	None
	Shaft Construction Vent Shaft Design Option 4	R5. Restaurants, Outdoor seating	85/85	67.0	None
		R6. TA Travel Center, outdoor seating	85/85	68.3	None
ONT Stations	Tunneling	R7. Church	80/70	61.6	None
		R9. Holiday Inn Hotel	85/85	58.1	None
	Station Construction	R7. Church	80/70	58.8	None
		R9. Holiday Inn Hotel	85/85	55.4	None

Note: MSF = maintenance and storage facility
Source: AECOM 2024

As shown in Table 3.11-13, the predicted noise level for the proposed Project during construction activities range from 55.4d BA to 71.0 dBA. Under the FTA noise impact criteria, shown in Table 3.11-1, the construction of the proposed Project would not increase noise levels in exceedance of the FTA impact threshold (ranging from 80 to 90 dBA) at noise sensitive receptor locations. Anticipated daytime and nighttime construction activities would be all within the FTA's noise impact criteria.

The portion of the proposed Project within the City of Rancho Cucamonga includes restaurants with outdoor seating and residential uses near or adjacent to the proposed Project site. The portion of the proposed Project within the City of Ontario has a travel center with outdoor seating, church, hotels and no residential uses near or adjacent to the proposed Project site. These uses are sensitive receptors that

are subject to temporary increase in ambient noise resulting from construction activities. Most of the above-ground construction activities are anticipated to occur during the daytime hours. Construction activities are not anticipated to occur outside of the permitted daytime and nighttime hours per the City of Rancho Cucamonga's and the City of Ontario's Noise Ordinance regulations. In addition, ambient noise policies for both the City of Rancho Cucamonga and the City of Ontario generally prohibit non-emergency nighttime construction activities. Noise levels are predicted to be below the FTA construction noise standards. The City of Rancho Cucamonga and the City of Ontario would require permits and variances approvals for above-ground nighttime construction activities outside of permitted hours. Therefore, adherence to existing regulations would ensure that noise impacts during construction of above-ground components would be less than significant for the proposed Project.

3.11.6.1.2.1.2 Tunnel Boring

In addition to on-site construction noise impacts at aboveground construction sites, potential noise impacts due to tunnel boring activities were also analyzed. As discussed in Chapter 2 (Project Description), tunnel boring would occur up to approximately 70 feet below the ground surface. A tunnel boring machine (TBM) would be launched from either the existing ONT parking lot near Terminal 2 or the Cucamonga Metrolink Station to construct the tunnel.

Tunnel-boring activities would generally take place at either the aboveground construction sites or underground. As previously discussed, construction of the proposed Project at aboveground construction sites would not increase noise levels in exceedance of the FTA impact threshold (ranging from 80 to 90 dBA) at noise-sensitive receptor locations. Tunnel-boring construction activities associated with the removal of tunnel boring spoils would require the use of heavy trucks which would result in temporary noise impacts along haul routes as shown in Table 3.11-13 and discussed in Section 3.11.6.1.2.1.3. At underground construction sites, audible air-borne noise from tunnel-boring activity is not anticipated due to the distance of construction activities below ground (up to 70 feet). As such, on-site construction noise impacts at tunnel boring locations would be less than significant.

3.11.6.1.2.1.3 Haul Routes

Haul routes associated with proposed Project construction could create excess noise from trucks hauling material to or away from construction sites. Off-site construction noise impacts can be assessed by determining the relative increase of traffic noise levels as a result of additional proposed Project-related traffic, especially the addition of heavy trucks hauling material to or away from construction sites, which could create excess noise.

Typically, vehicles legally allowed to travel on existing roadways are not regulated and would not result in noise impacts unless a significant increase in noise levels relative to typical traffic noise levels were to occur. Specifically, a 5-dBA increase in traffic noise levels would normally be considered a noticeable increase that would result in a noise impact.

The existing traffic volumes for haul route roadways were obtained from the proposed Project's traffic consultant, and the additional construction-related off-site heavy truck volumes were obtained from the proposed Project contractors in coordination with the proposed Project's traffic consultant. For this analysis, it was assumed that an additional 100 heavy trucks per day in each direction could be added during each workday to the defined haul routes, or approximately 10 trucks per hour during a 10-hour workday.

Table 3.11-14 below demonstrates that noise impacts due to increased heavy truck traffic on the proposed haul routes are not anticipated at any of the noise-sensitive receptors. As shown in Table 3.11-14, an increase of 0.0 to 1.8 dBA at the receptors located near the haul routes is anticipated during construction of the proposed Project. As previously discussed, a noise impact would result from an increase of 5 dBA or greater in traffic noise levels. As such, estimated off-site construction traffic noise impacts would not exceed significance thresholds at the proposed haul routes. Therefore, off-site construction traffic noise impacts would be less than significant.

Table 3.11-14 Haul Route Traffic Noise

Receiver near Haul Routes*	Nearest Haul Route Roadway	Existing Traffic Predicted Traffic Noise ($Leq_{(hourly)}$, dBA)	with Haul Route Predicted Traffic Noise ($Leq_{(hourly)}$, dBA)	Increase	Impact
R1. Fairway Village, I-10 Alternative	7th Street/ Anaheim Place	54.9	56.1	1.2	None
R1. Fairway Village, I-15 Alternative	7th Street/ Anaheim Place	54.9	55.7	0.8	None
R2. North Solamonte Apartments (north-facing units), I-10 Alternative	7th Street/ Anaheim Place	60.6	61.8	1.2	None
R2. North Solamonte Apartments (north-facing units), I-15 Alternative	7th Street/ Anaheim Place	60.6	62.4	1.8	None
R2. East Solamonte Apartments (east-facing units), I-10 Alternative	Milliken Avenue	68.9	69.4	0.5	None
R2. East Solamonte Apartments (east-facing units), I-15 Alternative	Milliken Avenue	68.9	69.0	0.1	None
R3. Reserve at Empire Lakes	Milliken Avenue	67.2	67.6	0.4	None
R4. Holiday Inn	Milliken Avenue	64.5	65.0	0.5	None
R5. In-N-Out, Chick-fil-A	Milliken Avenue	73.5	73.5	0.0	None
R6. TA Travel Center	Milliken Avenue	60.2	60.8	0.6	None

Source: AECOM 2024

Notes: Receptors R7, R8, and R9 are all greater than 1,000 feet from the nearest proposed haul route and, therefore, not evaluated for haul route noise. I-15 = Interstate 15.

3.11.6.1.2.2 Operational Impacts

The proposed Project's operational noise levels were predicted in this section using the methodology developed in the Noise and Vibration Technical Report (SBCTA 2024; Appendix O). As discussed in Chapter 2 (Project Description) of this Draft EIR, the proposed Project would consist of the development of a 4.2-mile underground tunnel that would connect Cucamonga Metrolink Station to ONT. The proposed Project includes three stations, one MSF, one vent shaft, and autonomous electric vehicle transportation. The proposed Project's three passenger stations would be connected to the bored tunnel via a cut-and-cover structure and an at-grade guideway. The guideway would be enclosed by fencing and walls that would be buffered with landscaping.

Overall, operation of the proposed Project is not expected to significantly increase noise levels above existing conditions at nearby noise-sensitive receptor locations due to the following factors:

- Passenger vehicles using the stations and tunnel structures will be electrically powered and have rubber tires, generating very little noise.
- Maintenance activities near the proposed Cucamonga Station will be conducted in a maintenance building with closed bay doors. The vehicle-washing station would not include noisy equipment.
- The vent shaft is not expected to have regularly operating equipment that would be audible at the nearest noise sensitive receptors over the existing traffic noise from I-10 and other nearby arterial roadways.

As a result, operational noise is not expected to be audible over existing noise levels and operational noise impacts would be less than significant.

3.11.6.2 G**eneration of excessive ground-borne vibration or ground**-borne noise levels?

3.11.6.2.1 No Project Alternative

Construction activities could create excessive GBV levels (and resulting ground borne noise) at proposed on-site residential uses, should the dwelling units be occupied before construction activity on adjacent parcels is complete. However, the No Project Alternative includes planned expansion, improvement projects and routine maintenance activities for the existing roadway system and transit facilities. Associated construction activities are anticipated to exist near existing roadways and transit facilities. Compliance with the City of Rancho Cucamonga and City of Ontario Municipal Codes would require implementation of construction BMPs and limiting the hours of construction. Daily operation of the No Project Alternative is anticipated to occur on existing roadways and existing transit facilities. The No Project Alternative is not anticipated to expose noise-sensitive land uses on- or off- site to noise levels that exceed the existing acceptable standards. With adherence to existing regulations, the No Project Alternative would result in a less than significant impact.

3.11.6.2.2 Proposed Project

3.11.6.2.2.1 Construction Impacts

This section presents predicted construction vibration levels using the methodology developed in the Noise and Vibration Technical Report (SBCTA 2024; Appendix O). A list of the vibration-sensitive receptors is presented in Table 3.11-13.

3.11.6.2.2.1.1 Above-Ground Project Components

Vibration impacts from aboveground construction activities were calculated for receiver locations within at least 500 feet of proposed Project construction. As shown in Table 3.11-15 below, predicted vibration levels were calculated in terms of both VdB to assess potential annoyance as well as PPV to assess potential damage. While a variety of vibration-producing equipment was considered, the worst-case scenario was generally associated with the use of vibratory rollers (used primarily for soil compaction), so this equipment type was used to predict the worst-case scenario for aboveground construction vibration impacts.

According to the FTA manual, a significant vibration impact would exist for human annoyance if GBV levels exceed 72 VdB at residential structures, or 75 VdB at institutional structures. For potential structural damage, a significant vibration impact would exist if GBV levels exceed the following:

- 0.5 PPV, in/sec, for Category 1 buildings (reinforced-concrete, steel, or timber [no plaster]);
- 0.3 PPV, in/sec, for Category 2 buildings (engineered concrete and masonry [no plaster]);
- 0.2 PPV, in/sec, for Category 3 buildings (non-engineered timber and masonry buildings); or
- 0.12 PPV, in/sec, for Category 4 buildings (buildings extremely susceptible to vibration damage).

All vibration-generating equipment was evaluated, as detailed in the Noise Technical Report (SBCTA 2024; Appendix O).

As shown in Table 3.11-15, construction activities would not result in potential vibration impacts due to human annoyance or building damage for vibration-sensitive uses. Therefore, the proposed Project would not result in GBV (and resulting ground borne noise) impacts from the use of vibration-generating construction equipment, and impacts would be less than significant.

Table 3.11-15 Ground-borne Vibration from Above-Ground Construction Sites

Construction Area	Construction Phase	Receiver Location	Predicted Vibration Level (VdB/PPV)	Impact Threshold Annoyance (VdB)	Impact Threshold Damage (PPV)	Impacts
Cucamonga Station and MSF	Tunneling	R1. Fairway Village	47.1 VdB/ 0.0009 PPV	75	0.5	None
		R2. Solamonte Apartments	43.5 VdB/ 0.0006 PPV	72	0.5	None
	Station/MSF Construction	R1. Fairway Village	47.1 VdB/ 0.0009 PPV	75	0.5	None
		R2. Solamonte Apartments	44.5 VdB/ 0.0007 PPV	72	0.5	None
Vent Shaft Design Option 2	Vent Shaft Construction	R5. Restaurants, Outdoor seating	0.0026 PPV	NA	0.5	None
		R6. TA Travel Center, outdoor seating	0.0006 PPV	NA	0.5	None
Vent Shaft Design Option 4	Vent Shaft Construction	R5. Restaurants, Outdoor seating	0.0013 PPV	NA	0.5	None
		R6. TA Travel Center, outdoor seating	0.0016 PPV	NA	0.5	None
ONT Stations	Tunneling	R7. Church	41.3 VdB/ 0.0005 PPV	72	0.2	None
		R8. Winery Buildings	NA/0.0012 PPV	NA	0.12	None
		R9. Holiday Inn Hotel	35.9 VdB/ 0.0002 PPV	72	0.5	None
	Station Construction	R7. Church	41.3 VdB/ 0.0005 PPV	72	0.2	None
		R8. Winery Buildings	NA/0.0012 PPV	NA	0.12	None
		R9. Holiday Inn Hotel	35.9 VdB/ 0.0002 PPV	72	0.5	None

Source: AECOM 2024
Notes: VdB = vibration velocity level (re 1 micro-inch/sec). PPV = peak particle velocity (in in/sec).

3.11.6.2.2.1.2 Tunnel Boring

In addition to construction vibration impacts at aboveground construction sites, potential vibration impacts due to tunnel boring activities were also analyzed. Predicted GBV levels and resulting ground borne noise impacts from tunnel boring activities are provided in Table 3.11-16 and Table 3.11-17, respectively.

As indicated in Table 3.11-16 and Table 3.11-17, no GBV (and resulting ground borne noise) impacts from tunnel-boring activities are anticipated. As such, on-site vibration impacts would be less than significant.

Table 3.11-16 Annoyance due to Ground-borne Vibration (GBV) and Ground-borne Noise (GBN) from Tunnel Boring

Receiver Location	GBV Impact threshold	GBV Predicted level	GBV Impact	GBN Impact Threshold	GBN Predicted Level	GBN Impact
	VdB re 1 micro-inch/sec			dBA re 20 micro-Pascals		
R1. Fairway Village	75	58.1	None	40	18.1	None
R2. Solamonte Apartments	72	56.7	None	35	16.7	None
R3. Reserve at Empire Lakes	72	57.9	None	35	17.9	None
R4. Holiday Inn Hotel	72	57.6	None	35	17.6	None

Source: AECOM 2024
dbA = A weighted decibel

Table 3.11-17 Damage due to Ground-borne Vibration (GBV) from Tunnel Boring

Receiver Location	GBV Impact threshold PPV (in/sec)	GBV Predicted level PPV (in/sec)	GBV Impact
R1. Fairway Village	0.5	0.0032	None
R2. Solamonte Apartments	0.5	0.0027	None
R3. Reserve at Empire Lakes	0.5	0.0031	None
R4. Holiday Inn Hotel	0.5	0.0030	None
R8. Winery Buildings	0.12	0.0015	None

Source: AECOM 2024

3.11.6.2.2.1.3 Haul Routes

In addition to on-site construction vibration impacts, potential vibration impacts from loaded heavy trucks operating on local haul routes were also analyzed. The proposed Project would require haul trucks to transport construction materials on- and off-site. These haul trucks would be limited to construction activities and would only occur within the duration of the construction activities. The haul trucks would leave construction sites in a queue and in a staggered basis limiting vibration impacts from haul trucks. Vibration may be felt on sidewalks at up to approximately 25 feet on roadways that serve as haul routes when large trucks pass. These construction vibration levels have the potential to result in some annoyance impacts for people within occupied structures near the roadway. However, vibration levels from haul trucks on project roads would not represent a significant increase, as heavy trucks already use local haul routes. Therefore, potential vibration is not anticipated to extend into any vibration-sensitive structures near the local haul routes. As such, off-site vibration and associated noise impacts would be less than significant.

3.11.6.2.2.2 Operational Impacts

As discussed in Chapter 2 (Project Description), operation of the proposed Project would include the use of electric vehicles that would be grouped and queued at their origin station and depart toward the destination station once boarded with passengers. Vibration levels are dependent on vehicle characteristics, load, speed, and pavement conditions. Due to the use of smaller, rubber-tired electric vehicles in the stations and tunnels, none of the proposed Project operations are anticipated to produce

perceptible vibration beyond the proposed Project footprint. Therefore, operation of the proposed Project would not increase the existing vibration levels in the immediate vicinity of the proposed Project. As such, vibration and associated noise impacts with the operation of the proposed Project would be less than significant.

3.11.6.3 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?

3.11.6.3.1 No Project Alternative

Concentration of people and facilities in the vicinity of airports raises concerns about aircraft hazards. ONT is located at 2500 East Airport Drive in the City of Ontario. The ONT ALUCP implements relevant policies and guidelines for land use compatibility and specific findings of compatibility or incompatibility of land uses within noise impact zones. The ALUCP also addresses airport land use compatibility concerns regarding exposure to aircraft noise with respect to people and property on the ground. The ALUCP's Table 2-3 (Noise Criteria) has determined that transportation uses including: 1) Rail and Bus Stations; 2) Transportation Routes: roads and rail right-of-way, bus stops; and 3) Auto Parking: surface lots and structures are permitted land uses that may be carried out with minimal interference from aircraft noise.

The No Project Alternative includes planned expansion, improvement projects and routine maintenance activities for the existing roadway system and transit facilities. Per the ALUCP, the No Project Alternative is a compatible use within the ONT Noise Impact Zones. Construction activities would be temporary, and adherence to all local, state, and federal regulations would ensure that impacts associated with potential noise hazards associated with airports are less than significant.

3.11.6.3.2 Proposed Project

3.11.6.3.2.1 Construction Impacts

Construction activities for the proposed Project would occur in the vicinity of airport facilities at ONT, therefore, the concentration of people and facilities in the vicinity of airports raises concerns about aircraft hazards. Construction activities would be temporary and would occur within the existing ROW of the parking lots for Terminals 2 and 4 and ONT. With adherence to all local, state, and federal regulations, the proposed project during construction would have a less than significant impact associated with noise hazards associated with airports.

3.11.6.3.2.2 Operational Impacts

As described in Section 2 (Project Description), the proposed Project includes an underground tunnel alignment operating approximately 70-feet deep that would serve as a transportation route for autonomous electric vehicles. In addition, the southern portion of the proposed Project includes two at-grade stations within the ALUCP that would be located within the parking lots of ONT Terminal 2 and

ONT Terminal 4. The ONT ALUCP implements relevant policies and guidelines for land use compatibility and specific findings of compatibility or incompatibility of land uses within the Noise Impact Zones. The southern portion of the proposed Project is located in the Noise Impact Zone 60-65 dB CNEL and Zone 65-70 dB CNEL, as shown in Figure 3.11-8. The ALUCP's Table 2-3 (Noise Criteria) has determined that transportation uses including 1) Rail and Bus Stations; 2) Transportation Routes: roads and rail right-of-way, bus stops; and 3) Auto Parking: surface lots and structures are a compatible use in Noise Impact Zone 60-65 dB CNEL and Noise Impact Zone 65-70 dB CNEL. The ALUCP has determined that activities associated with the land uses listed may be carried out with minimal interference from aircraft noise. Therefore, per the ALUCP, the proposed Project is a compatible use within the ONT Noise Impact Zones. With adherence to all local, state, and federal regulations, the proposed Project during operation would have a less than significant impact associated with noise hazards associated with airports, which includes excessive noise levels.

3.11.7 Mitigation Measures

No mitigation measures are required for the proposed Project during construction and operation.

3.11.8 Impacts After Mitigation

3.11.9 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?

No mitigation measures are required, and the proposed Project would have a less than significant impact.

3.11.10 Generation of Excessive Ground-Borne Vibration or Ground-Borne Noise Levels?

No mitigation measures are required, and the proposed Project would have a less than significant impact.

3.11.11 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?

No mitigation measures are required, and the proposed Project would have a less than significant impact.

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3.12 POPULATION AND HOUSING

3.12.1 Introduction

This section of this Draft Environmental Impact Report (EIR) provides a summary of the evaluation of the impacts on population, housing, and employment resulting from the implementation of the proposed Ontario International Airport (ONT) Connector Project (Project). This Draft EIR section also summarizes existing and forecasted population and housing in the proposed Project vicinity. Detailed information for population, housing, and employment are included in the Community Impact Assessment Technical Report (SBCTA 2024; Appendix E).

3.12.2 Regulatory Framework

3.12.2.1 Federal

There are no applicable federal plans, policies, or regulations related to population and housing.

3.12.2.2 State

3.12.2.2.1 California Environmental Quality Act

California Environmental Quality Act (CEQA) Section 21000 et seq. and the CEQA Guidelines (Sections 15000 et seq.) require state and local agencies to identify the significant environmental impacts of their actions, including potential significant impacts associates with population and housing, and to avoid or mitigate those impacts, when feasible.

3.12.2.2.2 California Relocation Assistance Act

California Relocation Assistance Act requires a public entity to provide relocation assistance and benefits if a project requires relocation of people and businesses. California Relocation Assistance Act seeks to: (1) ensure consistent and fair treatment of owners of real property, (2) encourage and expedite acquisition by agreement to avoid litigation and relieve congestion in the courts, and (3) promote confidence in the public land acquisitions process. Owners of private property have state constitutional guarantees that their property will not be acquired, taken, or damaged for public use unless they first receive an offer of just compensation. A just compensation amount is measured by the "fair market value" (FMV) of the real estate property interests and rights acquired, where the FMV is considered to be the:

> *"Highest price on the date of valuation that would be agreed to by a seller, being willing to sell, but under no particular or urgent necessity for so doing, nor obliged to sell; and a buyer, being ready, willing and able to buy but under no particular necessity for so doing, each dealing with the other with the full knowledge of all the uses and*

purposes for which the property is reasonably adaptable and available." (California Code of Civil Procedure Section 1263.320a.)

The establishment of the FMV of a property is determined by an independent appraisal opinion of value of a property's worth that is just and equitable on the open market and confirmed by an outside independent review appraisal.

3.12.2.2.3 California Code of Civil Procedure (Section 1230.010 et seq.)

Title 7 of the California Code of Civil Procedure (1975) describes California's Eminent Domain Law. Eminent Domain is the power of local, state, or federal government agencies to take private property for public use so long as the government provides just compensation to the property owner.

3.12.2.3 Regional

3.12.2.3.1 Southern California Association of Governments

The Southern California Association of Governments (SCAG) is the Metropolitan Planning Organization that oversees regional planning efforts for the six-county region consisting of: Los Angeles, Orange, Riverside, San Bernardino, Ventura, and Imperial counties. SCAG's planning efforts focus on strategies to minimize traffic congestion, protect environmental quality, and provide adequate housing throughout the region. Adopted on September 3, 2020, SCAG's Connect SoCal 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) is a long-range visioning plan that builds upon and expands land use and transportation strategies established over several planning cycles to increase mobility options and achieve a more sustainable growth pattern (SCAG 2020a).

Connect SoCal projects growth in employment, population, and households at the regional, county, city, town, and neighborhood levels. These projections take into account economic and demographic trends, as well as feedback reflecting on-the-ground conditions from SCAG's jurisdictions. The impacts analysis uses these projections to establish the magnitude of impacts related to growth. The Connect SoCal 2020-2045 RTP/SCS (SCAG 2020a) goals that focus on communities and neighborhoods include the following:

- Align the plan investments and policies with improving regional economic development and competitiveness.
- Encourage land use and growth patterns that facilitate transit and active transportation.
- Encourage regional economic prosperity and global competitiveness.
- Improve mobility, accessibility, reliability, and travel safety for people and goods.
- Enhance the preservation, security, and resilience of the regional transportation system.
- Increase person and goods movement and travel choices within the transportation system.

- Reduce greenhouse gas emissions and improve air quality.
- Support healthy and equitable communities.
- Adapt to a changing climate and support an integrated regional development pattern and transportation network.
- Leverage new transportation technologies and data-driven solutions that result in more efficient travel.
- Encourage development of diverse housing types in areas that are supported by multiple transportation options.

3.12.2.3.1.1 Regional Housing Needs Assessment

State law requires that all cities and counties provide a certain amount of housing to accommodate the demands of the growing population. California Department of Housing and Community Development is responsible for determining the statewide housing need, while local governments and councils of governments determine the specific housing needs within their jurisdictions and prepare a Regional Housing Needs Assessment (RHNA). SCAG prepares the RHNA for encompassed jurisdictions, including the City of Ontario and the City of Rancho Cucamonga. The housing needs identified for a particular city are based on four income categories: very low income, low income, moderate income, and above moderate-income households.

3.12.2.3.2 San Bernardino Council of Governments

The San Bernardino Council of Governments (SBCOG) was established in 1973 as a subregional council under a joint powers agreement formerly known as the San Bernardino Associated Governments (SANBAG) [SBCTA 2017]. In 2016, SANBAG sponsored Senate Bill 1305 to consolidate its transportation functions—such as the County Transportation Commission, local transportation authority, service authority for freeway emergencies, and local congestion management agency—into a single entity, the San Bernardino County Transportation Authority (SBCTA). The bill was passed and signed into law in August 2016, resulting in SANBAG, with the exception of the Council of Governments, becoming statutorily known as SBCTA on January 1, 2017. SANBAG has continued operating as the San Bernardino Council of Governments (SBCOG), a Joint Powers Authority focusing on regional governance and related responsibilities.

3.12.2.3.2.1 Ontario Airport Rail Access Study

The 2014 Ontario Airport Rail Access Study (SANBAG 2014) identified the need for a direct rail-to-airport connection to ONT to support its projected growth for air travelers and airport employees. Based on the need, the study aimed to develop a project or projects to meet the needs of current and forecasted passenger and employment growth, and improved direct first/last-mile connections between the Cucamonga Metrolink Station and ONT.

3.12.2.4 Local

A list of relevant local goals and polices are discussed in the Community Impacts Assessment Technical Report (SBCTA 2024; Appendix E). A summary of local goals and policies is provided in the following section.

3.12.2.4.1 San Bernardino County

The San Bernardino County General Plan Land Use (LU), Housing (H), and Economic Development (ED) Elements set forth goals and policies related to population forecasts and housing needs (San Bernardino County 2020). A brief summary of applicable goals and policies are provided as follows:

- Goal LU-1 addresses fiscally sustainable growth.
    - Policy LU-1.1 outlines growth and development guidelines that balances housing, the economy, and fiscal responsibility.
- Goal H-1 addresses housing production and supply.
    - Policy H-1.2 supports concurrent infrastructure.
- Goal ED-3 addresses countywide business and employment growth.
    - Policy ED-3.6 addresses countywide tourism.

3.12.2.4.2 City of Rancho Cucamonga General Plan

The City of Rancho Cucamonga's General Plan (City of Rancho Cucamonga 2021) establishes the goals, policies, and measures of success for the City of Rancho Cucamonga as expressed by its people during the outreach process. The following policies contained within the Land Use & Community Character (LC), and Housing (H) sections of the General Plan are relevant to the proposed Project as it relates to population and housing:

- Goal LC-3 encourages a fiscally sustainable city.
    - Policy LC-3.1 manages community value development.
    - Policy LC-3.5 encourages sustainable development.
- Goal H-1 supports diverse housing opportunities.
- Goal H-6 supports equitable housing opportunities.
    - Policy H-6.2 supports development projects improving access to resources and opportunities.

3.12.2.4.3 City of Ontario General Plan

The Land Use (LU), Housing (H), and Community Economics (CE) Elements of the City of Ontario's General Plan (City of Ontario 2022) includes goals and policies related to population and housing in Ontario. A brief summary of applicable goal and policies are provided below:

- Goal LU-1 supports diverse and financially accessible housing opportunities.
  - Policy LU-1.1 addresses strategic growth.
  - Policy LU-1.2 outlines a sustainable community strategy.
  - Policy LU-1.3 addresses adequate infrastructure for development.
- Goal LU-2 addresses land use compatibility.
  - Policy LU-2.11 addresses context-aware transitions and connections.
- Goal LU-4 addresses phased growth.
  - Policy LU-4.1 addresses time sensitive infrastructure.
- Goal LU-5 addresses airport planning.
  - Policy LU-5.1 addresses airport planning consistency.
- Goal H-1 addresses neighborhoods and housing cohesion.
  - Policy H-1.1 addresses strategic growth.
- Goal CE-1 encourages complete community planning.
  - Policy CE-1.1 addresses job-housing balance.
  - Policy CE-1.12 address circulation.

3.12.3 Methodology

This analysis considers whether population and household growth would occur with implementation of the proposed Project and whether this growth: (1) is within local or regional forecasts; (2) can be considered substantial with respect to remaining growth potential in the City as articulated in the City of Rancho Cucamonga General Plan and the City of Ontario General Plan; and/or (3) would result in the displacement of housing or people. In addition, this analysis of potential population and housing impacts considers whether population growth and residential development were previously assumed to occur in a particular area. Specifically, population and housing impacts were analyzed by comparing the proposed Project with growth projections for the City of Rancho Cucamonga and the City of Ontario from SCAG as well as the City of Rancho Cucamonga General Plan and the City of Ontario General Plan. The potential

for the proposed Project to indirectly induce growth by extending roads or infrastructure is addressed in Section 3.17 (Growth-Inducing Impacts) of this Draft EIR.

3.12.4 CEQA Thresholds of Significance

According to Appendix G of the 2024 CEQA Guidelines, implementation of the proposed Project may result in a potentially significant impact if it would:

- 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); and
- Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.

3.12.5 Existing Settings

The proposed Project site is located within San Bernardino County, the City of Rancho Cucamonga and the City of Ontario in California. San Bernardino County's 2022 population was estimated at 2,187,655 persons and is anticipated to increase to approximately 3,252,000 persons by 2045. The City of Rancho Cucamonga's 2022 population was 174,476, up 5.57 percent (%) from 165,269 in 2010. The City of Rancho Cucamonga's population is expected to increase to 201,300 by 2045. The City of Ontario's population grew from 163,924 in 2010 to 179,516 in 2022 (9.5 percent [%]) and is anticipated to increase to 269,100 by 2045. A summary of population breakdown is in Table 3.12-1.

Table 3.12-1 Existing (2022) and Projected Population

Jurisdiction	2010[1]	2020[1]	2022[2]	2030[3]	2045[3]	% Increase 2010–2045
San Bernardino County	2,035,210	2,122,579	2,187,665	2,474,000	3,252,000	59.8
City of Rancho Cucamonga	165,269	175,052	174,476	-	201,300	21.8
City of Ontario	163,924	180,788	179,516	-	269,100	64.2

Source: [1] Department of Finance 2021; [2] Department of Finance 2022; and [3] SCAG 2020b.

The employed population in San Bernardino County, the City of Rancho Cucamonga and the City of Ontario is also projected to increase between 2016 and 2045. As shown in Table 3.12-2, by 2045, the employed population is projected to increase by 34.5% in San Bernardino County, 19.0% in the City of Rancho Cucamonga and 48.6% in the City of Ontario as compared to the employed population in 2016 in these jurisdictions, respectively.

Table 3.12-2 Existing and Projected Employment

Jurisdiction	Employed Population in 2016	Employed Population in 2045	% Increase 2016–2045
San Bernardino County	791,000	1,064,000	34.5%
City of Rancho Cucamonga	88,300	105,100	19.0%
City of Ontario	113,900	169,300	48.6%

Source: SCAG 2022b

Household numbers have increased in San Bernardino County, the City of Rancho Cucamonga and the City of Ontario as shown in Table 3.12-3. In accordance with SCAG's 6th Cycle Final RHNA Allocation Plan, the City of Rancho Cucamonga must accommodate 10,525 units, of which 5165 units must be affordable to lower-income households (Very Low and Low). The City of Ontario's 2021-2029 Housing Element must accommodate a total of 20,854 units, of which 8,926 units must be affordable to lower-income households (Very Low and Low). Construction of new housing is not mandated by the RHNA, which is intended as a planning tool and a guide to an equitable distribution of housing.

Table 3.12-3 Existing and Projected Households

Jurisdiction	2016	2030	2035	2045	Increase 2020–2045
San Bernardino County	630,000	751,000	793,000	875,000	38.9%
City of Rancho Cucamonga	56,800	-	-	66,400	17%
City of Ontario	46,000	-	-	74,500	62%

Source: SCAG 2022b
Note: The 2020–2045 RTP/SCS Draft Growth Forecast does not include forecasts for census tracts.

3.12.6 Impact Evaluation

3.12.6.1 I**nduce 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)?

3.12.6.1.1 No Project Alternative

The No Project Alternative includes planned expansion, improvement projects, and routine maintenance activities for the existing roadway system and transit facilities. Induced substantial unplanned population growth in the No Project Alternative area, either directly or indirectly, is not anticipated resulting from the No Project Alternative. Construction and operation activities associated with the No Project Alternative would be subject to project and site-specific evaluation. Therefore, the No Project Alternative would have a less than significant impact.

3.12.6.1.2 Proposed Project

3.12.6.1.2.1 Construction Impacts

The proposed Project does not include a housing component or other population generating development. In addition, it is anticipated that local and/or out-of-area construction employees would commute from elsewhere in the region, rather than relocate to the proposed Project area for a temporary construction assignment. According to the California Employment Development Department (EDD), and the Local Area Unemployment Statistics (LAUS), the annual average unemployment rate in 2022 in the County was 3.8 percent (LAUS 2022). In March 2022, the City of Ontario had a slightly higher percentage (4.1 percent) of unemployed civilians than San Bernardino County, and the City of Rancho Cucamonga had a lower percentage (3.2 percent) of unemployed civilians than San Bernardino County. Given the current unemployed population within the region, construction workers are anticipated to be from the local area, live within driving distance from the job site, and would not require moving to the surrounding area for work. Up to 200 employees composed of construction and engineering staff are anticipated on the proposed Project site during the construction phase. The construction phase of the proposed Project would be temporary and would not directly or indirectly induce unplanned population growth in the area. Therefore, the proposed Project would not directly or indirectly induce substantial population growth during construction and would have a less than significant impact.

3.12.6.1.2.2 Operational Impacts

In 2014, SANBAG prepared the Ontario Airport Rail Access Study. The study identified the need for a direct rail-to-airport connection to ONT to support the airport's projected growth. Under a constrained capacity scenario for the four other regional airports, ONT could experience 33 million annual passengers by 2045 (HDR Engineering Inc. 2014). The proposed Project is a direct rail-to-airport connection providing direct transportation mobility from Cucamonga Metrolink Station to ONT in anticipation of the regional growth. The proposed Project would result in a 4.2-mile, underground tunnel; three stations; maintenance and storage facility (MSF); and one ventilation shaft (vent shaft).

The increase in the number of employees is expected to be proportional to the increase in air passengers. The increase in airport population would require additional employees for the ONT airport. The increase in air passengers and increase in airport employees could potentially increase the ridership during the operation of the proposed Project. The proposed Project is in anticipation of and in preparation for the potential growth that has been accounted for in the General Plans and SANBAG's Ontario Airport Rail Access Study and it would not cause growth that would exceed planned growth. The proposed Project does not include any housing components or other population generating developments. In addition, employees and an increase in air passengers are anticipated to be from the region and would not require additional housing to exceed any planned growth for the City of Rancho Cucamonga and the City of Ontario General Plans. No new households within the City of Rancho Cucamonga and the City of Ontario are expected to be required to accommodate the proposed Project. Therefore, implementation of the

proposed Project would not directly or indirectly induce substantial population growth in the area during operation, and the proposed Project would have a less than significant impact.

3.12.6.2 D**isplace substantial numbers of existing people or housing, necessitating the construction of** replacement housing elsewhere?

3.12.6.2.1 No Project Alternative

The No Project Alternative includes planned expansion, improvement projects, and routine maintenance activities for the existing roadway system and transit facilities. Displacement of existing people or housing, necessitating the construction of replacement housing is not anticipated to result from the No Project Alternative. Therefore, the No Project Alternative would have a less than significant impact.

3.12.6.2.2 Proposed Project

3.12.6.2.2.1 Construction Impacts

The proposed Project would require temporary construction easements that would be used as construction staging areas or to allow construction access. None of the construction easements involve displacement of existing people or housing, as none of the construction easements involve properties which contain houses or businesses. No property would be acquired for the implementation of the proposed Project. Therefore, no existing homes or businesses would be displaced and replacement housing would not be required. Construction workers are anticipated to be from the local area, live within driving distance from the job site, and would not require moving to the surrounding area for work to necessitate additional housing. Therefore, implementation of the proposed Project would not displace any existing housing, and no change to the housing stock of the City of Rancho Cucamonga and the City of Ontario would result. The proposed Project would not displace people or housing during construction and the proposed Project would have no impact.

3.12.6.2.2.2 Operational Impacts

As previously mentioned, the proposed Project would require construction easements that would be used as construction staging areas or to allow construction access. These construction easements would become permanent surface easements upon completion of construction for operation of the proposed Project. None of the permanent surface easements for implementation of the proposed Project involve displacement of existing people or housing, and no property would be acquired. TCEs that become permanent easements are either subsurface or on land already owned by the City of Rancho Cucamonga. One permanent surface easement is required for the vent shaft but is within the Interstate 10 cloverleaf exit at Milliken Avenue and no Assessor's Parcel Number is associated with this land. Therefore, no existing homes or businesses would be displaced, and replacement housing would not be required due to the implementation of the proposed Project. The proposed Project would not displace people or housing during operation and the proposed Project would have no impact.

3.12.7 Mitigation Measures

3.12.7.1 Proposed Project

No mitigation measure would be required for the proposed Project.

3.12.8 Impacts After Mitigation

3.12.8.1 **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)?

No mitigation measure would be required and the proposed Project would have a less than significant impact.

3.12.8.2 **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)?

No mitigation measure would be required and the proposed Project would have no impact.

3.13 PUBLIC SERVICES AND RECREATION

3.13.1 Introduction

This section of this Draft Environmental Impact Report (EIR) provides a summary of the evaluation of the impacts to public services related to implementation of the proposed Ontario International Airport (ONT) Connector Project (Project). Detailed information for public services and recreation is included in the Community Impact Assessment Technical Report (SBCTA 2024; Appendix E). For purposes of this Draft EIR, public services consist of (1) fire protection, (2) police protection, (3) schools/other public facilities, and (4) parks. Impacts related to emergency access are analyzed in Section 4.14 (Transportation and Traffic) of this Draft EIR.

3.13.2 Regulatory Framework

3.13.2.1 State

3.13.2.1.1 California Environmental Quality Act

California Environmental Quality Act (CEQA) (Sections 21000 et seq.) and CEQA Guidelines (Sections 15000 et seq.) requires state and local agencies to identify the significant environmental impacts of their actions, including potential significant impacts associated with public services and recreation, and to avoid or mitigate those impacts, when feasible.

3.13.2.1.2 California Fire Code

California Fire Code, Title 24 California Code of Regulations, Part 9 is based on the 2019 International Fire and Building Codes and contains regulations relating to construction and maintenance of buildings and the use of premises. Topics addressed in the code include fire department access, fire hydrants, automatic sprinkler systems, fire alarm systems, fire and explosion hazards safety, hazardous materials storage and use, provisions intended to protect and assist first responders, industrial processes, and many other general and specialized fire-safety requirements for new and existing buildings and premises. The code contains specialized technical regulations related to fire and life safety.

3.13.2.1.3 California Health and Safety Code

State fire regulations are set forth in the California Health and Safety Code and include regulations concerning building standards (as also set forth in the California Building Code), fire protection and notification systems, fire protection devices such as extinguishers and smoke alarms, high-rise building and childcare facility standards, and fire suppression training.

3.13.2.1.4 California Penal Code

All law enforcement agencies within the State of California are organized and operated in accordance with the applicable provisions of the California Penal Code. This code sets forth the authority, rules of conduct, and training for peace officers. Under state law, all sworn municipal and county officers are state peace officers.

3.13.2.1.5 California State Assembly Bill 2926 —School Facilities Act of 1986

Assembly Bill (AB) 2926 was passed in 1986 and is known as the *School Facilities Act*. The Act authorizes imposition and collection of school facilities fees assessed against new construction by local districts to generate revenue for capital acquisitions and improvements. It also established that the maximum fees (adjustable for inflation) which may be collected under this and any other school fee authorization program.

3.13.2.1.6 California Senate Bill 50—Leroy Green School Facilities Program (1998)

Senate Bill (SB) 50 defined the Needs Analysis process in Government Code Sections 65995.5–65998. Under the provisions of SB 50, school districts may collect fees to offset the costs associated with increasing school capacity as a result of development. The fees (referred to as Level One fees) are assessed based upon the proposed square footage of residential, commercial/industrial, and/or parking structure uses.

3.13.2.1.7 Quimby Act

California Government Code Section 66477, more commonly referred to as Quimby Act, was established by the California legislature in 1965 to provide parks for the growing communities in California. The Act authorizes cities to adopt ordinances addressing park land and/or fees for residential subdivisions for the purpose of providing and preserving open space and recreational facilities and improvements. The Act also specifies acceptable uses and expenditures of such funds.

3.13.2.2 Regional and Local

A list of relevant local goals and polices are discussed in the Community Impact Assessment Technical Report (SBCTA 2024; Appendix E). A summary of local goals and policies is provided in the following section.

3.13.2.2.1 San Bernardino County General Plan

The San Bernardino County General Plan, Personal and Property Protection (PP) Element and the Natural Resources (NR) Element, sets forth goals and policies that regulate public services and recreation in the

County (San Bernardino County 2020). The following goals and policies are applicable to the proposed Project:

- Goal PP-1 addresses crime prevention and law enforcement to support public safety.
    - Policy PP-1.1 provides law enforcement services for unincorporated areas and distributes resources.
    - Policy PP-1.2 provides law enforcement services to incorporated jurisdictions by contract.
    - Policy PP-1.4 allocates crime prevention resources based on data and community input.
    - Policy PP-1.6 establishes partnerships between the Sheriff's Department and other law enforcement agencies.
    - Policy PP-1.9 establishes periodic needs assessments for the Sheriff's Department.
- Goal PP-3 addresses fire and emergency medical response.
    - Policy PP-3.1 maintains fire and emergency medical services.
    - Policy PP-3.4 implements the California Fire Code and provides fire prevention services.
    - Policy PP-3.5 coordinates firefighting water supply and facilities.
    - Policy PP-3.6 addresses concurrent protection services prior to or in conjunction with new development.
    - Policy PP-3.12 allocates fire protection and emergency medical resources.
    - Policy PP-3.13 supports periodic needs assessments of facilities, equipment, and staffing.
- Goal NR-3 supports open space, parks, and recreation, and preserves the natural environment.
    - Policy NR-3.6 coordinates regional park land and maintains existing County parks and trails.
    - Policy NR-3.9 provides local parks, trails, and recreational programs in unincorporated areas.

3.13.2.2.2 City of Rancho Cucamonga General Plan

The City of Rancho Cucamonga General Plan, Public Facilities & Services (PF) Element and Open Space (OS) Element, sets forth goals and policies that regulates public services and recreation in the City of Rancho Cucamonga (City of Rancho Cucamonga 2021a). The following goals and policies are applicable to the proposed Project:

- Goal PF-2 addresses access to high-quality educational opportunities.
    - Policy PF-2.1 addresses the future needs of school districts serving Rancho Cucamonga.
    - Policy PF-2.2 maintains educational, vocational, and workforce programs in partnership with local schools.

- Goal PF-3 provides high-quality library resources.
    - Policy PF-3.1 improves local library systems.
- Goal OS-1 supports a complete, connected network of open spaces.
    - Policy OS-1.7 provides adequate park and recreational facilities.
- Goal OS-2 encourages a network of diverse trails and connected open space.

3.13.2.2.3 City of Rancho Cucamonga Municipal Code

Title 17 (Development Code), of the City of Rancho Cucamonga Municipal Code (2022a) provides regulations related to public services and recreation that are applicable to the proposed Project. The purpose and intent of Title 17 is to set standards and guidelines for the City of Rancho Cucamonga that are established and adopted to protect and promote the public health, safety, moral, comfort, convenience, and welfare, and more particularly to:

- Implement the goals and objectives of the General Plan and to guide and manage the future growth of the City of Rancho Cucamonga in accordance with such plan.
- Protect the physical, social, and economic stability of residential, commercial, industrial, and other land uses within the City of Rancho Cucamonga to assure its orderly and beneficial development.
- Reduce hazards to the public resulting from the inappropriate location, use, or design of buildings and other improvement.
- Attain the physical, social, and economic advantages resulting from comprehensive and orderly land use and resources planning.

Ordinance Number 912 regarding creative placemaking and public art under the City of Rancho Cucamonga Municipal Code requires the proposed Project to adhere to the general welfare and enhance the quality of life for city residents, workers, and visitors by improved public placemaking which would require certain developments to include or provide for public art or architecture that qualifies as art (City of Rancho Cucamonga 2022a).

3.13.2.2.4 City of Ontario General Plan

The City of Ontario General Plan, Safety (S) Element and Parks & Recreation (PR) Element, sets forth goals and policies that regulate public services and recreation in the City of Ontario (City of Ontario 2022a). The following goals, and policies are applicable to the proposed Project:

- Goal PR-1 supports planning and design of safe and accessible parks.
    - Policy PR-1.1 provides access to parks and recreational facilities in walking distance.

- Policy PR-1.3 addresses external and City funding for capital improvements, operations, and maintenance.
- Policy PR-1.8 examines renovation prior to building replacement of existing facilities.

- Goal PR-2 supports a range of recreational programs.
  - Policy PR-2.1 facilitates maximum utilization and participation in park recreational programs.
  - Policy PR-2.2 maintains a needs assessment for recreational programming.
- Goal S-3 addresses and reduces risk of fire and rescue hazards and promotes emergency response.
  - Policy S-3.1 maintains prevention services related to fire, hazardous material release, and structural collapse.
  - Policy S-3.3 manages fire and emergency medical services.
  - Policy S-3.6 supports interagency cooperation for emergency response.
  - Policy S3.8 requires fire prevention through environmental design for new development.
  - Policy S-3.9 allocates resources for fire incidents based on fire data.
- Goal S-7 addresses law enforcement to promote public safety.
  - Policy S-7.1 maintains police unit response.
  - Policy S-7.3 provides crime prevention programs.
  - Policy S-7.7 allocates resources for crime prevention and reduction.

3.13.2.2.5 City of Ontario Municipal Code

The City of Ontario Municipal Code (OMC), Title 4 (Public Safety), Chapter 3 (Emergency Organization) has been established to provide for the preparation and carrying out of plans for the protection of persons and property within the City of Ontario in the event of an emergency. This chapter provides direction of the emergency organization and the coordination of the emergency functions with all other public agencies, corporations, organizations, and affected private persons. OMC Title 4 (Public Safety), Chapter 4 (Fire Code) adopts the 2019 California Fire Code and the International Fire Code for the City of Ontario and establishes the fire codes for the City of Ontario (City of Ontario 2021).

3.13.3 Methodology

Impacts to fire protection services and police protection services are considered significant if an increase in population or building area would result in inadequate staffing levels and/or increased demand for services that would require the construction of new or the expansion of existing facilities that may have an adverse physical effect on the environment.

Impacts on schools are determined by analyzing the projected increase in the demand for schools as a result of the proposed Project and comparing the projected increase with the schools' remaining capacities to determine whether new or altered facilities would be required. Impacts related to other public services were evaluated based on the ability of other existing and planned public facilities such as libraries and community centers to determine whether new or altered facilities would be required.

Impacts related to parks were evaluated based on the ability of existing and planned parks and other recreational facilities to meet additional demand resulting from implementation of the proposed Project.

Impacts on recreation services are also considered significant if an increase in population would result in physical deterioration of recreations facilities or an acceleration that would require the construction new, or the expansion of existing, facilities that may have an adverse physical effect on the environment.

3.13.4 CEQA Thresholds of Significance

According to Appendix G of the 2024 CEQA Guidelines, implementation of the proposed Project may result in a potentially significant impact if it would:

- Result in substantial adverse physical impacts associated with the provision of, or need for, new or physically altered fire protection and emergency response facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for fire protection and emergency response;
- Result in substantial adverse physical impacts associated with the provision of, or need for, new or physically altered police protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for police protection;
- Result in substantial adverse physical impacts associated with the provision of, or need for, new or physically altered school facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for schools and/or result in substantial adverse physical impacts associated with the provision of, or need for, new or physically other public facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives other public facilities;
- Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated; and
- Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment and/or result in substantial adverse physical impacts associated with the provision of, or need for, new or physically altered recreational facilities, the construction of which could cause significant environmental impacts, in

order to maintain acceptable service ratios, response times, or other performance objectives for parks.

3.13.5 Existing Settings

3.13.5.1 Fire Services

3.13.5.1.1 City of Rancho Cucamonga Fire Services

In 1975, the Alta Loma Fire District and the Cucamonga Fire District were consolidated to form the Foothill Fire Protection District. On July 1, 1989, the Foothill Fire Protection District was legislatively re-organized to a subsidiary district of the City of Rancho Cucamonga and was renamed the Rancho Cucamonga Fire Protection District (RCFPD). RCFPD covers 50 square miles with seven fire stations. Each fire station is staffed with a three-person fire engine with two of the stations also housing a four-person fire truck (City of Rancho Cucamonga 2022b). Table 3.13-1 identifies the existing fire stations closest to the proposed Project. Figure 3.13-1 also shows the location of the RCFPD fire stations.

Table 3.13-1. Rancho Cucamonga Fire Protection District Fire Stations Near Proposed Project Site

Station	Distance from Proposed Project Site (miles)	Direction from Closest Point of Proposed Project Site	Address
Station 174	0.14	North	11297 Jersey Boulevard, Rancho Cucamonga, California 91730
Headquarters	0.9	Northwest	10500 Civic Center Drive, Rancho Cucamonga, California 91730

Source: City of Rancho Cucamonga 2022c

3.13.5.2 City of Ontario Fire Services

The City of Ontario Fire Department (OFD) has 10 fire stations strategically located including the fire station number 10 at ONT. The OFD has 227 personnel comprised of 186 sworn firefighter and 41 professional staff members serving across six bureaus. The six bureaus include the Operation/Airport Services, Fire Prevention, Support Services, Emergency Medical Services, Training and Professional Services, and Administrative Services. The OFD stations have a daily staffing level of 59 sworn firefighters with nine (9) four-person paramedic engine companies, three(3) four-person truck companies, an eight-person Airport Rescue and Fire Fighting Station, one fire investigation supervisor, and two battalion chiefs (City of Ontario 2022b). Table 3.13-2 identifies the fire stations closest to the proposed Project. Figure 3.13-1 also shows the location of the OFD fire stations closest to the proposed Project.

Table 3.13-2. City of Ontario Fire Department Fire Stations Near Proposed Project Site

Fire Station	Distance from Project Site (miles)	Direction from Closest Point of the Proposed Project Site	Address
Station 3	2.3	Southwest	1408 East Francis Street, Ontario, California, 91761
Station 6	1.8	South	2931 East Philadelphia Street, Ontario, California, 91761
Station 10	at ONT	at ONT	1230 Tower Drive, Ontario, California, 91761
Station 5	1.7	Northwest	1530 East 4th Street, Ontario, California, 91764
Station 8	0.5	North	3429 East Shelby Street, Ontario, California, 91764

Source: City of Ontario 2022b

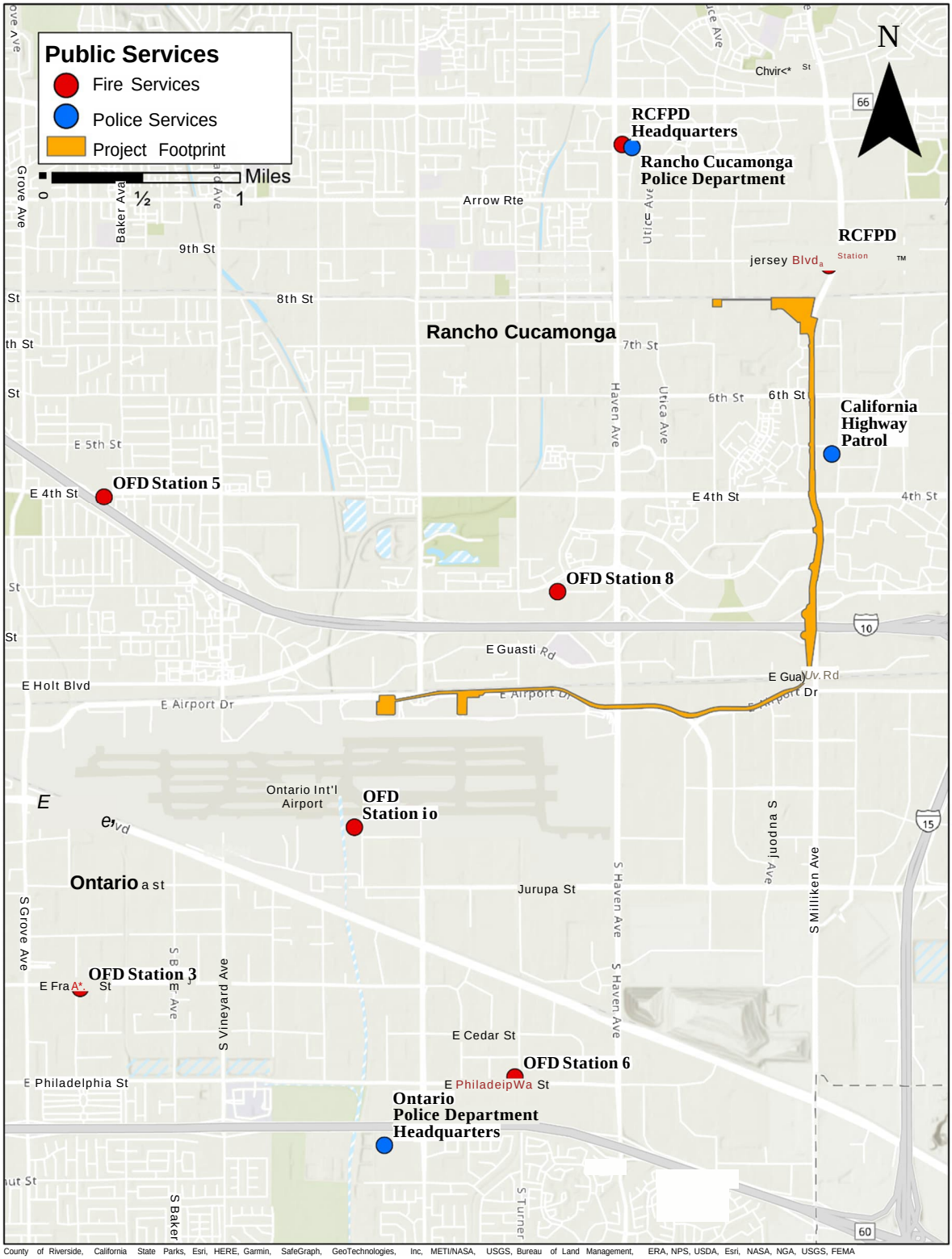
3.13.5.3 Police Services

3.13.5.3.1 City of Rancho Cucamonga Police Services

San Bernardino County Sheriff's Department (SBCSD) is the law enforcement agency for the largest geographical county in the nation. SBCSD serves over 2.1 million residents, with eight county and 14 contract patrol stations and approximately 3,600 employees with 1,800 volunteers (SBCSD 2022a). SBCSD's dispatch center takes in approximately 1,014,509 calls for service annually, with deputies writing approximately 102,271 reports annually. SBCSD has an annual detentions budget of $244,201,708 (SBCSD 2022a).

SBCSD has provided services for the City of Rancho Cucamonga since the city incorporated in 1977. There are 182 Sheriff's personnel serving the citizens of the City of Rancho Cucamonga. As shown in Figure 3.13-1, the San Bernardino County Sheriff patrol station serving the City of Rancho Cucamonga is located approximately 0.87 miles northwest of the proposed Project at 10510 Civic Center Drive in the City of Rancho Cucamonga (SBCSD 2022b). The station not only provides sufficient patrol services, but also provides a significant full-service traffic division, which includes motor units, Major Accident Investigation Team, a commercial enforcement unit, and a parking enforcement unit. A Multiple Enforcement Team, including a Bicycle Enforcement Team, provides a well-rounded community-based policing unit. In addition, the station also provides six School Resource Officers (who service each of the City of Rancho Cucamonga's high schools, middle schools, and elementary schools), a crime prevention unit, a crime analysis unit, and a well-diversified and experienced detective division.

Figure 3.13-1 Fire Station and Police Station Locations



Source: (City of Ontario 2022b; City of Rancho Cucamonga 2022c)

3.13.5.3.2 City of Ontario Police Services

The City of Ontario is serviced by the City of Ontario Police Department (OPD). As shown in Figure 3.13-1, the OPD headquarters is located 2.8 miles south of the proposed Project at 2500 South Archibald Avenue in the City of Ontario. OPD consists of the Airport Operations Bureau (AOB), Investigations, and the Special Operations unit. The AOB consists of police officers, explosive detection canines, narcotic detection canines, and community service officers. The AOB patrols all areas of ONT, investigates crimes, manages traffic flows and response to airport emergencies, and enforces Transportation Safety regulations and the airport security program. The Investigations unit is responsible for the investigation of crimes committed in the City of Ontario, including narcotics and crime scene investigations. The Specials Operations unit includes Air Support, Special Weapons and Tactics Team, Traffic Division, ABC Enforcement, Graffiti and Tagging, Crime Free Multi-housing Program, and Transient Enforcement (City of Ontario 2022c).

3.13.5.3.3 California Highway Patrol

California Highway Patrol (CHP) was created in 1929 to provide uniform traffic law enforcement through the state (CHP 2022a). CHP has patrol jurisdiction on freeways in the State of California, including Interstate 10. The CHP Rancho Cucamonga Area is part of the CHP's Inland Division and patrols over 250 miles of freeways and unincorporated roadways. The CHP Rancho Cucamonga Area station is located approximately 0.7 miles east of the closest point of the proposed Project at 9530 Pittsburgh Avenue, in the City of Rancho Cucamonga. The CHP Rancho Cucamonga Area is composed of 64 sworn officers, 10 civilian members, and 20 explorers (CHP 2022b).

3.13.5.4 School Services

The proposed Project is served by Cucamonga School District (CSD) and Ontario-Montclair School District (OMSD) for kindergarten through 8th grade (K-8). The City of Rancho Cucamonga is served by CSD with one preschool, three elementary schools, and one middle school (CSD 2022). The closest school to the proposed Project site is Los Amigos Elementary School, located approximately 3 miles west, at 8498 East 9th Street in the City of Rancho Cucamonga.

The City of Ontario is serviced by OMSD, which was founded in 1884 and serves the City of Ontario and the City of Montclair, portions of the City of Upland, and unincorporated areas of the San Bernardino County. OMSD has more than 21,800 pre-K-8 students with 22 elementary schools, six middle schools, four K-8 schools, and one Online Academy (OMSD 2022).

Chaffey Joint Union High School District (CJUHSD) serves the cities and the communities of Ontario, Montclair, Rancho Cucamonga, and portions of Fontana, Upland, Chino, and Mount Baldy. CJUHSD has provided high school education services since 1911. CJUHSD has approximately 24,000 students with eight comprehensive high schools, a continuation high school, an online high school, a community day school, an adult school, and alternative programs (CJUHSD 2022).

According to California Department of Education, Joshua Center Christian Academy is a private kindergarten through 12th grade school located 0.47-mile northwest of the proposed Project site at 8711 Monroe Court, Suite B in the City of Rancho Cucamonga (California Department of Education 2022a).

3.13.5.5 **Recreation**

The City of Rancho Cucamonga's Community Services Department operates park and recreational facilities and programs for the City of Rancho Cucamonga. The City of Rancho Cucamonga has approximately 338.3 acres of improved parkland (Colgan Consulting Company 2014). There is also the potential for an additional 70 acres of improved parkland with the development of remaining areas at Central Park (City of Rancho Cucamonga 2022d).

The City of Ontario has 528.66 acres of park space (City of Ontario 2022f). The City of Ontario's parks includes amenities such as basketball courts, barbeque area, community centers, drinking fountains, exercise equipment, horseshoe pits, pickleball, picnic tables/shelters, playgrounds, pool, restrooms, soccer field, softball/baseball field, tennis courts, tracks/walking paths and volleyball courts. The City of Ontario's Recreation and Community Services Department provides year-round public recreational services for all age groups. The department operates six community centers, a senior center, and provides programming in over 30 parks, three dog parks, and a municipal golf course (City of Ontario 2022f).

3.13.6 Impact Evaluation

3.13.6.1 **Result in substantial adverse physical impacts associated with the provision of, or need for, new or physically altered fire protection and emergency response facilities, the construction** of which could cause signi**fi**cant environmental impacts, in order to maintain acceptable **service ratios, response times, or other performance objectives for fire protection and** emergency response?

3.13.6.1.1 No Project Alternative

The No Project Alternative includes planned expansion, improvement projects, and routine maintenance activities for the existing roadway system and transit facilities. The No Project Alternative is not anticipated to increase or generate population growth during construction and operation activities to create new demands on fire services resulting in significant impacts to service ratios, response times, and other performance objectives. Construction workers associated with construction activities are temporary and would not require use of such public facilities. Construction and operation activities associated with the No Project Alternative would be subject to project and site-specific evaluation including environmental review, and mitigation would be required to reduce any potential impacts. Adherence to existing regulations would ensure that the impact to fire and emergency services would be less than significant.

3.13.6.1.2 Proposed Project

3.13.6.1.2.1 Construction Impacts

The proposed Project is not anticipated to generate or increase growth in population to create new demands on fire services such that significant impacts to service ratios, response times, and other performance objectives would occur. The proposed Project does not include a housing component or other population generating development. In addition, it is anticipated that local, and/or out-of-area construction employees would commute from elsewhere in the region, rather than relocate to the proposed Project area for a temporary construction assignment. The proposed Project would not increase or generate population growth during construction to create new demands on fire services such that significant impacts to service ratios, response times, and other performance objectives would occur. Therefore, fire protection services for the proposed project during construction would be less than significant.

3.13.6.1.2.2 Operational Impacts

RCFPD currently provides local fire services within the City of Rancho Cucamonga. OFD provides local fire services within the City of Ontario. Table 3.13-1 and Table 3.13-2 identify the RCFPD and OFD stations that would potentially be first-response facilities for the proposed Project.

The implementation of the proposed Project is not anticipated to generate or increase population growth to create new demands on fire services. The proposed Project does not include a housing component or other population-generating development. The City of Rancho Cucamonga and the City of Ontario commit sufficient funding from tax revenues to provide adequate staffing levels such that the police response times can be maintained. During operation, the proposed Project would also be managed by Omnitrans, which has its own Safety and Security Management Plan (SSPM) that outlines coordination between Omnitrans and emergency services to protect the patrons that utilize Omnitrans services. The Omnitrans SSMP defines activities, management controls, and monitoring processes that ensure that its patrons are adequately protected and local fire jurisdictions have appropriate and unimpeded access to the system in the event of an incident. As such, calls for emergency services from the proposed Project during operation would be accommodated by the existing fire protection facilities, and impacts associated with fire protection services would be less than significant.

3.13.6.2 **Result in substantial adverse physical impacts associated with the provision of, or need for, new or physically altered police protection facilities, the construction of which could cause** signi**fi**cant environmental impacts, in order to maintain acceptable s**ervice ratios, response times, or other performance objectives for police protection**?

3.13.6.2.1 No Project Alternative

The No Project Alternative includes planned expansion, improvement projects, and routine maintenance activities for the existing roadway system and transit facilities. The No Project Alternative is not

anticipated to increase or generate population growth during construction and operation activities to create new demands on police services resulting in significant impacts to service ratios, response times, and other performance objectives. Construction workers associated with construction activities are temporary and would not require use of such public facilities. Construction and operation activities associated with the No Project Alternative would be subject to project and site-specific evaluation including an environmental review process. Any potential impacts associated with police protection services would require mitigation measures. Therefore, with implementation of any necessary mitigation measures, the No Project Alternative would have a less than significant impact.

3.13.6.2.2 Proposed Project

3.13.6.2.2.1 Construction Impacts

The proposed Project does not anticipate to increase in population to create new demands on police services such that significant impacts to service ratios, response times, and other performance objectives would occur. The proposed Project does not include a housing component or other population-generating development. It is anticipated that local and/or out-of-area construction employees would commute from elsewhere in the region, rather than relocate to the proposed Project area for a temporary construction assignment. Therefore, the proposed Project during construction would not increase or generate population to increase the need of police protection services. Therefore, impacts associated with police protection services for the proposed Project would be less than significant.

3.13.6.2.2.2 Operational Impacts

Implementation of the proposed Project does not anticipate to increase or generate population growth to create new demands on police services such that significant impacts to service ratios, response times, and other performance objectives would occur. The proposed Project does not include a housing component or other population-generating development.

SBCSD currently provides local police protection services within the City of Rancho Cucamonga. OPD provides local police protection services within the City of Ontario. In addition, CHP provides traffic law enforcement on the freeways and roadways in the City of Rancho Cucamonga and the City of Ontario. The first-response facilities for the proposed Project include the SBCSD station located approximately 0.87 miles northwest of the proposed Project at 10510 Civic Center Drive in the City of Rancho Cucamonga, and the OPD station located 2.8 miles south of the proposed Project at 2500 South Archibald Avenue in the City of Ontario. The CHP station is also located 0.7 miles east of the proposed Project at 9530 Pittsburgh Avenue in the City of Rancho Cucamonga.

San Bernardino County evaluates the performance of SBCSD, and the City of Ontario evaluates the performance of the OPD on an annual basis. San Bernardino County, the City of Rancho Cucamonga, and the City of Ontario commit sufficient funding from tax revenues to provide adequate staffing levels such that the police response times can be maintained. During operation, the proposed Project would also be managed by Omnitrans, which has its own SSMP. This plan outlines coordination between Omnitrans and

emergency services to protect the patrons that utilize Omnitrans services. The Omnitrans SSMP defines activities, management controls, and monitoring processes that ensure that its patrons are adequately protected and local police jurisdictions have appropriate and unimpeded access to the system in the event of an incident. The proposed Project during operation would not create demands on police services such that significant impacts to service ratios, response times, and other performance objectives would occur, and the impact to police protection services would be less than significant.

3.13.6.3 **Result in substantial adverse physical impacts associated with the provision of, or need for, new or physically altered school facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for schools** and/or result **in substantial adverse physical impacts associated with the provision of, or need for, new or physically altered other public facilities, the construction of which could cause si**gnifi**cant** environmental impacts, in order to maintain **acceptable service ratios, response times, or other performance objectives for other public facilities**?

3.13.6.3.1 No Project Alternative

The No Project Alternative includes planned expansion, improvement projects, and routine maintenance activities for the existing roadway facilities and transit facilities. The No Project Alternative does not build housing or other development that would introduce new population. As such, the No Project Alternative is not anticipated to increase or generate population growth during construction and operation activities to create new demands on school facilities or other public facilities resulting in significant impacts to service ratios, response times, and other performance objectives. Construction workers associated with construction activities are temporary and would not require use of such public facilities. Construction and operation activities associated with the No Project Alternative would be subject to project and site-specific evaluation, including an environmental review process. Any potential impacts associated with the No Project Alternative onto school facilities or other public facilities would require mitigation measures. Therefore, the No Project Alternative would have a less than significant impact.

3.13.6.3.2 Proposed Project

3.13.6.3.2.1 Construction Impacts

The proposed Project would not result in population growth during construction activities. The proposed Project would not increase new school-age population that would require school facility services. The proposed Project does not include a housing component or other population-generating development. In addition, construction workers are not anticipated to relocate to the City of Rancho Cucamonga or the City of Ontario. It is anticipated that local, and/or out-of-area construction employees would commute from elsewhere in the region, rather than relocate to the proposed Project area for a temporary construction assignment.

The proposed Project would not provide new housing opportunities in the proposed Project area. As such, the proposed Project is not likely to create a significant increase in the use of other public facilities such as libraries or community centers. The proposed Project would not increase population growth to generate a demand for school facilities and/or other public facilities. Therefore, there would be less than significant impact to schools and other public facilities during construction activities for the proposed Project.

3.13.6.3.2.2 Operational Impacts

The proposed Project would not create a need for new or expanded public school facilities. Typically, housing developments generate impact to school facilities which is related to new school-age children population from the migration and relocation of families with children. The proposed Project does not include a housing component or other population-generating development. The proposed Project would not provide new housing opportunities in the proposed Project area and would not generate any new school age population that would require school facility services. As such, the proposed Project is not likely to create a significant increase in the use of other public facilities such as libraries or community centers. Therefore, there would be a less than significant impact to school services and other public facilities during operational activities for the proposed Project.

3.13.6.4 **Would the proposed 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?

3.13.6.4.1 No Project Alternative

The No Project Alternative includes planned expansion, improvement projects, and routine maintenance activities for the existing roadway system and transit facilities. The No Project Alternative is not anticipated to increase or generate population growth during construction and operation activities to create new demands existing neighborhood and regional parks resulting in significant impacts to the conditions of facilities such that the physical deterioration of the facility would occur or be accelerated. Construction workers associated with construction activities are temporary and would not require use of such public facilities. Construction and operational activities associated with the No Project Alternative would be subject to project and site-specific evaluation, including an environmental review process. Any potential impacts associated with neighborhood and regional parks would require mitigation measures. Therefore, the No Project Alternative would have a less than significant impact.

3.13.6.4.2 Proposed Project

3.13.6.4.2.1 Construction Impacts

The proposed Project does not include a housing component or other population-generating development that would create new demand on parks and recreation facilities. Construction workers are not anticipated to relocate to the City of Rancho Cucamonga or the City of Ontario. It is anticipated that

local, and/or out-of-area construction employees would commute from elsewhere in the region, rather than relocate to the proposed Project area for a temporary construction assignment. As such, the proposed Project would not increase the use of park or other recreational facilities that would accelerate and/or cause substantial physical deterioration during construction activities. Therefore, the proposed Project during construction would have a less than significant impact to parks or recreational facilities.

3.13.6.4.2.2 Operational Impacts

Implementation of the proposed Project would not increase the use of existing neighborhood and regional parks or other recreational facilities. Physical impacts to recreation facilities are generally associated with population growth. There is no housing or other population-generating development under the proposed Project; therefore, implementation of the proposed Project would not generate population growth that would increase the use of parks or other recreational facilities. As such, the proposed Project would not increase the use of parks or other recreational facilities accelerating and/or causing substantial physical deterioration during operation and there would be a less than significant impact to parks or recreational facilities.

3.13.6.5 **Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment** and/or r**esult in substantial adverse physical impacts associated with the provision of, or need for, new or physically altered recreational facilities, the construction of which could cause** signi**fi**cant environmental impacts, in order to maintain acceptable service **ratios, response times, or other performance objectives for parks**?

3.13.6.5.1 No Project Alternative

The No Project Alternative includes planned expansion, improvement projects, and routine maintenance activities for the existing roadway system and transit facilities. The No Project Alternative does not construct, expand, or physical alter new or existing recreation facilities that might have significant adverse impact on the environment. As such, the No Project Alternative is not anticipated to increase or generate population growth during construction and operation activities to create new demands on recreational facilities or parks resulting in significant impacts to service ratios, response times, and other performance objectives. Construction workers associated with construction activities are temporary and would not require use of such public facilities. Construction and operation activities associated with the No Project Alternative would be subject to project and site-specific evaluation, including an environmental review process. Any potential impacts on associated neighborhood and regional parks would require mitigation measures. Therefore, the No Project Alternative would have a less than significant impact.

3.13.6.5.2 Proposed Project

3.13.6.5.2.1 Construction Impacts

Construction workers are not anticipated to relocate to the City of Rancho Cucamonga or the City of Ontario. It is anticipated that local, and/or out-of-area construction employees would commute from elsewhere in the region, rather than relocate to the proposed Project area for a temporary construction assignment. Because the proposed Project is a transportation project, the proposed Project would not increase population growth, and it would not increase demand for parks. Therefore, the proposed Project would not require the construction or expansion of off-site recreational facilities nor result in an increase in demand for parks and recreational facilities in the surrounding area. The proposed Project during construction would have a less than significant impact to parks.

3.13.6.5.2.2 Operational Impacts

Typically, housing developments generate impacts on parks. These impactsare related to new youth population from the migration and relocation of families with children. The proposed Project is a transportation project and does not include any new housing or other popluation-generating development. The proposed Project would not increase population growth, nor would it otherwise increase demand for parks and recreational facilities. Therefore, the proposed Project would not require the construction or expansion of off-site recreational facilities and would also not result in an increase in demand for parks and recreational facilities in the surrounding area. The proposed Project during operation would have a less than significant impact to parks.

3.13.7 Mitigation Measures

No mitigation measures are required for the proposed Project for public services and recreation.

3.13.8 Impacts After Mitigation

3.13.8.1 **Result in substantial adverse physical impacts associated with the provision of, or need for, new or physically altered fire protection and emergency response facilities, the construction** of which could cause signi**fi**cant environmental impacts, in order to maintain acceptable **service ratios, response times, or other performance objectives for fire protection and** emergency response?

No mitigation measures are required, and the proposed Project would have a less than significant impact

3.13.8.2 **Result in substantial adverse physical impacts associated with the provision of, or need for, new or physically altered police protection facilities, the construction of which could cause** signi**fi**cant environmental impacts, in order to maintain acceptable s**ervice ratios, response times, or other performance objectives for police protection**?

No mitigation measures are required, and the proposed Project would have a less than significant impact.

3.13.8.3 **Result in substantial adverse physical impacts associated with the provision of, or need for, new or physically altered school facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for schools and/or** result **in substantial adverse physical impacts associated with the provision of, or need for, new or physically altered other public facilities, the construction of which could cause si**gnif**i**cant environmental impacts, in order to maintain **acceptable service ratios, response times, or other performance objectives for other public facilities**?

No mitigation measures are required, and the proposed Project would have a less than significant impact

3.13.8.4 **Would the proposed 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?

No mitigation measures are required, and the proposed Project would have a less than significant impact.

3.13.8.5 **Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment** and/or r**esult in substantial adverse physical impacts associated with the provision of, or need for, new or physically altered recreational facilities, the construction of which could cause** signif**i**cant environmental impacts, in order to maintain acceptable service **ratios, response times, or other performance objectives for parks**?

No mitigation measures are required, and the proposed Project would have a less than significant impact.

3.14 TRANSPORTATION AND TRAFFIC

This section of this Draft Environmental Impact Report provides a summary of the evaluation of the impacts to transportation and traffic resulting from the implementation of the proposed Ontario International Airport (ONT) Connector Project (Project). Detailed information for transportation and traffic is included in the Transportation Technical Report (SBCTA 2024; Appendix Q).

3.14.1 Regulatory Framework

3.14.1.1 Federal

3.14.1.1.1 Americans with Disabilities Act

The Americans with Disabilities Act (ADA) of 1990 prohibits discrimination toward people with disabilities and guarantees that they have equal opportunities as the rest of society to become employed, purchase goods and services, and participate in government programs and services. The ADA includes requirements pertaining to transportation infrastructure. The Department of Justice's revised regulations for Titles II and III of the ADA, known as the 2010 ADA Standards for Accessible Designs, set minimum requirements for newly designed and constructed or altered state and local government facilities, public accommodations, and commercial facilities to be readily accessible to and usable by individuals with disabilities. These standards apply to accessible walking routes, curb ramps, and other facilities.

3.14.1.1.2 American Rescue Plan Act

The American Rescue Plan Act of 2021, which took effect on March 11, 2021, includes United States dollar ($) 30.5 billion in federal funding to support the nation's public transportation systems as they continue to respond to the coronavirus pandemic and provide transit services.

3.14.1.1.3 Intermodal Surface Transportation Efficiency Act

The Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 provides the foundation for the nation's surface transportation into the 21st century. ISTEA commits to a national intermodal transportation system and its empowerment of state and local officials to solve their specific transportation problems, flexibility in the use of funds by state and local governments, environmental enhancement, and planning and management systems that will enable the intermodal network to work more efficiently. The intermodal approach to transportation is taking hold at all levels throughout the transportation community in the way projects are conceived, developed, and completed. Roads and highways, railroads, transit, ports and shipping, aviation, bikes, and walking, not working separately but in coordination, provide the best means to maximize the benefits that an intermodal transportation system can bring to our country and the world (Federal Highway Administration 1994).

3.14.1.1.4 Fixing America's Surface Transportation Act

On December 4, 2015, President Barack Obama signed the Fixing America's Surface Transportation (FAST) Act (Public Law Number 114-94) into law—the first federal law in over a decade to provide long-term

funding certainty for surface transportation infrastructure planning and investment (Federal Highway Administration 2015). The FAST Act authorizes $305 billion over fiscal years 2016 through 2020 for highway and motor vehicle safety, public transportation, motor carrier safety, hazardous materials safety, rail, and research, technology, and statistics programs. The FAST Act maintains focus on safety, keeps intact the established structure of the various highway-related programs, continues efforts to streamline project delivery, and, for the first time, provides a dedicated source of federal dollars for freight projects. With the enactment of the FAST Act, states and local governments are now moving forward with critical transportation projects with the confidence that they will have a federal partner over the long term.

3.14.1.2 State

3.14.1.2.1 California Environmental Quality Act

The purpose of the California Environmental Quality Act (CEQA) is to provide a statewide policy of environmental protection. As part of this protection, state and local agencies are required to analyze, disclose and, when feasible, mitigate the environmental impacts of, or find alternatives to, a proposed project.

The State CEQA Guidelines (California Code of Regulations 15000 et seq.) provide regulations for the implementation of CEQA and include more specific direction on the process of documenting, analyzing, disclosing, and mitigating the environmental impacts of a project. To assist in this process, Appendix G of the State CEQA Guidelines provides a sample checklist form that may be used to identify and explain the degree of impact a project will have on a variety of environmental aspects, including Transportation (Section XVII).

As stated in Section 15002(b)(1-3) of the State CEQA Guidelines, CEQA applies to governmental action, including activities that are undertaken by, financed by, or require approval from a governmental agency. Because this proposed Project is undertaken by governmental agencies, CEQA regulations apply.

3.14.1.2.2 Assembly Bill 1358

Assembly Bill (AB) 1358, or the California Complete Streets Act, was signed into law on September 30, 2008. As of January 1, 2011, AB 1358 has required circulation element updates to address the transportation system from a multimodal perspective. The act states that streets, roads, and highways must "meet the needs of all users in a manner suitable to the rural, suburban, or urban context of the General Plan." The act requires a circulation element to plan for all modes of transportation where appropriate, including walking, biking, car travel, and transit. Specifically, the legislation requires cities and counties to ensure that local roads and streets adequately accommodate the needs of bicyclists, pedestrians and transit riders, as well as motorists.

3.14.1.2.3 Assembly Bill 32 and Senate Bill 375

With the passage of AB 32, the Global Warming Solutions Act of 2006, the state committed itself to reducing statewide greenhouse gas (GHG) emissions to 1990 levels by 2020. California Air Resources Board (CARB) is coordinating the response to comply with AB 32.

Senate Bill (SB) 375, or the Sustainable Communities and Climate Protection Act, provides incentives for cities and developers to bring housing and jobs closer together and to improve public transit. The goal is to reduce the number and length of automobile commuting trips to meet the statewide targets for reducing GHG emissions set by AB 32. SB 375 requires each metropolitan planning organization to add a broader vision for growth to its transportation plan, called a Sustainable Communities Strategy (SCS). The SCS must lay out a plan to meet the region's transportation, housing, economic, and environmental needs in a way that enables the area to lower GHG emissions. The SCS should integrate transportation, land use, and housing policies to plan for achievement of the emissions target for each region. The latest Southern California Association of Governments (SCAG) Regional Transportation Plan (RTP) and SCS were adopted in 2020 (SCAG 2020).

3.14.1.2.4 Senate Bill 743

On September 27, 2013, Governor Jerry Brown signed SB 743, which went into effect in January 2014. SB 743 directed the Governor's Office of Planning and Research (OPR) to develop revisions to the State CEQA Guidelines by July 1, 2014, to establish new criteria for determining the significance of transportation impacts and define alternative metrics for traffic level of service (LOS). This new criteria for determining the significance of transportation impacts started a process that changes transportation impact analysis under CEQA.

Under this bill, traffic impacts of a residential, mixed-use residential, or employment center project on an infill site within a transit priority area will not be considered significant. Also, residential, mixed-use, and employment center projects meeting specific criteria would be exempt from CEQA. Furthermore, for the CEQA process, this bill eliminates measures such as auto delay, LOS, and other vehicle-based measures of capacity in California. Instead, other measurements, such as vehicle miles traveled (VMT), are to be utilized to measure impacts.

The purpose of SB 743 is to balance the needs of congestion management, infill development, public health, GHG reductions, and other goals. The OPR released the *Technical Advisory on Evaluating Transportation Impacts in CEQA* in December 2018 (OPR 2018). The City of Rancho Cucamonga led the countywide effort to develop the SB 743 implementation study, a guiding document for VMT analysis methodology, thresholds, and mitigation strategies for transportation impact evaluation for San Bernardino County Transportation Authority (SBCTA) agencies (SBCTA 2020).

SB 743 changed how traffic impacts are evaluated for CEQA purposes. The new rules supersede the LOS criteria for measuring traffic impacts, replacing them with VMT metrics. Section 15064.3 of the State CEQA

Guidelines must be implemented statewide by July 1, 2020, and public agencies may elect to adopt VMT thresholds of significance.

3.14.1.2.5 California Department of Transportation

The California Department of Transportation (Caltrans) oversees the state's highway system. Caltrans is the public agency responsible for designing, building, operating, and maintaining the state's highway system, which consists of freeways, highways, expressways, toll roads, and the area between the roadways and property lines. Caltrans is also responsible for permitting and regulating the use of state roadways. Caltrans' construction practices require temporary traffic control planning during activities that interfere with the normal function of a roadway.

In addition, Caltrans has developed a VMT-focused Transportation Impact Study Guide (TISG), which provides a starting point and a consistent basis on which Caltrans evaluates traffic impacts to state highway facilities. The TISG was adopted on May 20, 2020, and provides guidance to Caltrans districts, lead agencies, tribal governments, developers, and consultants regarding Caltrans review of a land use project or plan's transportation analysis using a VMT metric. This guidance is not binding on public agencies, and it is intended to be a reference and informational document.

3.14.1.2.6 California Department of Transportation State Transportation Improvement Program

The Caltrans State Transportation Improvement Program (STIP) is a multi-year capital improvement program of transportation projects on and off of the State Highway System that is funded with revenues from the Transportation Investment Fund and other funding sources. STIP programming generally occurs every two years. The programming cycle begins with the release of a proposed fund estimate in July of odd-numbered years, followed by the California Transportation Commission adoption of the fund estimate in August (odd years). The fund estimate serves to identify the amount of new funds available for the programming of transportation projects. Once the fund estimate is adopted, Caltrans and the regional planning agencies prepare transportation improvement plans for submittal by December 15 (odd years). Caltrans prepares the Interregional Transportation Improvement Plan and regional agencies prepare Regional Transportation Improvement Plans. Public hearings are held in January (even years) in both northern and southern California. The STIP is adopted by the California Transportation Commission by April (even years).

3.14.1.2.7 California Complete Streets Act

The California Complete Streets Act requires that the circulation elements of local general plans accommodate a balanced, multimodal transportation network that meets the needs of all users of streets, roads, and highways in manners that are suitable to applicable rural, suburban, or urban contexts. Users are defined to include motorists, pedestrians, bicyclists, children, persons with disabilities, seniors, movers of commercial goods, and riders of public transportation.

3.14.1.3 Regional and Local

A list of relevant local goals and polices are discussed in the Transportation Technical Report (SBCTA 2024; Appendix Q). A summary of local goals and policies is provided in the following section.

3.14.1.3.1 Southern California Association of Governments 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy (Connect SoCal)

In compliance with SB 375, on September 3, 2020, the SCAG Regional Council adopted the 2020–2045 RTP/SCS, also known as Connect SoCal, which is a long-range visioning plan that incorporates land use and transportation strategies to increase mobility options and achieve a more sustainable growth pattern while meeting GHG reduction targets set by CARB. Connect SoCal represents the vision for Southern California's future, including policies, strategies, and projects for advancing the region's mobility, economy, and sustainability through 2045. The plan details how the region will address its transportation and land use challenges and opportunities in order to achieve its regional emissions standards and GHG reduction targets.

The components of Connect SoCal are required by federal and state legislation, and the RTP/SCS is an important planning document for the region, allowing project sponsors to qualify for federal funding. SCAG is required to update this long-range planning document every four years. Connect SoCal 2024 is the current version and embodies a collective vision for the region's future based on input from local governments, county transportation commissions, tribal governments, nonprofit organizations, businesses, and local stakeholders within the counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura.

3.14.1.3.2 San Bernardino County Congestion Management Program

The passage of Proposition 111 in June 1990 established a process for each metropolitan county in California, including San Bernardino County, where the City of Rancho Cucamonga and City of Ontario are located, to prepare a Congestion Management Program (CMP). California Government Code (CGS) Section 65089 (CGC 2016) states the requirements for CMPs:

> "(a) A congestion management program shall be developed, adopted and updated biennially, consistent with the schedule for adopting and updating the regional transportation improvement program, for every county that includes an urbanized area and shall include every city and the county."

Updated by San Bernardino Associated Governments (SANBAG) in 2016, the CMP is an effort to align land use, transportation, and air quality management efforts in order to promote reasonable growth management programs that effectively use statewide transportation funds while ensuring that new development pays its fair share of needed transportation improvements.

The focus of the CMP is the development and coordination of a multimodal transportation system across jurisdictional boundaries, incorporating the goals from the SCAG RTP/SCS. Per the LOS standards adopted by SBCTA, when a CMP segment falls to "F," a deficiency plan must be prepared by the local agency where the deficiency is located. The plan must contain mitigation measures, including Transportation Demand Management strategies and transit alternatives, and a schedule for mitigating the deficiency. It is the responsibility of local agencies to consider the traffic impacts on the CMP when reviewing and approving development proposals. The 2016 update of the SANBAG CMP (SANBAG 2016) outlines the following goals:

- Goal 1: Maintain or enhance the performance of the multimodal transportation system and minimize travel delay.
- Goal 2: Assist in focusing available transportation funding on cost-effective responses to subregional and regional transportation needs.
- Goal 4: Help to coordinate development and implementation of subregional transportation strategies across jurisdictional boundaries.
- Goal 6: Promote air quality and improve mobility through implementation of land use and transportation alternatives or incentives that reduce both vehicle trips and miles traveled, and vehicle emissions.

3.14.1.3.3 Measure I Strategic Plan

First approved in 1989 and extended in 2004 by voters, Measure I authorized a half-cent sales tax in San Bernardino County until March 2040 for use exclusively on transportation improvement and traffic management programs (SBCTA 2004). Administered by SBCTA, the Measure I Strategic Plan is the official guide for the allocation and administration of the combination of local transportation sales tax, state and federal transportation revenues, and private fair-share contributions to regional transportation facilities to fund delivery of the Measure I 2010–2040 transportation programs. The strategic plan identifies funding categories, allocations, and planned transportation improvement projects in San Bernardino County for freeways, major and local arterial roadways, bus and rail transit, and traffic management systems. For fiscal years 2018–2019 through 2022–2023, the City of Rancho Cucamonga has identified improvements worth approximately $19 million in funding for pavement rehabilitation projects, ADA corrective measures, and signal and striping maintenance. These improvements are planned to be funded through the Measure I Local Streets Program. It is to be noted that the five-year Capital Improvement Program is over-programmed to allow use of this funding source if additional funding is available during the five-year planning period (City of Rancho Cucamonga 2022).

3.14.1.3.4 San Bernardino County Long-range Transit Plan

SBCTA updates its Long-range Transit Plan (LRTP) to address transit needs for an approximate 25-year horizon. The LRTP prioritizes goals and projects for transit growth. With the passage of SB 375 by the state

legislature in 2008, the LRTP has been modified to more closely tie land use and transportation planning strategies. The LRTP addresses countywide travel challenges and creates a system aimed to increase the role of transit in future travel choices. The LRTP anticipates that a premium transit service, such as rapid buses and rail modes, will offer solutions to future travel demands by providing competitive travel times and increased reliability, mobility, and accessibility. Premium transit will reduce dependence on cars, encourage community revitalization, and encourage more balanced transit-oriented land use development.

3.14.1.3.5 San Bernardino County Non-motorized Transportation Plan

SBCTA published its Non-motorized Transportation Plan (NMTP) in 2011, which was revised in 2018, with the vision of creating a safe, interconnected cycling and walking system in San Bernardino County. Supplemented by local jurisdiction inventory data, the NMTP provides recommendations at both the regional and city level, and the local jurisdictions are responsible for the implementation of the NMTP.

3.14.1.3.6 City of Rancho Cucamonga General Plan

The City of Rancho Cucamonga General Plan (PlanRC 2021) sets forth the goals, policies, and programs the City of Rancho Cucamonga uses to manage future growth and land use. The Mobility and Access chapter of this plan contains the following goals and policies relevant to the proposed Project:

- Goal MA-1 seeks to create a regional mobility hub.
    - Policy MA-1.2 addresses Cucamonga Metrolink Station redevelopment.
    - Policy MA-1.3 supports federal, statewide, and regional infrastructure funding for transit and transportation.
    - Policy MA-1.4 supports a local mobility hub.
- Goal MA-2 supports a safe, efficient, accessible, and equitable transportation system.
    - Policy MA-2.8 addresses service levels.
    - Policy MA-2.9 addresses high-quality pedestrian environments.
    - Policy MA-2.12 addresses transportation demand management for new projects.
    - Policy MA-2.13 addresses active transportation.
    - Policy MA-2.14 addresses bicycle facilities.
- Goal MA-3 addresses transportation safety.
    - Policy MA-3.1 addresses pedestrian and bicycle networks.
    - Policy MA-3.2 addresses traffic safety.
    - Policy MA-3.4 addresses emergency access and first-responders.

- Goal MA-5 addresses sustainable transportation needs.
    - Policy MA-5.1 addresses land use supporting reduced VMT.
    - Policy MA-5.2 addresses emerging technologies integration.

The Land Use and Community Character chapter of this plan contains the following goals and policies relevant to the proposed Project:

- Goal LC-2 addresses development that fosters social and economic interaction.
    - Policy LC-2.3 addresses streetscapes.
- Goal LC-5 addresses connected corridors.
    - Policy LC-5.1 addresses improved street network.

3.14.1.3.7 City of Rancho Cucamonga Municipal Code

The City of Rancho Cucamonga Municipal Code includes regulations and standards that govern traffic, parking and loading, and development in the City of Rancho Cucamonga (City of Rancho Cucamonga 2022). Title 10 of the City of Rancho Cucamonga Municipal Code specifically addresses vehicles and traffic in the City of Rancho Cucamonga. This regulation establishes a traffic enforcement division to enforce the street traffic regulations of the City of Rancho Cucamonga and state vehicle laws. It also outlines the responsibilities of the City Traffic Engineer, advisory traffic committee, and the local Fire Departments as they relate to traffic regulations and their enforcement.

Title 10 includes speed limits on various streets in the City of Rancho Cucamonga, designates one-way streets and alleys, stop-controlled streets; identifies driving rules, pedestrian rights and duties, and restrictions on stopping, standing and parking; establishes permit parking districts and truck routes; and contains other regulations that promote public safety on streets, sidewalks, and driveways.

3.14.1.3.8 City of Ontario General Plan

The City of Ontario General Plan (Ontario Plan) sets forth the goals, policies, and programs the City of Ontario uses to manage future growth, land use, and other community elements. The Mobility Element within the Policy Plan of the Ontario Plan contains the following goals and policies relevant to the proposed Project:

- Goal M1 supports a system of roadways that meets the mobility needs of a dynamic and prosperous Ontario.
    - Policy M1-1 addresses roadway design and maintenance.
    - Policy M1-2 addresses mitigation of impacts for new development.
    - Policy M1-3 addresses roadway improvements.

- Policy M1-4 addresses collaboration with adjacent jurisdictions.
- Policy M1-5 addresses complete streets.

- Goal M2 encourages a system of trails and corridors that facilitates and encourages bicycling and walking.
  - Policy M2-1 addresses bikeway plans.
  - Policy M2-2 addresses bicycles systems.
  - Policy M2-3 addresses pedestrian walkways.
  - Policy M2-4 addresses opportunities to expand pedestrian and bicycle networks.
- Goal M3 encourages a public transit system that is a viable alternative to automobile travel and meets basic transportation needs of the transit dependent.
  - Policy M3-9 encourages an Ontario Airport Metro Center circulator.
  - Policy M3-10 encourages a multimodal transit center.
  - Policy M3-11 addresses transit and community facilities.

3.14.1.3.9 City of Ontario Municipal Code

The City of Ontario Municipal Code includes regulations and standards that govern traffic, parking and loading, and development in the City of Ontario (City of Ontario 2021). Title 4 (Public Safety) includes regulations on bicycles, traffic enforcement regulations, and off-street parking restrictions in Chapters 2, 6, and 13, respectively.

3.14.2 Methodology

3.14.2.1 Traffic Operations Analysis

The traffic operations analysis (TOA) for the proposed Project was prepared to meet the requirements of the City of Rancho Cucamonga, the City of Ontario, and SBCTA. As such, the TOA was prepared consistent with the requirements established by the SANBAG CMP and the goals and policies included in PlanRC and the Ontario Plan. Additionally, the TOA meets the requirements for disclosure of project impacts pursuant to CEQA.

As previously discussed, with implementation of SB 743 and the updated Appendix G CEQA thresholds, vehicle delay is not considered a potential significant impact on the environment. As such, this analysis will not go into detail on the anticipated effect of the proposed Project with respect to LOS; however, an analysis of LOS is provided for informational purposes. Instead, the focus of the analysis of transportation impacts is on VMT in order to reduce GHG and create multimodal networks.

For the purposes of this analysis, the Opening Year is estimated to be 2031, and the Design Year is estimated to be 2051, based on the information obtained from SBCTA.

3.14.2.1.1 Identification of the Study Intersections

The proposed Project would include an underground tunnel for direct connection between the Cucamonga Metrolink Station and ONT. As such, the proposed Project is estimated to have a minimal effect on adjacent surface transportation and roadway systems, excluding the two termini of the proposed Project. Therefore, it is estimated that only the adjacent intersections of the two termini would be affected by the proposed Project. As such, the following existing intersections have been evaluated in Sections 3.14.5.3 and 3.14.5.4:

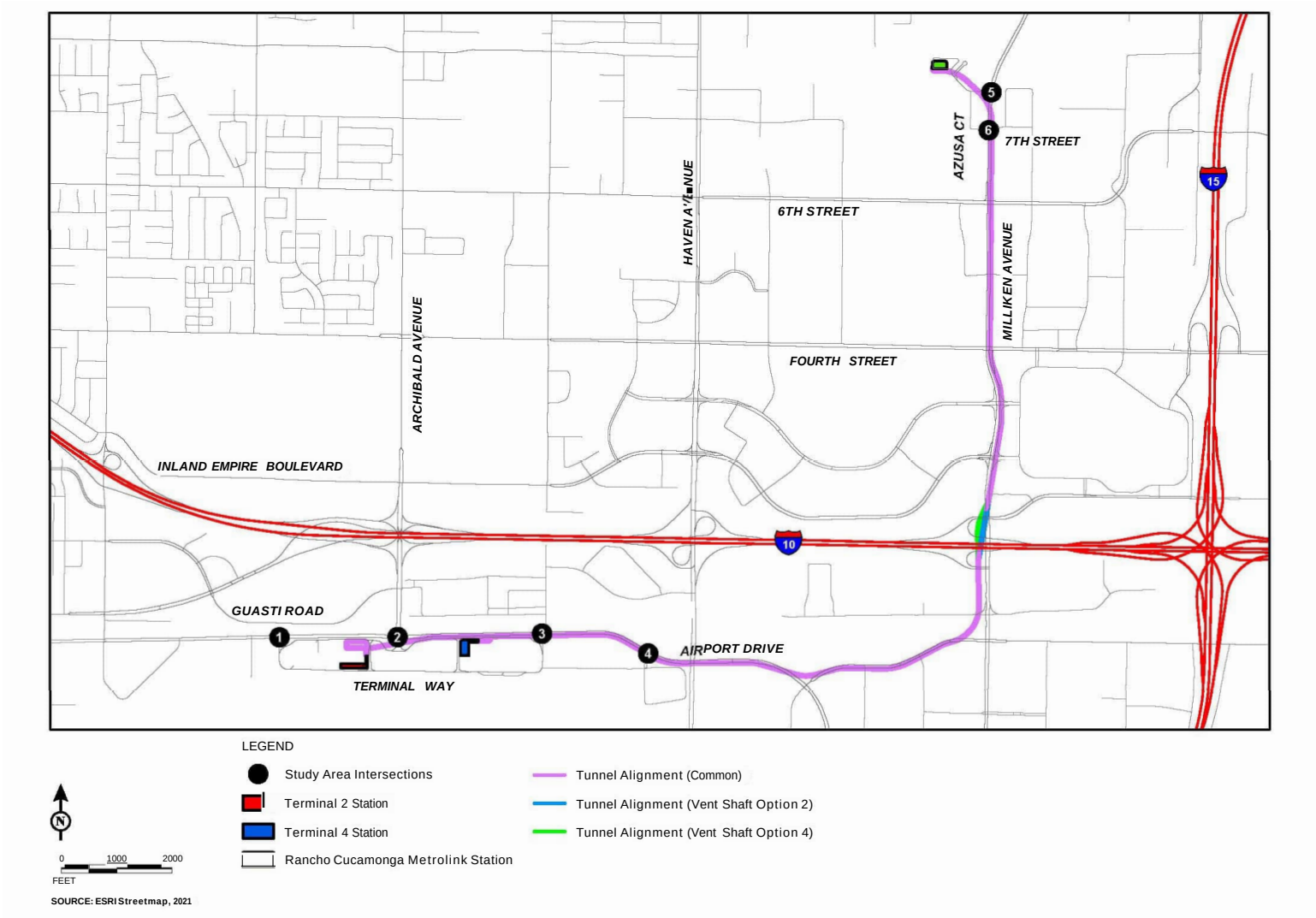
- Intersections Adjacent to ONT:
    1. East Terminal Way (West)/Airport Drive (City of Ontario),
    2. Archibald Avenue – Terminal Way/Airport Drive (City of Ontario),
    3. East Terminal Way (East)/Airport Drive (City of Ontario), and
    4. Rental Car Road/Airport Drive (City of Ontario).
- Intersections Adjacent to the Cucamonga Metrolink Station:
    1. Milliken Avenue/Azusa Court (City of Rancho Cucamonga), and
    2. Milliken Avenue/7th Street (City of Rancho Cucamonga).

Figure 3.14-1 illustrates the intersections analyzed for the proposed Project within the Study Area. All study intersections have been analyzed during the a.m. and p.m. peak hours. The a.m. peak hour is defined as the one hour of highest traffic volumes occurring between 7:00 a.m. and 9:00 a.m., while the p.m. peak hour is defined as the one hour of highest traffic volumes occurring between 4:00 p.m. and 6:00 p.m. for both the City of Rancho Cucamonga and the City of Ontario.

Several transportation projects within the region have been proposed and could be operational in conjunction with the proposed Project. Major transportation projects and policies that are anticipated to affect the proposed Project are included in the ONTLoop – Autonomous, Zero-Emission Transit Tunnel to Ontario International Airport, 2022 Raise Application (SBCTA 2022). These transportation projects include the future construction of Brightline, as well as the increase of the Metrolink San Bernardino Line frequency to 30 minutes headway. Additionally, alternative tunnel fare policies are also estimated to affect ridership. The ONTLoop evaluates the following transportation project possibilities in different scenarios:

- Metrolink frequency: 60 minutes or 30 minutes headway;
- Completion of Brightline;
- Tunnel Fare Policy 1;
  Tunnel Fare Policy 2; and Tunnel Far Policy 3.

Figure 3.14-1 Traffic Operations Analysis Study Area Intersections



The proposed Project TOA estimates daily ridership for the proposed Project. From a traffic operations perspective, the ridership could be estimated as a proxy for the number of passenger vehicle trips that were previously using the surface roadway network system. As such, because of the proposed Project, patrons previously using passenger vehicles to commute would now use this facility, thereby eliminating these passenger vehicle trips from the surface roadway network.

Consistent with the Opening Year and Design Year scenarios included in the Ontario Loop Ridership Analysis (SBCTA 2022), the same Opening Year and Design Year scenarios have been evaluated as part of the proposed Project TOA. The same proposed Project analysis scenarios were evaluated using the Federal Transit Administration's (FTA's) Simplified Trips-on-Project Software (STOPS) model for the Opening Year Scenario 5 (OY-5 Scenario) and Horizon Year Scenario 3 (HY-3 Scenario) for the proposed Project. As such, the proposed Project TOA evaluated traffic operations under the following analysis scenarios:

- Existing conditions;
- Opening Year (2031) No Build conditions;
- Opening Year (2031) Build (OY-5 Scenario) conditions;
- Design Year (2051) No Build conditions; and
- Design Year (2051) Build (HY-3 Scenario) conditions.

3.14.2.1.2 Existing Conditions

Existing traffic conditions at the study area intersections have been determined through the analysis of weekday peak-hour intersection counts. A certified traffic counter collected traffic data at the study intersections listed. The appropriate methodology for developing existing traffic volumes has been confirmed with the City of Rancho Cucamonga, the City of Ontario, and SBCTA. Heavy vehicle traffic, pedestrian, and bicycle data were collected along with vehicular traffic counts at the study area intersections for the proposed Project TOA.

3.14.2.1.3 Opening Year (2031) and Design Year (2051) Traffic Forecast Methodology

The following datasets have been used in the development of the proposed Project traffic volumes for different scenarios:

- Input and output data from the STOPS model run scenarios used in the Ontario Loop Ridership Analysis (SBCTA 2022);
- Disaggregated observed ridership for existing transit routes at the Cucamonga Metrolink Station (both pre-coronavirus pandemic and post-coronavirus pandemic);
- Observed existing hourly passenger arrival and departure data at the ONT terminals (both pre-coronavirus pandemic and post-coronavirus pandemic); and

- Forecast ridership for Metrolink, ONT, and the future Brightline service.

The current forecast year in the San Bernardino Transportation Analysis Model (SBTAM) is 2040. Therefore, the following methodology has been conducted to develop traffic volumes for each scenario using the data previously listed.

- Opening Year (2031) Build Conditions: Growth from the SBTAM base (2019) to the SBTAM future year (2040) has been applied to existing traffic volumes to develop Opening Year (2031) traffic volumes. Data from SBTAM, ridership results by district and time periods from the STOPS model, and existing traffic volumes have been used to estimate the proposed Project's traffic volumes. The STOPS model runs are different than the proposed Project Opening Year, so the proposed Project-related traffic changes have been adjusted appropriately.
- Design Year (2051) Build Conditions: The SBTAM future year model (2040) data have been used to develop Design Year (2051) traffic volumes. Consistent with SANBAG CMP procedures for developing future volumes, the SBTAM future year (2040) volumes have been developed by applying post-processing methodologies. The post-processed volumes from 2040 (SBTAM future year) have been extrapolated to 2051 (proposed Project Design Year) using the model growth as a conservative approach. For the proposed Project trips have been estimated using methodology similar to the Opening Year scenario using existing traffic volumes from the SBTAM, ridership results from STOPS runs, and appropriate adjustment factors for differences in the Design Year and model Horizon Years.

The detailed proposed Project trip generation volume development methodology is included in the Transportation Technical Report (SBCTA 2024; Appendix Q).

3.14.2.1.4 Identification of Analysis Methodology and Measures of Effectiveness (Included for Informational Purposes Only)

The TOA used the Highway Capacity Manual, 6th Edition (HCM; Transportation Research Board 2016) methodologies to analyze traffic operations at the study area intersections. Intersection LOS has been calculated using the Synchro 11 software.

The HCM measures effectiveness through the metric of average delay in seconds per vehicle. The average delay of every vehicle is used when assessing the effectiveness of signalized intersections, whereas the average delay of the worst-performing movement is used when assessing the effectiveness of an unsignalized intersection where the major street is uncontrolled.

These delay values correspond to individual letter grades from A to F, with LOS A corresponding to lower-delay facilities and LOS F corresponding to the highest-delay facilities. Table 3.14-1 describes the LOS grade criteria for intersections. Table 3.14-2 provides the relationship between LOS and the HCM delay.

Table 3.14-1 Intersection LOS Definitions

LOS	Description
A	Traffic operations with a control delay of 10 seconds per vehicle or less and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is low and either progression is exceptionally favorable, or the cycle length is very short. If LOS A is the result of favorable progression, most vehicles arrive during the green indication and travel through the intersection without stopping.
B	Traffic operations with control delay between 10 seconds per vehicle and 20 seconds per vehicle and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is low and either progression is highly favorable, or the cycle length is short. More vehicles stop than with LOS A.
C	Traffic operations with control delay between 20 and 35 seconds per vehicle and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when progression is favorable, or the cycle length is moderate. Individual cycle failures (i.e., one or more queued vehicles are not able to depart as a result of the insufficient capacity during the cycle) may begin to appear at this level. The number of vehicles stopping is significant, although many vehicles still pass through the intersection without stopping.
D	Traffic operations with control delay between 35 and 55 seconds per vehicle and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is high and either progression is ineffective, or the cycle length is long. Many vehicles stop and individual cycle failures are noticeable.
E	Traffic operations with control delay between 55 and 80 seconds per vehicle and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when volume-to-capacity ratio is high, progression is unfavorable, and the cycle length is long. Individual cycle failures are frequent.
F	Traffic operations with control delay exceeding 80 seconds per vehicle or a volume-to-capacity ratio greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is very high, progression is very poor, and the cycle length is long. Most cycles fail to clear the queue.

Source: SBCTA 2024

Table 3.14-2 LOS Criteria for Unsignalized and Signalized Intersections

LOS	Unsignalized Intersection Average Delay per Vehicle (seconds)	Signalized Intersection Average Delay per Vehicle (seconds)
A	< 10	< 10
B	> 10 and < 15	> 10 and < 20
C	> 15 and < 25	> 20 and < 35
D	> 25 and < 35	> 35 and < 55
E	> 35 and < 50	> 55 and < 80
F	> 50	> 80

Source: SBCTA 2024
Notes: < = less than; > = greater than

Study area intersections analyzed in the TOA are under the jurisdictions of the City of Rancho Cucamonga and the City of Ontario. The City of Ontario uses LOS E as its minimum LOS criterion per its Ontario Plan. The City of Rancho Cucamonga uses LOS D as its minimum LOS criterion per its PlanRC. Operational improvements are required at study intersections within the cities where the intersection peak-hour LOS degrade from satisfactory to deficient levels based on the respective jurisdictions.

The TOA examines traffic operations based on the criteria set forth in the City of Rancho Cucamonga's Traffic Impact Analysis Guidelines, the City of Ontario's Traffic Impact Analysis Guidelines, and the SANBAG CMP Traffic Impact Analysis Guidelines. Study area intersections under the jurisdiction of the City of Rancho Cucamonga have been analyzed consistent with the analysis methodologies as outlined in the City of Rancho Cucamonga's Traffic Impact Analysis Guidelines (City of Rancho Cucamonga 2020). Study area intersections under the jurisdiction of the City of Ontario have been analyzed consistent with the analysis methodologies outlined in the SBCTA's Recommended Traffic Impact Analysis Guidelines for Vehicle Miles Traveled and Level of Service Assessment (SBCTA 2020).

3.14.2.1.5 Vehicle Miles Traveled Analysis

The proposed Project would provide first/last-mile access for patrons traveling between the Cucamonga Metrolink Station and ONT to enhance transit accessibility. The increase in transit trips would occur partly due to the mode shift that occurs due to the proposed Project.

Data sources utilized to develop the proposed Project's VMT include FTA's STOPS ridership forecasts, SBTAM data, and proposed Project trip generation. The proposed Project VMT was estimated using proposed Project trip generation and trip length information from the STOPS model outputs and information obtained from SBCTA, whereas VMT for existing conditions was developed using SBTAM data.

The proposed Project VMT is estimated for the entire transit trip rather than just the portion of the trip via the tunnel. In other words, the estimate includes VMT reduction for the entire trip via automobiles that are being replaced by transit trips enabled by the proposed Project. The reduction in VMT due to the proposed Project was calculated using the proposed Project ridership from the proposed Project trip generation. Trip generation for the proposed Project is included in a separate memorandum provided in Appendix A of the Transportation Technical Report (SBCTA 2024; Appendix Q). The proposed Project ridership was converted to passenger miles traveled (PMT), which was then converted to VMT. Similar to the proposed Project trip generation, the proposed Project PMT estimates are conducted using the four ridership market segments, as the trip lengths vary among these market segments.

The following steps describe estimation of VMT reduction due to the proposed Project:

Trips to and from ONT by passengers who previously would have parked at ONT. In this case, a transit trip to and from ONT can replace two auto trips (one-for-one replacement). The STOPS model

disaggregates the entire modeling region into different districts to track and understand the geographic distribution of trips due to the addition of the proposed transit project. ONT was modeled as a separate district, as the proposed Project would serve only the trips to/from ONT.

The following steps were used to estimate the proposed Project PMT for the market segment:

The STOPS outputs include a trip matrix (to/from) among the modeling districts. The outputs also include corresponding distances between the districts, similar to travel model skimming (travel distance) outputs. A percentage distribution/ratio was developed for all proposed Project trips destined to ONT from different districts in the region. This percentage distribution from the total ridership was applied to the market segment trips that were developed during the proposed Project trip generation. This resulted in identifying trips within this market segment (passengers who previously parked at ONT) from the different districts of the model.

The STOPS model also included the distances from different districts to the airport district, which were used as the trip lengths.

Trips from step "a" and trip lengths from step "b" were used to estimate the proposed Project PMT by district. The PMT from all the districts was aggregated to estimate the market segment PMT. Table3.14-3 shows the 2031 and 2051 PMT for this market segment.

PMT trips to and from ONT by passengers who were previously dropped off. In this case, a passenger transit trip to and from ONT can replace four one-way auto trips (two trips for each passenger drop-off/pickup). The same methodology/steps used for Market Segment 1 (passengers who previously parked at ONT) were used to estimate the PMT reduction due to this market segment. However, this market segment included two trips per direction (drop-off/pickup) instead of one trip. Table3.14-4 illustrates the 2031 and 2051 proposed Project PMT for this market segment.

Also, while all trips in this market segment were being dropped off/picked up at ONT similar to existing conditions, a very small portion (approximately 3%) of trips were assumed to be dropped off/picked up at the Cucamonga Metrolink Station in the proposed Project analysis, based on mode-split forecasts from the STOPS model. Therefore, only 97% of the PMT reduction was used for this market segment. Table 3.14-5 shows the 2031 and 2051 PMT increase due to the abovementioned drop-offs.

However, for the 3% of trips that are being dropped off at the Cucamonga Metrolink Station, there is still some VMT reduction from the Cucamonga Metrolink Station to ONT, as these trips would be dropped off/picked up at ONT similar to existing conditions. To account for this PMT reduction, the distance from the Cucamonga Metrolink Station to ONT Terminals 2 and 4 was applied. Table 3.14-16 shows the distance from the Cucamonga Metrolink Station to both ONT terminals. The PMT for 3% of the trips, for the segment from the Cucamonga Metrolink Station to the terminals, was added back to the PMT reduction for the market segment. Table 3.14-7 shows the PMT reduction that is being added back.

Table 3.14-3 Passenger Miles Traveled by Air Passengers Previously Parking

STOPS District IDs	Attraction to Airport from STOPS Districts	Distance from Skims Used in STOPS	2031 Ridership	2031 PMT	2051 Ridership	2051 PMT
District 1	0.0%	8	0	-	0	-
District 2	0.0%	4.8	0	-	0	-
District 3	0.0%	2.1	0	-	0	-
District 4	4.5%	5.7	5	31	12	66
District 5	0.0%	7.6	0	-	0	-
District 6	0.0%	5.9	0	-	0	-
District 7	15.1%	11.4	18	210	39	450
District 8	14.4%	19.5	18	342	38	735
District 9	11.6%	28.3	14	402	31	863
District 10	11.3%	48.1	14	663	30	1,424
District 11	32.5%	85.8	40	3,406	85	7,314
District 12	0.3%	18.4	0	8	1	17
District 13	3.8%	36.8	5	169	10	363
District 14	0.3%	51	0	21	1	46
District 15	0.0%	0	0	-	0	-
District 16	0.0%	33.6	0	-	0	-
District 17	4.1%	17	5	85	11	183
District 18	2.1%	41.9	3	105	5	226
District 19	0.0%	0	0	-	0	-
District 20	0.0%	0	0	-	0	-
District 21	0.0%	0.4	0	-	0	-
Other	0.0%	0	0	-	0	-
Total	100.0%		122	5,442	262	11,687

Source: STOPS model
Notes: ID = Identification Number
PMT = Passenger Miles Traveled Trips

Table 3.14-4 Passenger Miles Traveled by Air Passengers Previously Being Dropped Off

STOPS District IDs	Attraction to Airport from STOPS Districts	Distance from Skims Used in STOPS	2031 Ridership	2031 PMT	2051 Ridership	2051 PMT
District 1	0.0%	8	0	-	-	-
District 2	0.0%	4.8	0	-	-	-
District 3	0.0%	2.1	0	-	-	-
District 4	4.5%	5.7	11	62	23	133
District 5	0.0%	7.6	0	-	-	-
District 6	0.0%	5.9	0	-	-	-
District 7	15.1%	11.4	37	421	79	898
District 8	14.4%	19.5	35	687	75	1,467
District 9	11.6%	28.3	29	807	61	1,723
District 10	11.3%	48.1	28	1,332	59	2,843
District 11	32.5%	85.8	80	6,839	170	14,599
District 12	0.3%	18.4	1	15	2	33
District 13	3.8%	36.8	9	340	20	725
District 14	0.3%	51	1	43	2	91
District 15	0.0%	0	0	-	-	-
District 16	0.0%	33.6	0	-	-	-
District 17	4.1%	17	10	171	21	365
District 18	2.1%	41.9	5	211	11	450
District 19	0.0%	0	0	-	-	-
District 20	0.0%	0	0	-	-	-
District 21	0.0%	0.4	0	-	-	-
Other	0.0%	0	0	-	-	-
Total	100.0%		245	10,925	523	23,323

Source: STOPS model

Table 3.14-5 Passenger Miles Traveled Increase Due to Passengers

	2031	2051
Total PMT	21,851	46,645
PMT Being Increased to Account for Trips Being Dropped Off at Cucamonga Metrolink Station (3% of Ridership)	656	1,399

Source: Metrolink 2024

Table 3.14-6 Distance from Cucamonga Metrolink Station to ONT Terminals

	Terminal 2	Terminal 4
Distance from Cucamonga Station to ONT (miles)	5.1	4.1

Source: SBCTA 2024

Table 3.14-7 PMT Reduction for Cucamonga Metrolink Station to ONT Segment

	2031	2051
PMT to Terminal 2	25	53 47
PMT to Terminal 4	40	86 77
Total	65	139

Notes: For 3% being dropped off at the Cucamonga Metrolink Station
Source: Metrolink 2024

Trips to and from ONT by employees who previously drove and parked at ONT. Ridership for this category was obtained from the proposed Project trip generation and home-based work (HBW) trip length for the ONT traffic analysis zone obtained from the SBTAM. Ridership from the proposed Project trip generation and HBW trip length from the SBTAM were used to estimate the proposed Project PMT for this category.

Trips by visitors and business travelers who would previously have flown to ONT and rented a car and now instead can ride using the proposed Project and Metrolink to their destinations, such as downtown Los Angeles or City of Redlands. In this case, each round trip on transit would replace two auto trips. It would be similar to the case where a business traveler from Southern California would fly into Oakland International Airport, take the tram to the Bay Area Rapid Transit (BART) Coliseum Station, and then take BART to downtown San Francisco. Similar to other categories, ridership for this market segment was also obtained from the proposed Project trip generation. The average trip length of 29 miles between ONT and the City of Redlands was applied based on data obtained from SBCTA.

Table3.14-8 shows the estimated proposed Project PMT for all four market segments. The PMT was converted to VMT using the average occupancy factor from the SBTAM. An average auto occupancy factor of 1.52 from the SBTAM was used, similar to the proposed Project trip generation, to convert PMT to VMT. As such, using the aforementioned steps provides the reduction in VMT due to the proposed Project. The proposed Project PMT and VMT are shown in Table3.14-9.

3.14.2.2 Construction Traffic Analysis

Traffic operations at intersections during the proposed Project construction have been analyzed to determine the impacts and effects of construction traffic on the existing roadway circulation network. Construction is anticipated to begin in 2025 and culminate in 2031 A LOS analysis was conducted on intersections affected during construction, including intersections along the construction route corridors. Specific information considered in performing the construction analysis includes (but is not limited to):

- Staging/Phasing: A description of staging area location(s), construction phases, and phase duration (including potential overlapping phases);

Table 3.14-8 Proposed Project PMT by Ridership Market Segments

Market Segments	2031 Ridership	2051 Ridership	# of Trips Assumed	Average Trip Length	2031 PMT	2051 PMT
Air Passengers Previously Parking[(1)]	122	262	1	-	5,440	11,684
Air Passengers Previously Dropped Off[(2)]	245	523	2	-	21,851	46,645
Employees Previously Parking	186	262	1	15	2,755	3,880
Out-of-Region Visitors Renting Cars[(3)]	122	262	1	29	3,538	7,598
Total	675	1,309			33,584	69,807

Notes:
PMT for air passengers previously parking and previously being dropped off was obtained from Table3.14-4..
(1) Trips to and from the airport by passengers who previously would have parked at ONT. In this case, a transit trip to and from the airport can replace two auto trips (one-for-one replacement).
(2) Trips to and from the airport by passengers who were previously dropped off. In this case, a passenger transit trip to and from the airport can replace four one-way auto trips (two trips for each passenger drop-off/pickup).
(3) Trips to and from the airport by employees who previously drove and parked at ONT. Ridership for this category was obtained from the Project trip generation and home-based work trip length for the airport traffic analysis zone obtained from the SBTAM.

Table 3.14-9 Total Project Passenger Miles Traveled and Vehicle Miles Traveled

	2031	2051
Total PMT Due to Ridership (a)	33,584	69,807
PMT Being Increased to Account for Trips Being Dropped Off at Cucamonga Metrolink Station (3% of Ridership) (b)	656	1,399
PMT Reduction for Cucamonga Metrolink Station to ONT (c)	65	139
Total PMT (d = a + b + c)	32,994	68,547
Total VMT	21,773	45,234

Notes:
(a) The STOPS outputs include a trip matrix (to/from) among the modeling districts.
(b) The STOPS model also included the distances from different districts to the airport district, which were used as the trip lengths.
(c) Trips from step "a" and trip lengths from step "b" were used to estimate Project PMT by district.

- Workers (for each phase): Approximate number of workers on a typical day, construction schedule/hours (i.e., estimated arrival/departure times), possible carpool/vanpool options, and access routes;
- Hauling/Deliveries (for each phase): Anticipated number of haul/delivery trucks on a typical day, truck schedule/hours, and designated truck routes;
- Machinery/Equipment (for each phase): A description of any heavy machinery/equipment that requires transport to/from the proposed Project site (not included as part of staging or hauling/deliveries); and

- Lane Closures: A description of any anticipated lane closures by a proposed Project phase.
- Table 2-2 provided in Chapter 2 (Project Description) shows the typical durations for construction activities related to the proposed project.

3.14.2.2.1 Identification of the Study Area

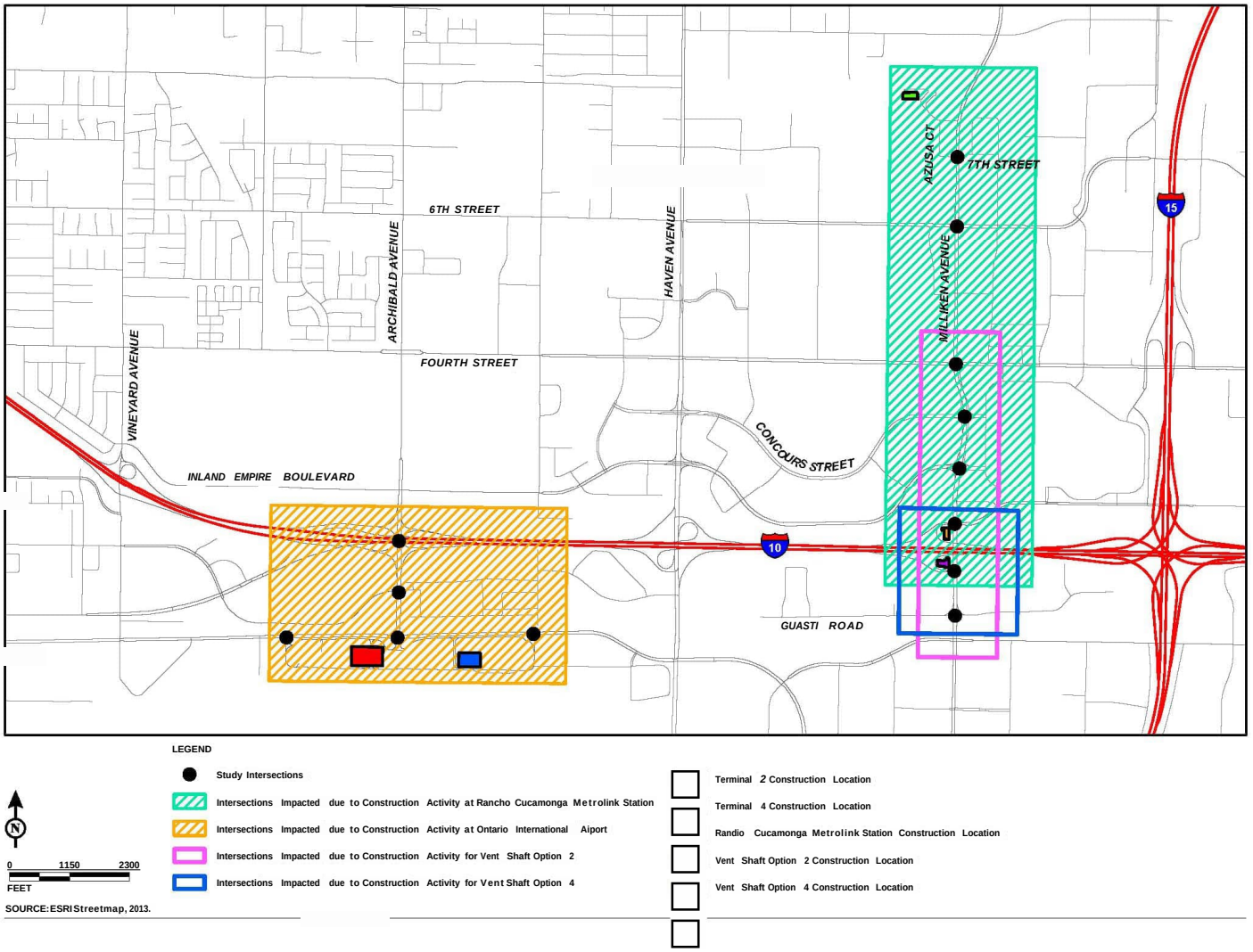
The proposed Project includes construction staging at the following four facilities:

- ONT Terminal 2;
- ONT Terminal 4;
- Cucamonga Metrolink Station; and
- Vent shaft area (for the proposed tunnel).
    - Vent shaft design option 2; or
    - Vent shaft design option 4.

Figure 3.14-2 illustrates the locations of all four construction staging facilities, including both locations of the proposed vent shaft design option 2 and vent shaft design option 4. It should be noted that only one vent shaft draft option will be built as part of the proposed project. As such, Option 2 and Option 4 were analyzed as separate analysis scenarios.

The intersections along the primary trucking and hauling routes for each construction staging area have been examined. Due to the locations of the construction staging, common intersections are shared among the evaluated construction hauling routes. Construction truck hauling routes are included in Appendix Q.

Figure 3.14-2 Construction Traffic Analysis Study Area Intersections



The following list includes all the intersections that have been analyzed as part of the construction traffic analysis:

1. East Terminal Way/Airport Drive [West] (City of Ontario);
2. Archibald Avenue/Interstate (I) 10 Ramps (Caltrans);
3. Archibald Avenue/Guasti Road (City of Ontario);
4. Archibald Avenue–Terminal Way/Airport Drive (City of Ontario);
5. East Terminal Way/Airport Drive [East] (City of Ontario);
6. Milliken Avenue/7th Street (City of Ontario);
7. Milliken Avenue/6th Street (City of Ontario);
8. Milliken Avenue/4th Street (City of Ontario);
9. Milliken Avenue/Concours Street (City of Ontario);
10. Milliken Avenue/Inland Empire Boulevard–Mall Drive (City of Ontario);
11. Milliken Avenue/I-10 Westbound Ramps–Ontario Mills Parkway (Caltrans);
12. Milliken Avenue/I-10 Eastbound Ramps (Caltrans); and
13. Milliken Avenue/Guasti Road (City of Ontario).

Following is a detailed breakdown of intersections by each staging area:

3.14.2.2.1.1 ONT Terminal 2

For this construction staging area, the following intersections have been examined:

1. East Terminal Way/Airport Drive (West) (City of Ontario);
2. Archibald Avenue/I-10 Ramps (Caltrans);
3. Archibald Avenue/Guasti Road (City of Ontario); and
4. Archibald Avenue–Terminal Way/Airport Drive (City of Ontario).

Figure 3.14-3 illustrates the study intersections for construction staging at Terminal 2.

3.14.2.2.1.2 ONT Terminal 4

For this construction staging area, the following intersections have been examined:

1. Archibald Avenue/I-10 Ramps (Caltrans);
2. Archibald Avenue/Guasti Road (City of Ontario);
3. Archibald Avenue–Terminal Way/Airport Drive (City of Ontario); and
4. East Terminal Way/Airport Drive [East] (City of Ontario).

Figure 3.14-3 illustrates the study intersections for construction staging at Terminal 4.

Figure 3.14-3 Construction Traffic Analysis Study Area Intersections – ONT Terminal 2 and Terminal 4 Stations



3.14.2.2.1.3 Cucamonga Metrolink Station

For this construction staging area, the following intersections have been examined:

1. Milliken Avenue/7th Street (City of Rancho Cucamonga);
2. Milliken Avenue/6th Street (City of Rancho Cucamonga);
3. Milliken Avenue/4th Street (City of Rancho Cucamonga/City of Ontario);
4. Milliken Avenue/Concours Street (City of Ontario);
5. Milliken Avenue/Inland Empire Boulevard–Mall Drive (City of Ontario);
6. Milliken Avenue/I-10 Westbound Ramps–Ontario Mills Parkway (Caltrans); and
7. Milliken Avenue/I-10 Eastbound Ramps (Caltrans).

Figure 3.13-4 illustrates the study intersections for construction staging at the Cucamonga Metrolink Station.

3.14.2.2.1.4 Tunnel Vent Shaft.

For the construction staging area for vent shaft design option 2, the following intersections have been examined:

8. Milliken Avenue/4th Street (City of Rancho Cucamonga/City of Ontario);
9. Milliken Avenue/Concours Street (City of Ontario);
10. Milliken Avenue/Inland Empire Boulevard–Mall Drive (City of Ontario);
11. Milliken Avenue/I-10 Westbound Ramps–Ontario Mills Parkway (Caltrans);
12. Milliken Avenue/I-10 Eastbound Ramps (Caltrans); and
13. Milliken Avenue/Guasti Road (City of Ontario).

Figure 3.14-5 illustrates the study intersections for construction staging for tunnel vent shaft design option 2. For the construction staging area for vent shaft design option 4, the following intersections have been examined:

14. Milliken Avenue/I-10 Westbound Ramps–Ontario Mills Parkway (Caltrans);
15. Milliken Avenue/I-10 Eastbound Ramps (Caltrans); and
16. Milliken Avenue/Guasti Road (City of Ontario).

Figure 3.14-6 illustrates the study intersections for construction staging for tunnel vent shaft design option 4.

Figure 3.14-4 Construction Traffic Analysis Study Area Intersections — Cucamonga Metrolink Station

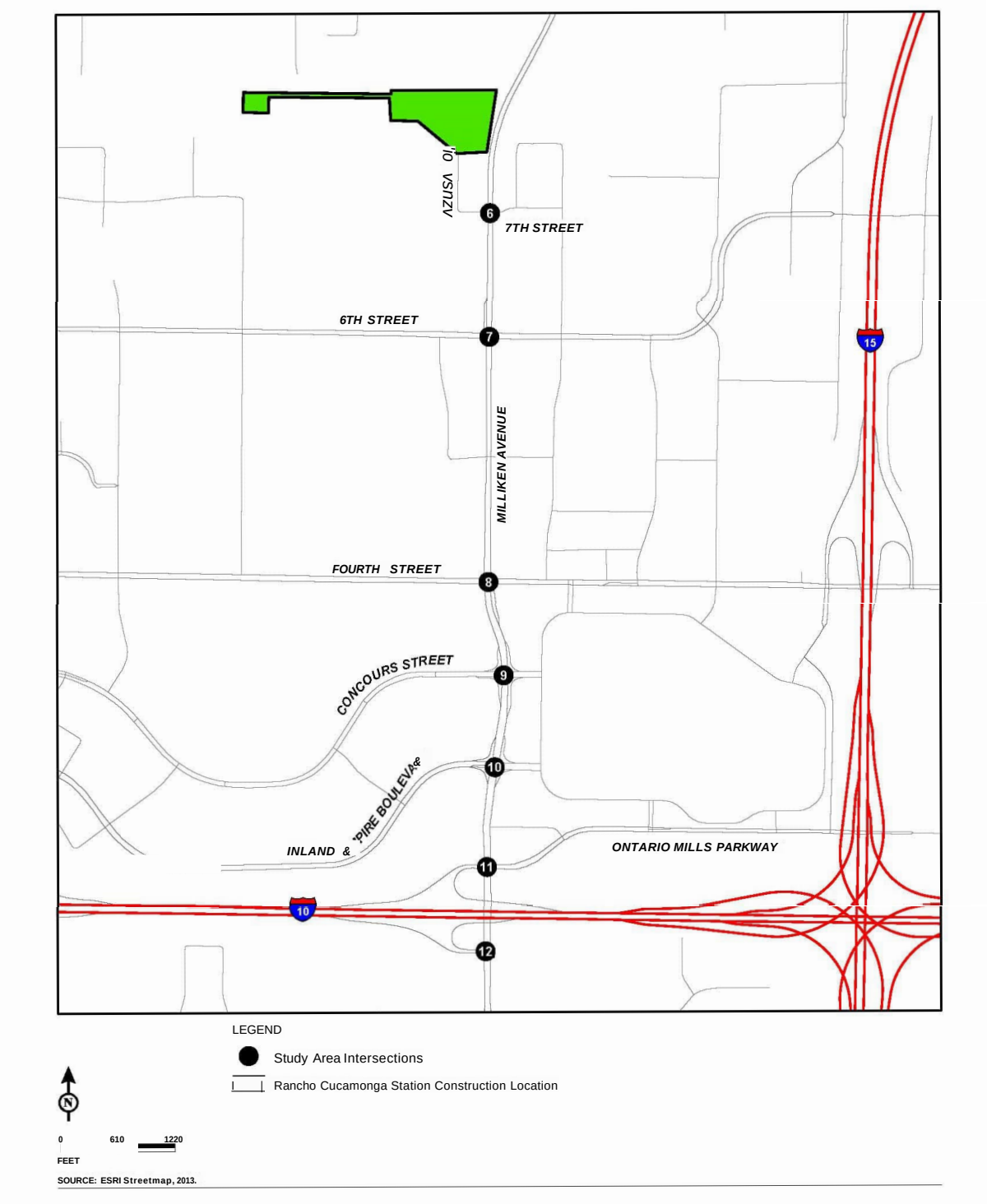


Figure 3.14-5 Construction Traffic Analysis Study Area Intersections—Vent Shaft Design Option 2

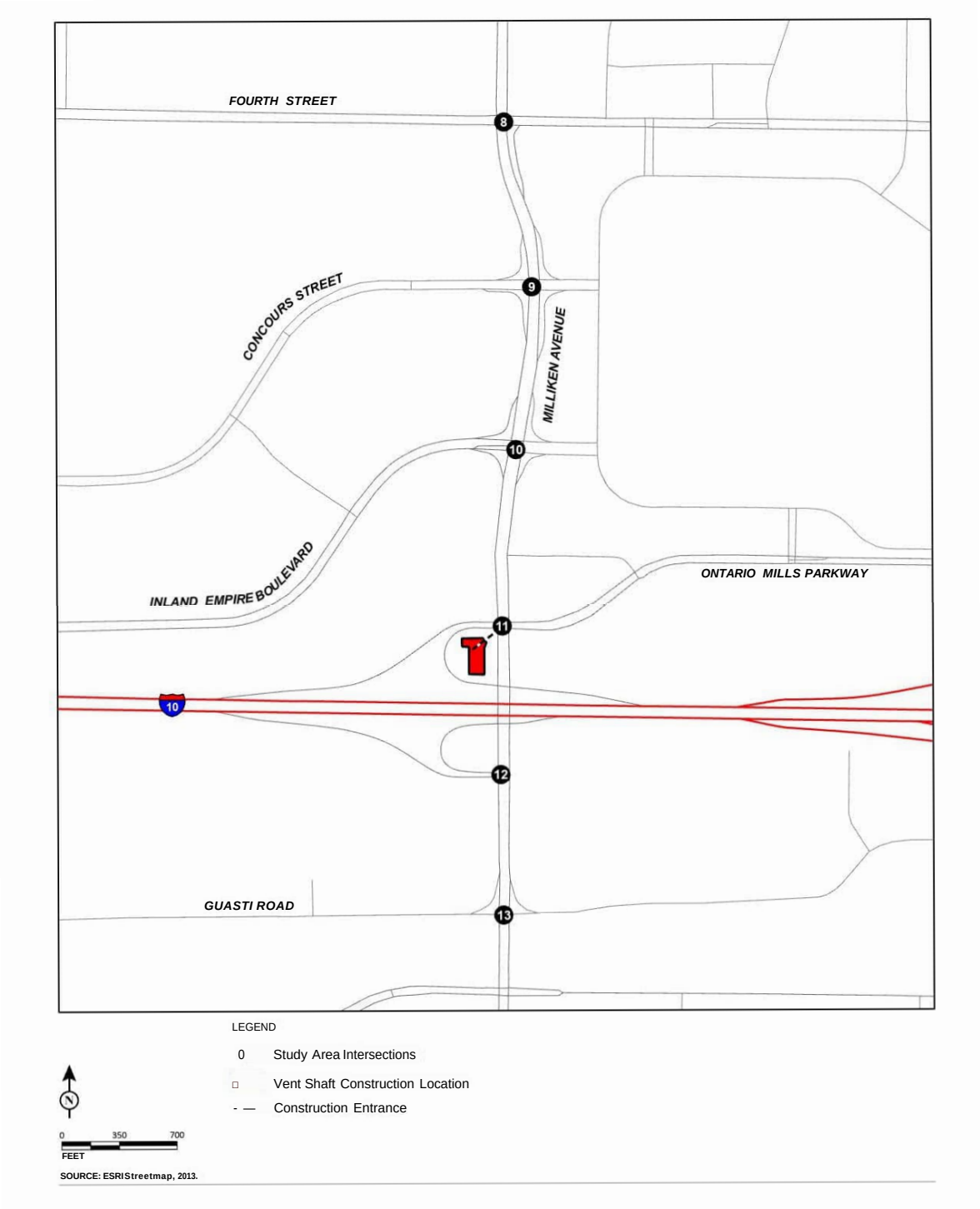
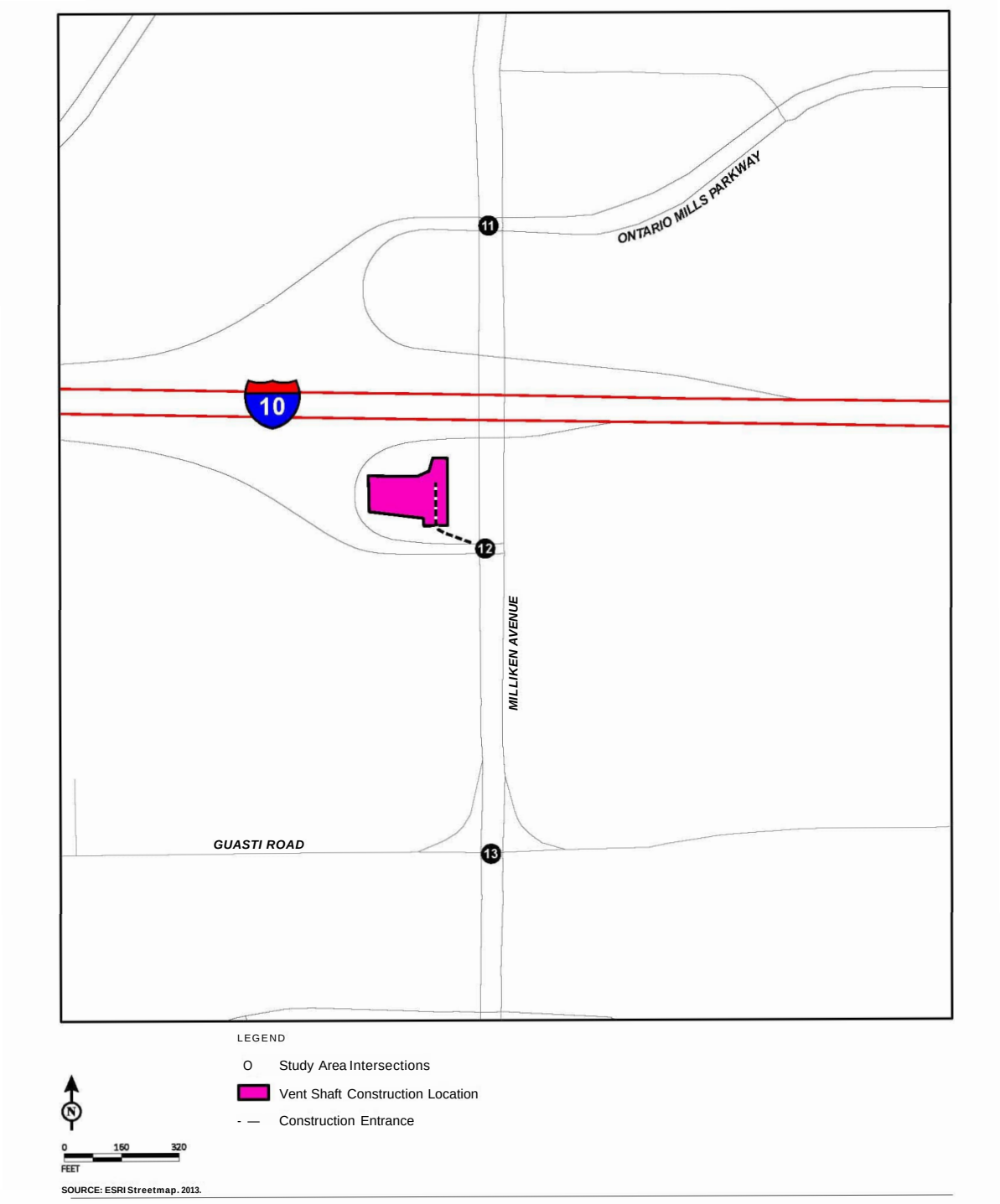


Figure 3.14-6 Construction Traffic Analysis Study Area Intersections—Vent Shaft Design Option 4



3.14.2.2.2 Identification of Analysis Scenarios

Based on the understanding of the proposed Project, construction would occur at two staging sites simultaneously during Scenario 1. Following completion of Scenario 1, construction would also occur at two staging sites simultaneously during Scenario 2. As such, the following scenarios have been analyzed:

- Scenario 1: ONT Terminal 2 and Terminal 4;
- Scenario 2A: vent shaft design option 2 and Cucamonga Station (includes Maintenance and Storage Facility [MSF]); and
- Scenario 2B: vent shaft design option 4 and Cucamonga Station (includes MSF).

3.14.2.2.3 Analysis Methodology and Methods of Effectiveness (Included for Informational Purposes Only)

Traffic operations at intersections have been evaluated for weekday a.m. and p.m. peak-hour traffic conditions for Scenarios 1, 2A, and 2B. Consistent with the TOA, the intersection LOS analysis has been prepared using HCM methodologies to analyze traffic operations at the identified study intersections. Intersection LOS was calculated using the Synchro 11 software.

Study intersections analyzed are under the jurisdictions of the City of Rancho Cucamonga, the City of Ontario, and Caltrans. The City of Ontario uses LOS E as its minimum LOS criterion per its General Plan. The City of Rancho Cucamonga uses LOS D as its minimum LOS criterion per its General Plan. Caltrans uses LOS D as its minimum LOS criterion at all intersections under its jurisdiction.

3.14.2.2.4 Year 2025 Conditions Traffic Forecast Methodology

Consistent with the TOA, existing traffic conditions at the study area intersections have been determined through the analysis of weekday peak-hour intersection counts. A certified traffic counter collected traffic data at the study intersections listed in Section 3.14.2.1.1. The appropriate methodology for developing existing traffic volumes has been confirmed with the City of Rancho Cucamonga, the City of Ontario, and SBCTA. Heavy vehicle traffic, pedestrian, and bicycle data were collected along with vehicular traffic counts at study intersections for the construction analysis.

SBTAM has been used to analyze Year 2025 conditions. The current forecast year in the SBTAM is 2040. As such, growth from the SBTAM base (2019) to the SBTAM future year (2040) has been applied to existing traffic volumes to develop Year 2025 traffic volumes.

3.14.2.2.5 Construction Trip Generation

Trip generation calculations have been prepared for the proposed Project's temporary construction (accounting for passenger vehicle equivalents (PCE) and the potential overlap of construction activities). The following summarizes the conceptual construction schedules at each construction staging area:

- Daily Construction Trucks/Equipment Arrival and Departure Schedule:
    - Working hours would be from 7:00 a.m. to 5:00 p.m.

- Excavation cut/cover of stations would require 50 trucks per day at each location.
- The permanent structure construction phase would require 10 concrete trucks per day.
- Ancillary delivery trucks would require approximately one truck every two hours.

- Conceptual Construction Employees Scheduling:
  - Day Shift Miners: The day shift includes a total of 70 miners, including supervision. Day shift miners would arrive at the construction sites between 5:00 and 5:30 a.m. and depart between 4:00 and 4:30 p.m.
  - Day Shift Staff: The day shift also includes 30 staff (the contractor, the owner, and quality assurance/quality control [QA/QC] personnel). Day shift staff would arrive at the construction sites between 6:30 and 7:00 a.m. and depart between 4:30 and 5:00 p.m.
  - Night Shift Staff: The night shift consists of 30 miners and five staff (the contractor, the owner, and QA/QC personnel). All night shift miners and staff would arrive at the construction sites between 3:00 and 3:30 p.m. and depart between 4:00 and 4:30 a.m.
  - 30 Additional Employees: It is anticipated that 30 employees would arrive at the construction sites during the a.m. peak hour and depart during the p.m. peak hour.

The construction trip generation summary table has been prepared based on the information listed. Table 3.14-10 summarizes the construction trip generation. Because two sites would be developed simultaneously, each scenario accounts for the trip generation at both construction staging sites.

Construction trucks for excavation cut-and-cover would require 50 trucks per day at each site, for a total of 200 truck trips per day (100 truck trips inbound and 100 truck trips outbound). These trucks have been assumed to arrive uniformly throughout the day over a period of 10 hours (7:00 a.m. to 5:00 p.m.). Therefore, these construction trucks are estimated to generate approximately 10 inbound and 10 outbound truck trips during each peak hour. Concrete trucks required for the permanent structure construction phase would access the sites after the excavation phase is complete. There would be only 10 concrete trucks per day during the permanent structure construction phase. Therefore, the number of construction traffic trucks would be higher during the excavation phase of construction. Thus, the truck trip generation during the excavation phase is considered to be the more conservative and has been included to develop the construction traffic trip generation. For ancillary delivery trucks, all delivery trucks are assumed to be large two-axle trucks. The construction traffic trip generation would consist of 12 inbound trucks and 12 outbound trucks in each of the peak hours.

Table 3.14-10 Construction Traffic Analysis Trip Generation

Construction Staging Areas	Units		A.M. Peak Hour			P.M. Peak Hour			Daily
			In	Out	Total	In	Out	Total	
Scenario 1 Construction Traffic[1]									
Construction Sites: Ontario International Airport Terminals 2 and 4									
Construction Trucks Traffic									
Construction Trucks - Excavation Cut/ Cover	100	TR	10	10	20	10	10	20	200
Ancillary Delivery Trucks	10	TR	2	2	4	2	2	4	20
Total Truck Trip Generation			12	12	24	12	12	24	220
Construction Trucks - Excavation Cut/Cover Trip Generation (in PCEs)[2,3]	100	TR	30	30	60	30	30	60	600
Ancillary Delivery Trucks Trip Generation (in PCEs)[2,3]	10	TR	3	3	6	3	3	6	30
Total PCE Trip Generation			33	33	66	33	33	66	630
Construction Employees Traffic									
Day Shift Miners	70	Miners	0	0	0	0	70	70	140
Day Shift Staff	30	Staff	0	0	0	0	30	30	60
Night Shift	70	Staff	0	0	0	0	0	0	140
Other Construction Employees	60	Emp	60	0	60	0	60	60	120
Total Construction Employees Trip Generation			60	0	60	0	160	160	460
Scenario 1 Construction Traffic Net Trip Generation (Total Vehicles)			72	12	84	12	172	184	680
Scenario 1 Construction Traffic Net Trip Generation (in PCEs)			93	33	126	33	193	226	1,090
Scenarios 2A and 2B Construction Traffic[1]									
Construction Sites: Rancho Cucamonga Metrolink Station and Vent Shaft (Vent shaft design option 2 and Option 4)									
Construction Trucks Traffic									
Construction Trucks - Excavation Cut/Cover	100	TR	10	10	20	10	10	20	200
Ancillary Delivery Trucks	10	TR	2	2	4	2	2	4	20
Total Truck Trip Generation			12	12	24	12	12	24	220
Construction Trucks - Excavation Cut/Cover Trip Generation (in PCEs)[2,3]	100	TR	30	30	60	30	30	60	600
Ancillary Delivery Trucks Trip Generation (in PCEs)[2,3]	10	TR	3	3	6	3	3	6	30
Total PCE Trip Generation			33	33	66	33	33	66	630
Construction Employees Traffic									
Day Shift Miners	70	Miners	0	0	0	0	70	70	140
Day Shift Staff	30	Staff	0	0	0	0	30	30	60
Night Shift	70	Staff	0	0	0	0	0	0	140
Other Construction Employees	60	Emp	60	0	60	0	60	60	120
Total Construction Employees Trip Generation			60	0	60	0	160	160	460

Construction Staging Areas	Units	A.M. Peak Hour			P.M. Peak Hour			Daily
		In	Out	Total	In	Out	Total	
Scenarios 2A and 2B Construction Traffic Net Trip Generation (Total Vehicles)		72	12	84	12	172	184	680
Scenarios 2A and 2B Construction Traffic Net Trip Generation (in PCEs)		93	33	126	33	193	226	1,090

Source: SBCTA 2024
Notes: [1]Number of trucks and employees based on the conceptual construction trucking schedule for excavation, number of construction employees, arrival, and departure times provided by AECOM.
[2] Based on the City of Rancho Cucamonga's *Traffic Impact Analysis Guidelines (dated June 2020)*, all truck trips were converted to passenger car equivalents (PCEs) using a 1.5 PCE factor for 2-axle trucks, 2.0 for 3-axle trucks, and 3.0 for 4- and more axle trucks.
[3] The City of Ontario uses the same PCE factors.
Emp = Employees
TR = Trucks

Truck traffic was converted to PCE volumes. The concept of PCEs accounts for the effects of larger trucks on traffic operations by assigning each type of truck a PCE factor that represents the number of passenger vehicles that could travel through an intersection at the same time that a particular type of truck could. PCE volumes were developed using a factor of 1.5 for two-axle trucks, 2.0 for three-axle trucks, and 3.0 for trucks with four or more axles. As a conservative estimate, all construction truck trips were considered to be trucks with four or more axles. As previously stated, all ancillary delivery trucks have been considered as two-axle trucks. As such, the construction trucking schedule is estimated to generate 33 inbound PCE trips and 33 outbound PCE trips in each of the peak hours.

Each construction employee has been considered to generate one trip as a conservative estimate. Based on the construction employee schedule, construction employees are anticipated to generate 60 inbound trips in the a.m. peak hour and 160 outbound trips in the p.m. peak hour. Overall, each construction site is estimated to generate 126 net PCE trips in the a.m. peak hour and 226 net PCE trips in the p.m. peak hour.

3.14.3 Parking Analysis

The proposed Project would provide on-demand service using autonomous vehicles for passengers traveling to and from ONT from the Cucamonga Metrolink Station, within the Cities of Rancho Cucamonga and Ontario. As previously mentioned, the proposed Project includes the development of 3 passenger stations: one in the Cucamonga Metrolink Station western parking lot, one in the ONT Lot 2 General parking lot, and one in the ONT Lot 4 General parking lot. The parking analysis has analyzed the loss of parking under project construction and project operation to determine whether adequate parking would be available with implementation of the proposed Project.

3.14.3.1 Ontario International Airport Parking

During construction, the proposed Project is estimated to result in the temporary loss of 300 spaces in each of the ONT Lot 2 General and Lot 4 General parking lots. During operations, the proposed Project is estimated to result in the permanent loss of 85 spaces in the ONT Lot 2 General parking lot and the permanent loss of 115 spaces in the ONT Lot 4 General parking lot.

Existing parking demand data for ONT Lot 2 General, Lot 2 Premium, Lot 3, Lot 4 General, Lot 4 Premium, Lot 5, and Lot 6 were obtained from Ontario International Airport Authority (OIAA). Parking data provided by OIAA reflects the daily peak demand between June 1, 2024, and June 11, 2024, as well as the total number of available stalls for each of the applicable ONT parking lots. The peak parking demand at ONT during project construction is based on the existing parking demand data provided by OIAA. Terminal 2 and Terminal 4 project trips were added to the existing parking demand for each corresponding parking lot to determine the peak parking demand during project operations.

The parking analysis has analyzed the loss of parking under both operations and construction scenarios at ONT during a typical weekday and weekend day to determine whether adequate parking would be available on-site during construction and after implementation of the proposed Project.

3.14.3.2 Cucamonga Metrolink Station Parking

During construction, the proposed Project is estimated to result in the temporary loss of 170 spaces in the Cucamonga Metrolink Station western parking lot. During operations, the proposed Project is estimated to result in the permanent loss of 180 spaces in the Cucamonga Metrolink Station western parking lot.

Parking surveys were conducted at the Cucamonga Metrolink Station to determine the peak parking demand at this site. The parking surveys were conducted on two typical weekdays (June 25, 2024 [Tuesday] and June 27, 2024 [Thursday]) and typical weekend days (June 22, 2024 [Saturday] and June 29, 2024 [Saturday]) for a span of 24 consecutive hours for each of the surveyed days. The peak parking demand at the Cucamonga Metrolink Station during project construction is based on the parking demand data provided in the parking surveys.

Several transportation projects within the region have been proposed and are anticipated to be operational in conjunction with the proposed Project. Among these projects is the Brightline West High-Speed Rail Project that would connect to and operate in the existing Cucamonga Metrolink Station. According to the *Brightline West Cajon Pass High-Speed Rail Project Transportation Technical Report*, dated October 2022, the existing eastern lot of the Cucamonga Metrolink Station would be replaced with a parking structure that would provide a total of 4,100 parking stalls, including 650 reserved stalls for Metrolink passengers. Furthermore, the Brightline West Project estimates a peak demand of 4,025 parking stalls under their opening year scenario (2025) and 8,654 parking stalls under their horizon year scenario (2045) to be used for Brightline West passengers, intercity rail passengers, employees, and Metrolink passengers. It should be noted that all parking demand data provided by the Brightline West

project reflects the peak daily demand during a typical week, which occurs between Friday and Saturday. Cucamonga Metrolink Station project trips and Brightline West parking demand data were added to the existing parking demand data to determine the peak demand during project operation. For purposes of this analysis, as a conservative approach, this peak demand has been applied to both weekday and weekend day parking analyses at the Cucamonga Metrolink Station.

The parking analysis has analyzed the loss of parking due to project construction at the Cucamonga Metrolink Station during a typical weekday and weekend day to determine whether adequate parking would be available on-site during project construction. Furthermore, the parking analysis has analyzed the change of available parking stalls during project operation on a typical weekday and weekend day to determine whether adequate parking would be available on-site during project operation in conjunction with Brightline West operations at Cucamonga Metrolink Station.

3.14.4 Evaluation of Impacts Under California Environmental Quality Act

On December 28, 2018, the California Office of Administrative Law cleared the revised State CEQA Guidelines for use. Among the changes to the guidelines was the removal of vehicle delay and LOS from consideration under CEQA. With the adopted guidelines, transportation impacts are evaluated based on a Project's impact on VMT.

Because the proposed Project spans multiple jurisdictions and involves federal and state regulatory authorities, the VMT analysis must address requirements from SBCTA, Caltrans, the City of Rancho Cucamonga, and the City of Ontario. Therefore, the analysis addresses the requirements for preparation of a VMT analysis as established by the following guidelines:

- Caltrans' Transportation Analysis under CEQA (TAC) & Transportation Analysis Framework (TAF) (September 2020);
- SBCTA's Recommended Traffic Impact Analysis Guidelines for Vehicle Miles Traveled and Level of Service Assessment (February 2020);
- The City of Ontario's *VMT Impact Thresholds* (June 2020); and
- The City of Rancho Cucamonga's *Traffic Impact Analysis Guidelines* (June 2020).

In accordance with the guidelines set forth by Caltrans, SBCTA, the City of Rancho Cucamonga, and the City of Ontario, the proposed Project would have a significant impact related to transportation if it would do the following:

- Increase capacities of the roadway network; or
- Induce vehicular travel via construction of new roadway facilities.

Although VMT is the transportation impact evaluation metric under CEQA, the City of Rancho Cucamonga and City of Ontario seek to maintain a certain LOS standard for their circulation network as summarized in their goals and policies under Section 3.14.1.3. As such, the General Plan goals and policies of the City of Rancho Cucamonga and the City of Ontario set forth the minimum LOS standards for their respective circulation networks. Therefore, an LOS analysis is also required to demonstrate consistency with the respective General Plan.

3.14.5 CEQA Thresholds of Significance

According to Appendix G of the 2024 CEQA Guidelines, implementation of the proposed Project may result in a potentially significant impact if it would:

- Conflict with a program plan, ordinance, or policy addressing the circulation system including transit, roadways, bicycle, and pedestrian facilities;
- Conflict or be inconsistent with the State CEQA Guidelines Section 15064.3, subdivision (b);
- Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); and
- Result in inadequate emergency access.

3.14.6 Existing Settings

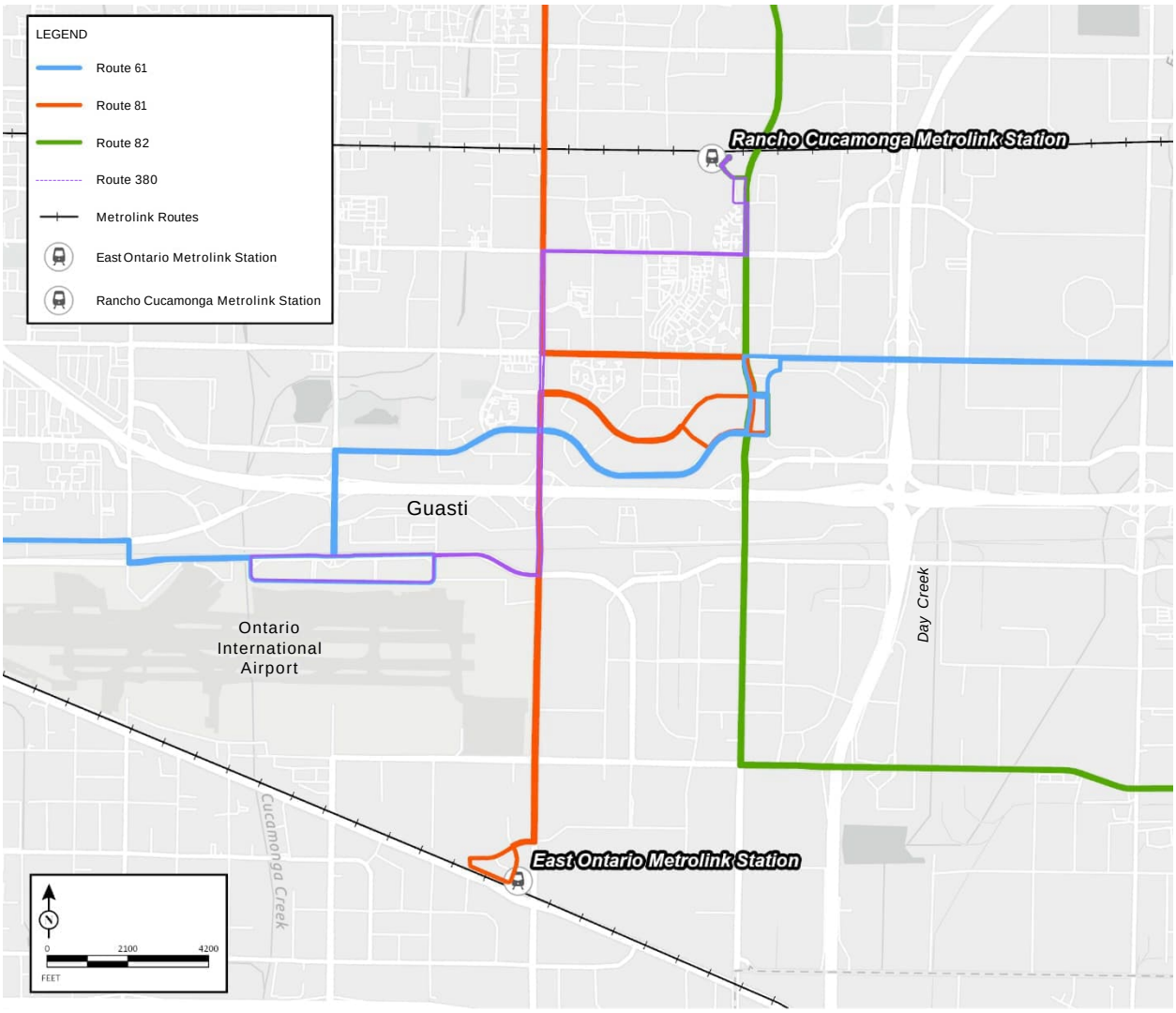
3.14.6.1 Bus and Rail Transit Service

3.14.6.1.1 Existing Bus and Rail Transit Services

The San Bernardino Line is the busiest in the Metrolink commuter rail system, carrying approximately 6,000 passengers each weekday (Metrolink 2024). rail system, carrying approximately 6,000 passengers each weekday (Metrolink 2024). Metrolink's Riverside Line carries approximately 1,300 passengers per day but does not provide weekend service (Metrolink 2024). The lack of weekend service limits the line's use for connecting to ONT. While ONT is a key destination for travelers within the region, it is located outside of walking/biking distance from both stations. The 2014 rail access study evaluated potential connections between ONT and Metrolink and recommended a series of projects to address increased passenger capacity at ONT. Current and near-term ridership at ONT did not justify the costs of constructing a high-capacity rail system (SANBAG 2014). While the rail was identified as a long-term solution, bus shuttles were recommended to address near-term connectivity (SANBAG 2014). However, bus shuttles would require programming both an interim project and a long-term project to meet these identified solutions.

Public transportation to ONT is limited to Omnitrans. As of April 2024, Omnitrans operates 28 fixed bus routes in the San Bernardino Valley, including 27 local bus routes and one bus rapid transit (BRT) line, the sbX Green Line (Omnitrans, 2022). ONT Connect Route 380 directly connects ONT to the Cucamonga.

Figure 3.14-7 Omnitrans Routes Within the Proposed Project Vicinity



Source: Omnitrans (2022)

Metrolink Station. Furthermore, portions of three routes in particular—Routes 61, 81, and 82—traverse through the proposed Project corridor as shown on Figure 3.14-7 Route 61 runs every 20 to 30 minutes on weekdays and every 30 minutes on weekends but does not directly connect to either of the two nearby Metrolink stations. The route does connect to Metrolink stations more than 5 miles from ONT (the Riverside Line Downtown Pomona Station and the San Bernardino Line Fontana Station). Route 81 directly connects to the Ontario-East Station. However, Route 81 runs once per hour with no service on Sundays and does not enter the ONT terminal area. Passengers must walk or ride a shuttle after exiting the bus to reach the terminal area (SANBAG 2014). Route 82 directly connects to the Cucamonga Metrolink Station. However, Route 82 runs every 60 minutes on weekdays and 65 minutes on weekends, with no direct

connection with the ONT terminal area. Similar to Route 81, passengers would have to use another transportation option to reach the terminal area. None of the Omnitrans routes are timed to coincide with ONT flight arrivals and departures

According to the service plan of Omnitrans in fiscal year 2021, Route 61 has the highest annual revenue hours and accounts for 11.4% of all 27 fixed routes. The combined annual revenue hours of Routes 61, 81, and 82 account for 17.1% of all 27 fixed routes, as shown on Figure 3-14-8.

Metrolink is a regional commuter train service that operates seven regional lines serving the Antelope Valley and Los Angeles, Ventura, San Bernardino, Riverside, and Orange counties under the jurisdiction of the Southern California Regional Rail Authority. Three routes serve San Bernardino County: the San Bernardino, Riverside, and Inland Empire/Orange County lines. The San Bernardino route interfaces with the planned ONT connection corridor alignments and served an average of 9,336 average weekday riders in the second quarter of fiscal year 2018–2019 (Metrolink 2021). The San Bernardino Line runs 7 days per week.

3.14.6.1.1.1 Omnitrans Route 61

Route 61 has a total of 143 stops in both directions. The route length of Route 61 is 22 to 24 miles, depending on the direction. It provides an east-west connection between the Pomona Transit Center and the Fontana Metrolink Station. Route 61 travels through the City of Pomona, City of Montclair, City of Ontario, City of Rancho Cucamonga, and the City of Fontana, providing easy connections to many other Omnitrans routes, neighboring transit bus operators, and Metrolink rail service in both Pomona and Fontana. As of January 2022, Route 61 accounts for 1.2 million riders per year, or about 12% of Omnitrans annual ridership, despite being only one of 28 systemwide routes (Omnitrans 2022). It is Omnitrans' highest-ridership route (SBCTA 2020).

3.14.6.1.1.2 Omnitrans Route 81

Route 81 has 57 stops in both directions, and its route length is 11 miles. It provides a north-south connection between Chaffey College and the East Ontario Metrolink Station. Route 81 serves the City of Ontario and the City of Rancho Cucamonga via Ontario Mills Mall, with a stop at the Chino Transit Center. It runs primarily on Haven Avenue but makes a detour on 4th Street to connect with Ontario Mills Mall. Route 81 then continues back to Haven Avenue via Concours Street.

3.14.6.1.1.3 Omnitrans Route 82

Route 82's weekday eastbound service has 82 stops, and its weekday westbound service has 78 stops. The route lengths are both approximately 26.6 miles. Route 82's weekend eastbound service has 54 stops, with a total length of 15.2 miles. The route's weekend westbound service has 59 stops, with a total length of 17.7 miles. Route 82's weekday service provides a critical connection between major destinations such as the Fontana Farmer's Market and the Aquatic Center in the north and Henry J. Kaiser High School and

Southridge Village in the south. The weekend service provides a north-south connection between the Farmer's Market and Southridge Village.

Figure 3.14-8 Revenue Hours by Omnitrans Service Current vs. Proposed

Route	Total Annual Revenue Hours			
	Current	Proposed	A	%A
1	42.941	42.962	21	00%
2	19.112	12.258	(6.854)	-35 9%
3	31.207	30,379	(828)	-2.7%
4	29,815	29,249	(566)	-1.9%
5	20,708	-	(20 708)	-100 0%
6	-	19,624	19.624	n/a
7	10.902	-	(10.902)	-100 0%
8	20.111	16,330	(3.782)	-188%
10	14.103	14,192	89	06%
12	16.021	-	(16.021)	-100.0%
14	34.481	32.418	(2.063)	-6.0%
15	35.153	35.152	(D	00%
19	42,655	42.844	189	04%
20	4 279	•	(4.279)	-100.0%
22	18.456	12.919	(5.538)	-30.0%
29	3,017	-	(3.017)	-100.0%
215	12.485	12.713	228	18%
290	7.115	5.447	(1 668)	-234%
61	68.968	65,563	(3,405)	-4.9%
66	46,032	38.637	(7.395)	-16.1%
67	7.586	7.854	268	3.5%
80	10.223	-	(10.223)	-100 0%
81	15,181	9.218	(5,963)	-39.3%
82	19,274	19,464	190	1.0%
83	15,807	14.009	(1.798)	-11.4%
84	8,752	5,087	(3.664)	-41.9%
85	31.603	31.145	(457)	-1 4%
86	8,216	-	(8.216)	-100 0%
87	•	15.489	15.489	n/a
88	11.784	7.760	(4.025)	-34.2%
40' Total	605,988	520,713	(85,274)	-14.1%

Source: https://Omnitrans.org/wp-content/uploads/2020/07/Omnitrans-Service-Plan-FY2021.pdf

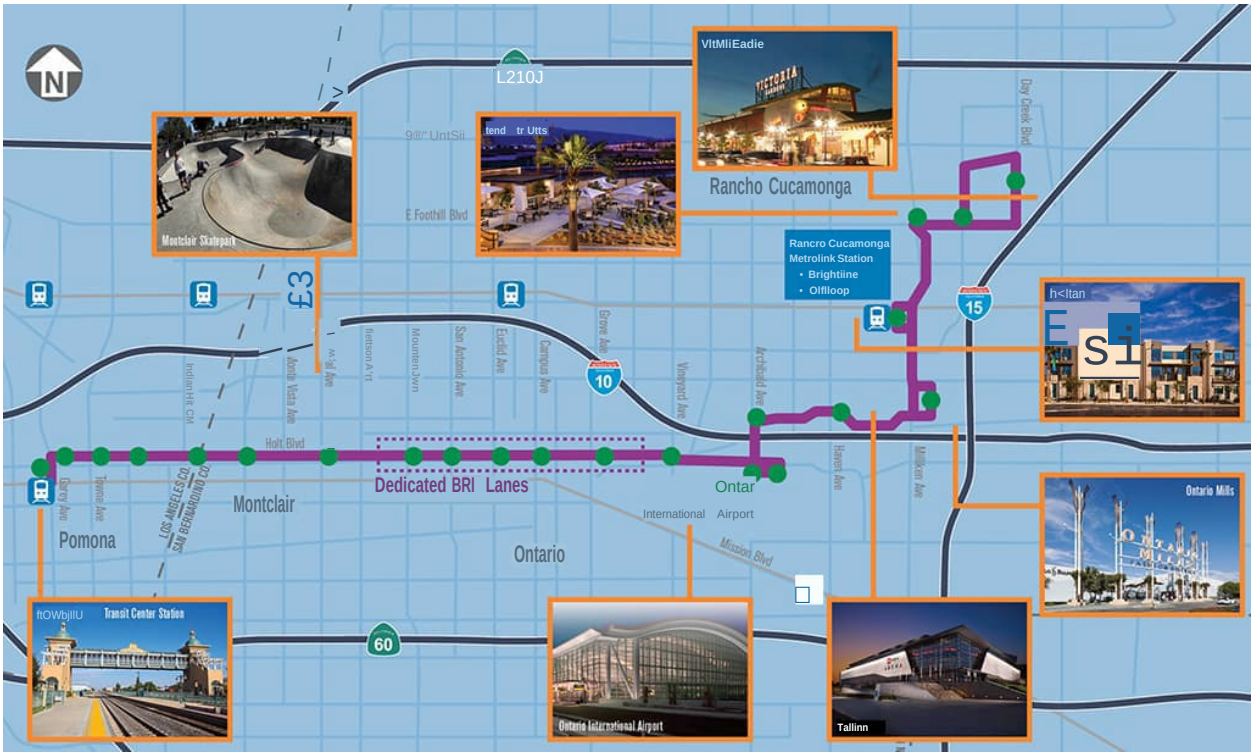
3.14.6.1.2 Planned Bus and Rail Transit Services

3.14.6.1.2.1 Omnitrans System Plan

The Omnitrans service plan for fiscal year 2021 proposed to increase Route 61's frequency to 15-20 minutes.

The West Valley Connector (WVC) project is a zero-emission BRT project that would be the first stage of the San Bernardino County Zero-Emission Bus Initiative and the second BRT route in San Bernardino County. The WVC alignment is shown on Figure 3.14-9

Figure 3.14-9 West Valley Connector Project Alignment Map



Source: San Bernardino County Transportation Authority (https://www.gosbcta.com/project/west-valley-connector-brt/)

Phase 1 of the project is 19 miles in length and would upgrade a portion of existing Route 61 that runs along Holt Boulevard, adding approximately 3.5 miles as center-running, dedicated bus-only lanes. Phase 1 includes 21 stations that would provide a much-improved transit connection to ONT and help build transit connectivity by linking ONT, two Metrolink lines (San Bernardino and Riverside), and multiple major activity centers along the route, including Ontario Mills Mall and Victoria Gardens.

Headways would be 10 minutes in the peak commute period and 15 minutes off-peak, providing a high level of service to the community. The completion of the project would reduce transit trip time approximately 28%, from 75 to 54 minutes.

As of June 2022, the WVC project is in the process of completing the final design. The new service is anticipated to start in December 2024. SCAG included the WVC project in its 2020 RTP/SCS, the Connect SoCal Plan (SCAG 2020).

3.14.6.2 Existing Regional Vehicle Miles Traveled

Transportation analysis for purposes of estimating VMT, such as the proposed Project trip generation and traffic analysis, was analyzed using data from the STOPS model and SBTAM. The STOPS model does not provide existing regional VMT; therefore, existing regional VMT was estimated using the SBTAM. A region should be defined to estimate regional VMT. The modeling area for the STOPS model was developed to capture all potential areas that would have trips to/from the proposed Project. Therefore, the modeling area from STOPS was considered as the region. VMT for all roadway links within the region was summarized as regional VMT. However, the base year for the SBTAM is 2016, with a horizon year of 2040, and no interim data were available from the model. Linear interpolation was applied to estimate existing (2022) regional VMT using 2016 and 2040 roadway VMT summaries from SBTAM. Table 3-14-11 shows the SBTAM regional VMT for 2016, existing (2022), and 2040 conditions.

Table 3.14-11 Existing Regional VMT

	2016	2040	2022 (Existing)
Daily Regional VMT (from SBTAM)	330,113,226	403,851,886	348,547,891

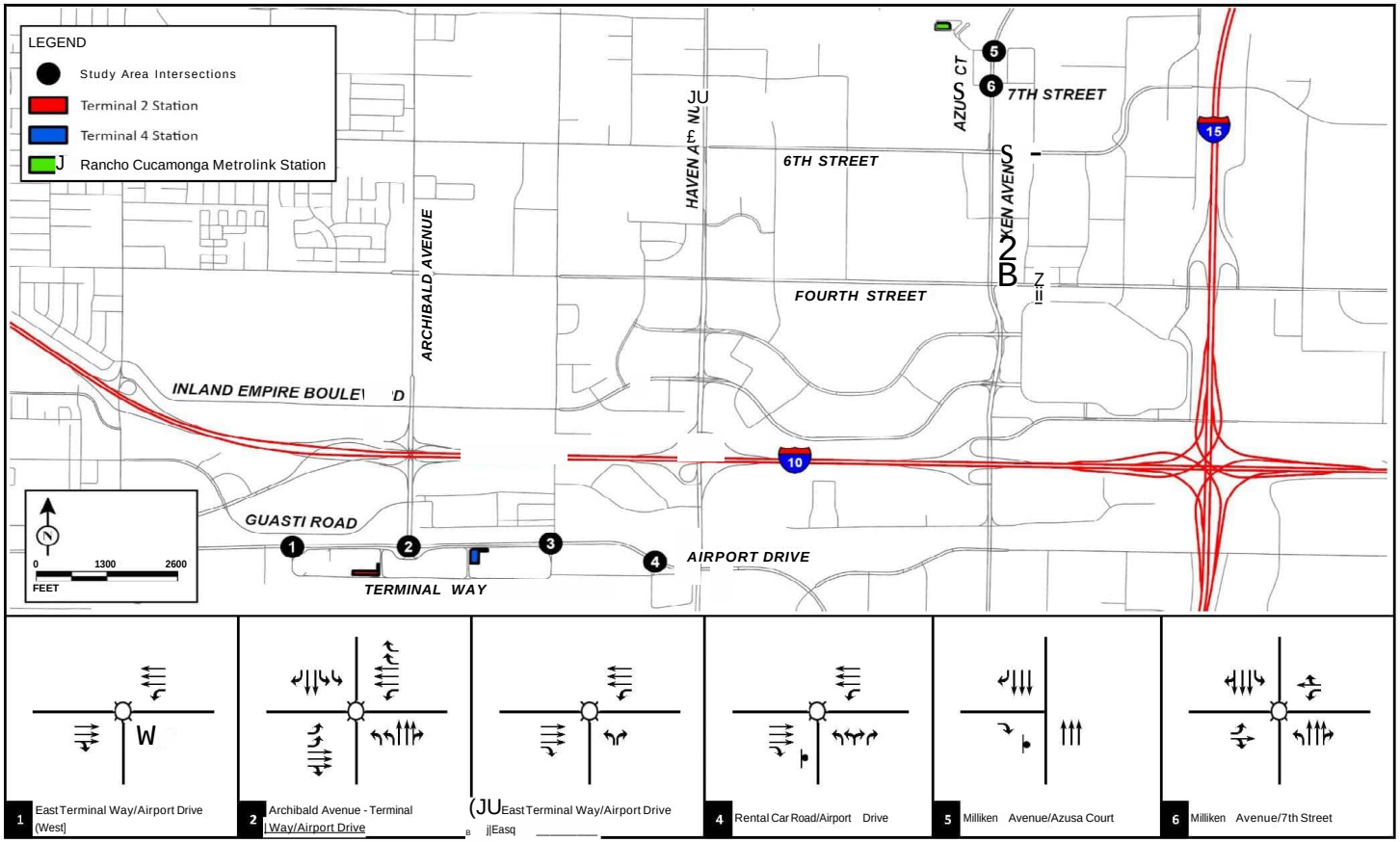
Source: LSA 2024

3.14.6.3 Vehicular Traffic and Existing (2022) Traffic Volumes

Existing intersection counts were collected for the a.m. and p.m. peak hours at the study area intersections in September 2022. Intersection volumes were collected during the a.m. and p.m. peak periods, from 7:00 to 9:00 a.m. and from 4:00 to 6:00 p.m., respectively. Volume development for the existing peak-hour volumes was based on the methodology documented in Section 3.14.6.2.

Figure 3.14-10 illustrates the existing lane geometries and traffic control at study area intersections. Figure 3.14-11 illustrates the existing peak-hour turning movement volumes at the study area intersections. Detailed count sheets and volume development worksheets are included in the Transportation Technical Report (SBCTA 2024; Appendix Q).

Figure 3.14-10 Existing Lane Geometries and Traffic Control at Study Intersections

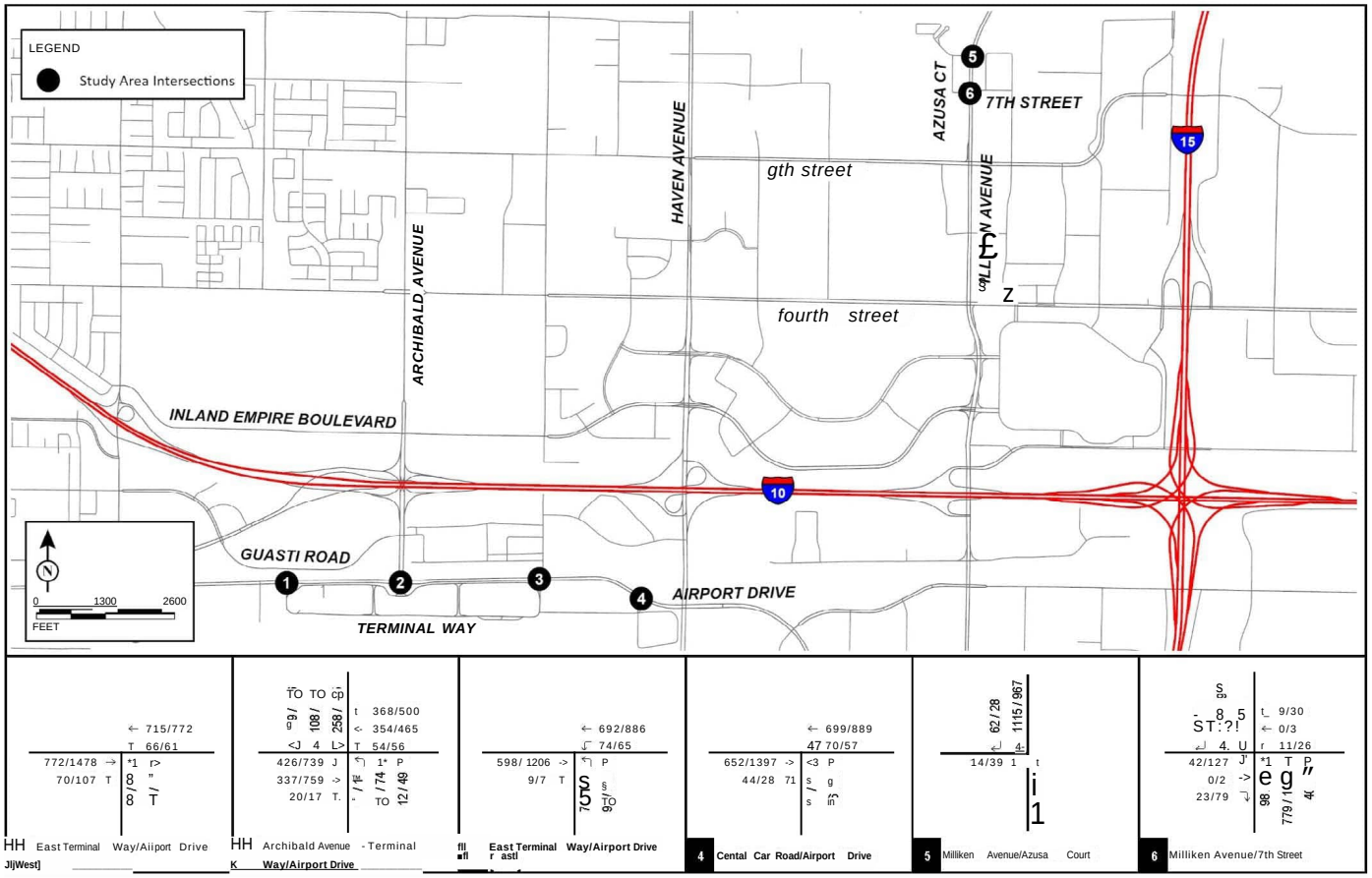


Legend

O Signal

H StopSign

Figure 3.19-11 Existing Peak-Hour Turning Movement Volumes at the Study Intersections



XXXX / YYYY
AM / PM Peak Hour Traffic Volumes

3.14.6.4 Existing (2022) Levels of Service (Included for Informational Purposes Only)

The LOS standard refers to traffic operations during the peak hours, based on the assumption that facilities that operate adequately during the peak period would operate adequately at other times as well. Therefore, the LOS analysis examines the LOS during the a.m. and p.m. peak hours.

Figure 3.14-10: Existing Lane Geometries and Traffic Control at Study Area Intersections

The LOS analysis was conducted based on the methodology documented in Section3.14.2, using the Synchro 11 software and signal timing sheets provided by the City of Rancho Cucamonga, the City of Ontario, and Caltrans. Table 3.14-12 summarizes the result of the LOS analysis and shows that all intersections under existing conditions operate at a satisfactory LOS except for:

- Archibald Avenue – Terminal Way/Airport Drive (p.m. peak hour only).

Table 3.14-12 Existing Intersection LOS

	Intersection	Jurisdiction	LOS Standard	Control	No Build			
					A.M. Peak Hour		P.M. Peak Hour	
					Delay (sec.)	LOS	Delay (sec.)	LOS
1	East Terminal Way/Airport Drive [West]	City of Ontario	E	Signal	36.2	D	48.3	D
2	Archibald Avenue - Terminal Way/ Airport Drive	City of Ontario	E	Signal	63.2	E	>100	F *
3	East Terminal Way/Airport Drive [East]	City of Ontario	E	Signal	31.3	C	26.8	C
4	Rental Car Road/Airport Drive	City of Ontario	E	Signal	24.1	C	19.9	B
5	Milliken Avenue/Azusa Court	City of Rancho Cucamonga	D	OWSC	14.4	B	14.0	B
6	Milliken Avenue/7th Street	City of Rancho Cucamonga	D	Signal	10.0	A	14.0	B

Source: SBCTA 2024
Notes: OWSC = One-Way Stop Control; Delay = Average control delay in seconds (For OWSC/TWSC intersections, reported delay is for worst-case movement); *Exceeds LOS Standard

Signal timing and detailed intersection LOS worksheets are included in the Transportation Technical Report (SBCTA 2024; Appendix Q).

3.14.6.5 Parking

Most of the proposed Project footprint is designated as Urban Nfigueighborhood, Commercial, Employment-Industrial, and Open Space adjacent to a major arterial (Milliken Avenue). Multifamily residential uses are primarily located on the western side of Milliken Avenue from approximately 7th Street

south to 4th Street, and a mix of commercial and industrial businesses are located east of Milliken Avenue. There is no on-street parking along Milliken Avenue; however, plentiful off-street surface parking can be found at commercial lots. On-street parking can also be found in multifamily residential areas.

Parking stalls are also available at the Cucamonga Metrolink Station and at ONT. The parking areas at the Cucamonga Metrolink Station include 980 standard parking stalls, including 24 ADA-compliant stalls that are separated by landscaped pathways and seating areas (Metrolink 2022). In addition, a Metrolink charging station is provided within the northeastern portion of the eastern parking lot. Azusa Court provides access to the various parking areas associated with the Cucamonga Metrolink Station from Milliken Avenue to the east. ONT offers short- and long-term parking in Lot 2, General, Lot 2 Premium, Lot 3, Lot 4 General, Lot 4 Premium, Lot 5 and Lot 6 parking lots. Parking lots 2 and 4 are within the proposed Project footprint. Parking lot 5 has the highest parking capacity, with more than 2,316 stalls. Lot General has a total of 1,234 parking stalls. Lot 2 Premium has a total of 347 parking stalls, which includes electric vehicle parking. Lot 3 has a total of 1,192 parking stalls. Lot 4 General has a total of 1,430 parking stalls. Lot 4 Premium has a total of 352 parking stalls, which include electric vehicle parking. Lot 6 has a total of 1, 337 parking stalls (Ontario International Airport Authority, 2024).

3.14.6.6 Active Transportation

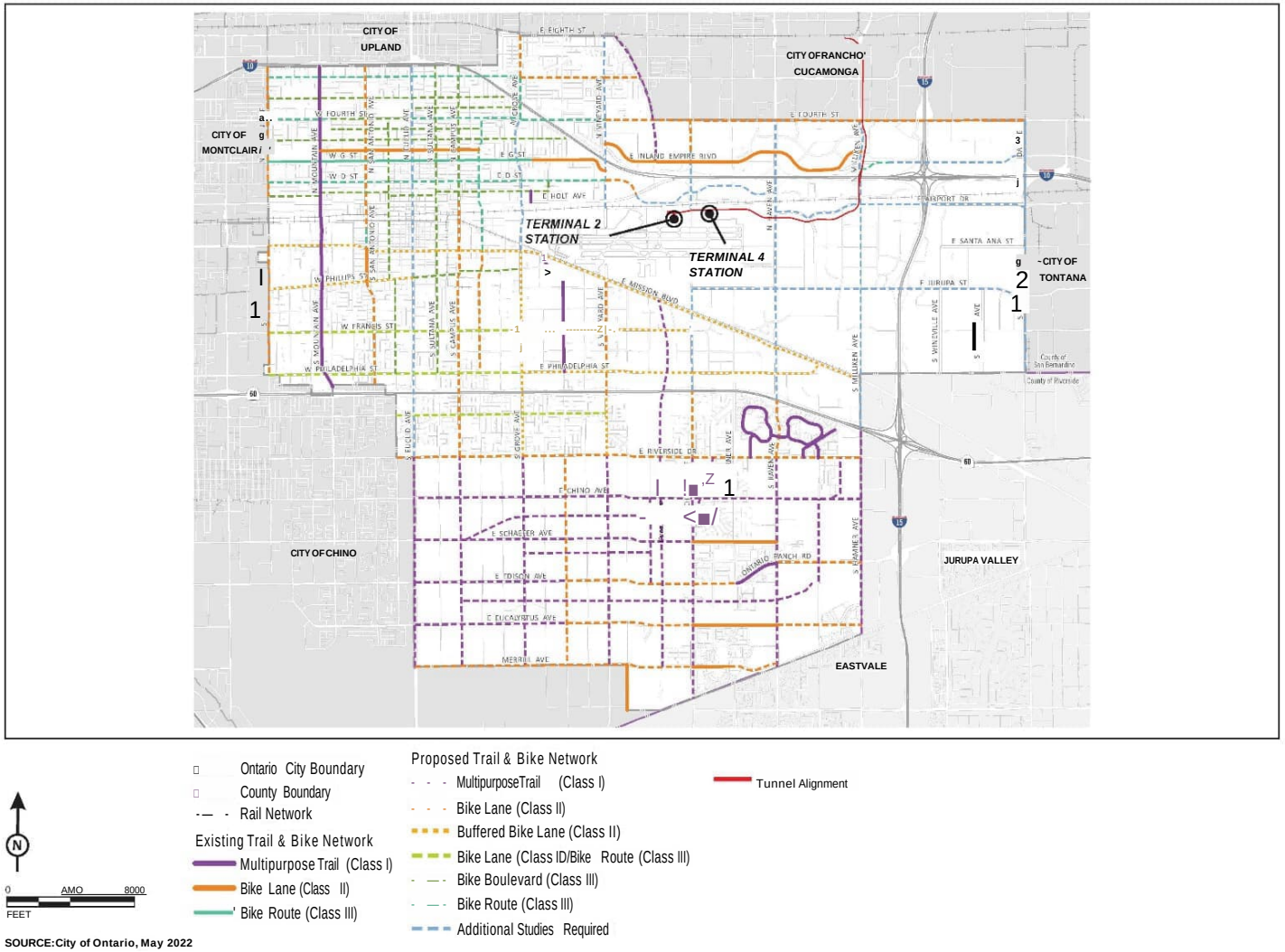
The SBCTA NMTP (as of 2018) identifies bikeways that run adjacent to the proposed Project area. The City of Ontario's existing and proposed bikeways are illustrated on Figure 3.14-12. The City of Rancho Cucamonga's existing and proposed bicycle network is illustrated on Figure 3.14-13. Table 3.14-14 summarizes the existing and planned bikeways along the proposed Project footprint.

Table 3.14-13 Existing Bikeways Within Proposed Project Footprint

Jurisdiction	Existing and Proposed Bikeways
City of Rancho Cucamonga	From Arrow Route to 6th Street along the Milliken Avenue existing Class II bike lane
City of Rancho Cucamonga	From 6th Street to 5th Street along the Milliken Avenue existing Class II bike lane
City of Rancho Cucamonga	From 5th Street to 4th Street along the Milliken Avenue existing Class II bike lane
City of Ontario	From Vineyard Avenue to Milliken Avenue along the Inland Empire Boulevard existing Class II bike lane

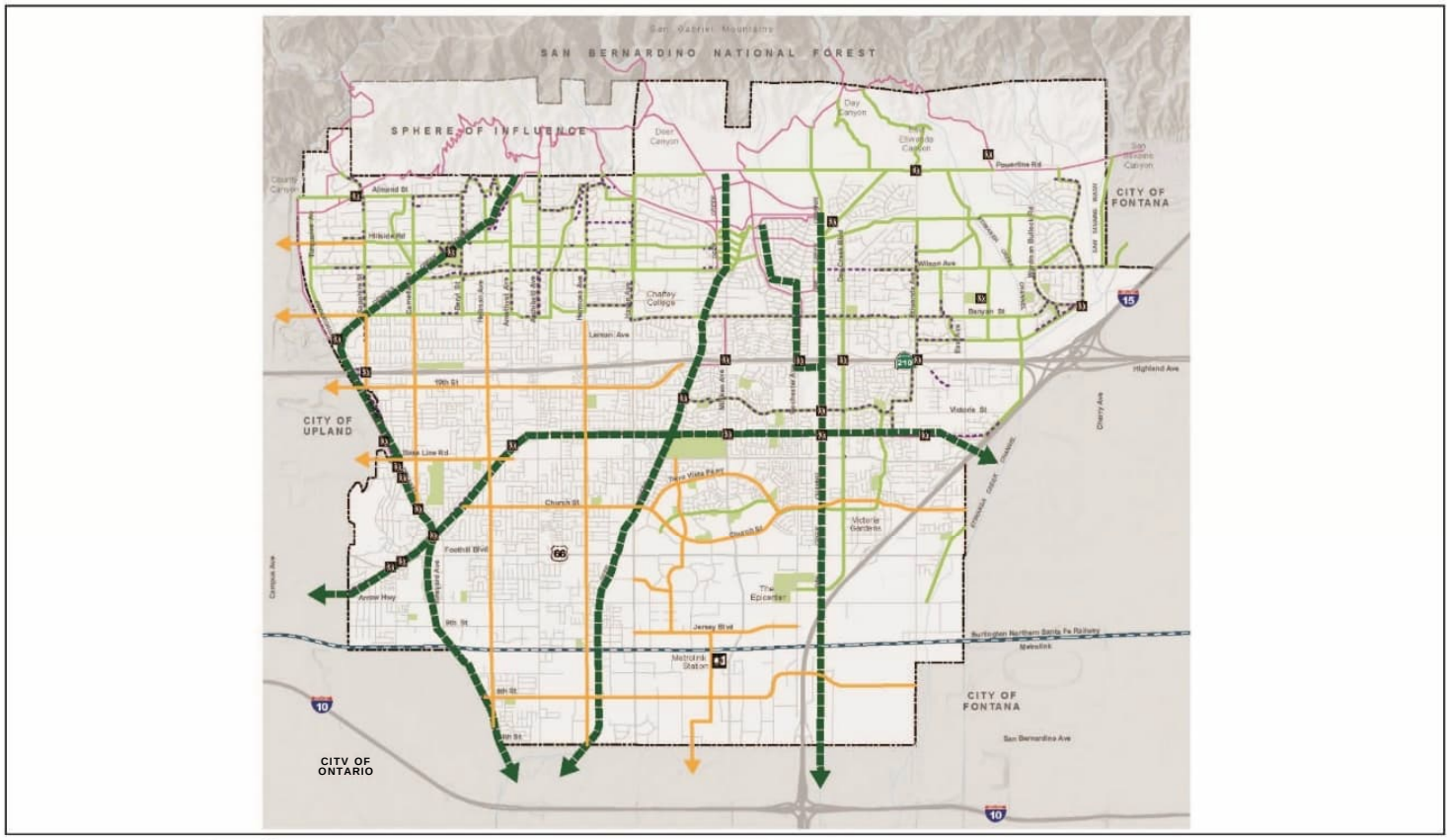
Source: SBCTA 2024

Figure 3.14-12 Existing and Proposed Bikeways in the City of Ontario



SOURCE:City of Ontario, May 2022

Figure 3.14-13 Existing and Proposed Bikeways in the City of Rancho Cucamonga



SOURCE: City of Haecho Cucamonga, December 2021

P:\AEM22O1 SBCTA Ontario Tunnel\Task 5 Traffic\GIS\HeportWg5-7_Tralls&Blkes_Ranchoal (01/31/20231

3.14.7 Opening Year (2031) Conditions

3.14.7.1 Bus and Rail Transit Service

The proposed Project serves to improve public transit and provide alternatives for travel to the airport along the proposed Project corridor and regional-serving transit. The WVC project is anticipated to be in operation for service as an upgrade of the existing Omnibus Route 61 to a median-running BRT during the Opening Year of the proposed Project. The WVC project would provide improved bus service to ONT, improve connection to rail, and provide connectivity to major activity centers, as previously stated in Section 3.14.6.1.2.1. Commuter rail services are expected to continue to be provided by Metrolink's San Bernardino Line and Riverside Line. The proposed Project would provide a direct connection to the Cucamonga Metrolink Station, allowing for convenient transfers between ONT and the Metrolink San Bernardino Line. As previously stated in Table 3.14-14, it is anticipated that there will be approximately 675 passengers per day during the Opening Year (2031) and approximately 1,309 passengers per day during the Design Year (2051). These numbers of passengers include air passengers previously parking, air passengers previously dropped off, employees previously parking, and out-of-region visitors renting cars. Ridership data is estimated using the STOPS model as described in Section 3.14.6.2.

3.14.7.2 Opening Year Vehicle Miles Traveled

The proposed Project is anticipated to be open for operation in 2031. Similar to existing conditions, neither the SBTAM nor the STOPS model included an interim modeling year of 2031. Linear interpolation using 2016 and 2040 was conducted to calculate the Opening Year 2031 regional No Build VMT. The methodology to estimate the amount of VMT reduction in 2031 due to the proposed Project is described in detail in Section 3.14.2. Project VMT is the amount of reduction in VMT, as the proposed Project would encourage mode shift from automobiles to transit and can be interpreted as the VMT that would have been on the roadway network in the absence of the proposed Project. Therefore, 2031 Project VMT was subtracted from the 2031 No Build regional VMT to develop 2031 regional VMT for Project Build conditions. Table 3.14-14 summarizes the Opening Year VMT for No Build conditions. Table 3.14-15 summarizes the Opening Year Project VMT, No Build VMT, and Build VMT.

Table 3.14-14 Opening Year (2031) Regional VMT – No Build

	2016	2040	2031 (Opening Year)
Daily Regional VMT (from SBTAM)	330,113,226	403,851,886	376,199,889

Source: SBCTA 2024

Table: 3.14-15 Opening Year (2031) Regional VMT – No Build versus Build

	2031 No-Build VMT	2031 Project VMT	2031 Build VMT
Daily VMT	376,199,889	(21,773)	376,178,116

Source: SBCTA 2024

3.14.8 Vehicular Traffic and Opening Year (2031) Traffic Volumes

Traffic volumes for the Opening Year were developed using the methodology outlined in Section 3.14.2.1.3 illustrates the Opening Year a.m. and p.m. peak-hour volumes at the study intersections. Detailed volume development worksheets are included in Appendix Q.

3.14.9 Opening Year (2031) Levels of Service

Table 3.14-16 summarizes the results of the LOS analysis for the study intersections. Detailed intersection LOS worksheets are included in Appendix Q. All intersections are forecasted to operate at a satisfactory LOS except for:

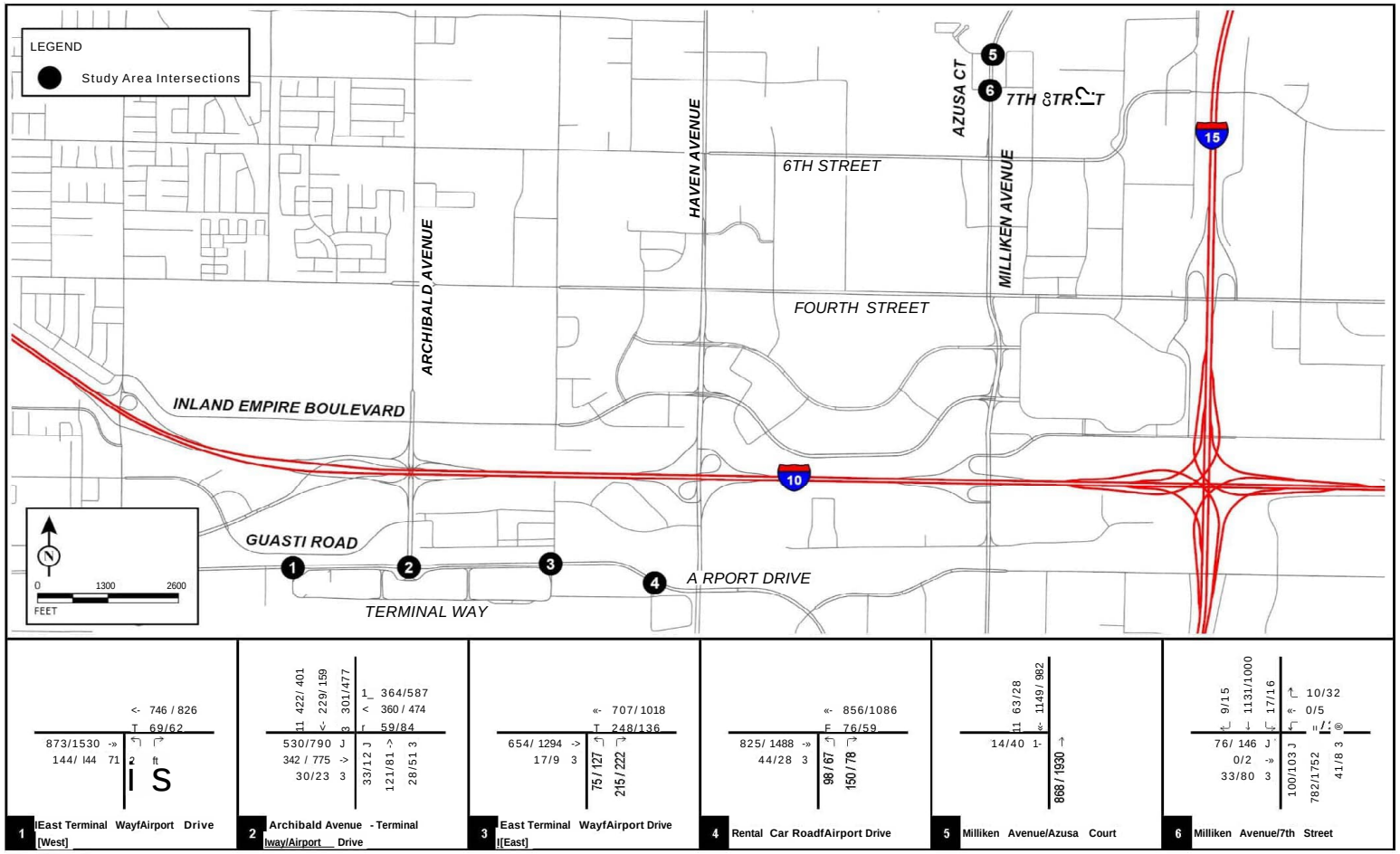
2. Archibald Avenue – Terminal Way/Airport Drive (p.m. peak hours)

Table: 3.14-16 Opening Year (2031) No Build Intersection Levels of Service

	Intersection	Jurisdiction	LOS Standard	Control	No Build A.M. Peak Hour Delay (sec.)	A.M. Peak Hour LOS	No Build P.M. Peak Hour Delay (sec.)	P.M. Peak Hour LOS	Improvement Required?
1	East Terminal Way/ Airport Drive [West]	City of Ontario	E	Signal	36.2	D	56.9	E	No
2	Arch–bald Avenue - Terminal Way/ Airport Drive	City of Ontario	E	Signal	81.8	F*	>100	F*	Yes
3	East Terminal Way/ Airport Drive [East]	City of Ontario	E	Signal	32.8	C	27.0	C	No
4	Rental Car Road/ Airport Drive	City of Ontario	E	Signal	28.2	C	22.3	C	No
5	Milliken Avenue/ Azusa Court	City of Rancho Cucamonga	D	OWSC	14.6	B	14.2	B	No
6	Mill[ik]en Avenue/ 7th Street	City of Rancho Cucamonga	D	Signal	11.9	B	16.0	B	No

Notes:
OWSC = One-Way Stop Control; LOS = Level of Service
Delay = Average control delay in seconds (For OWSC/TWSC intersections, reported delay is for worst-case movement).
*Exceeds LOS Standard

Figure 3.14-14 Opening Year Peak-Hour Volumes at Study Intersections



LSA

XXXX / YYYY
AM / PM Peak Hour Traffic Volumes

3.14.10 Design Year (2051) Conditions

3.14.10.1 Bus and Rail Transit Service

The proposed Project serves to improve public transit and provide an alternative for travel between ONT and the Cucamonga Metrolink Station. The Brightline West system is anticipated to be in operation at the existing Cucamonga Metrolink Station during the Design Year conditions. Brightline West is anticipated to provide a high-speed rail connection between Las Vegas, Nevada, and the City of Rancho Cucamonga, with a potential future expansion to downtown Los Angeles. Therefore, Brightline West is anticipated to provide an alternative mode to cars between Las Vegas and Southern California. The proposed Project would provide a direct connection to Brightline West, allowing for convenient transfers between ONT and the commuter/high-speed rail at the Cucamonga Metrolink Station.

3.14.10.2 Design Year (2051) Vehicle Miles Traveled

The Design Year of 2051 was established for the proposed Project (20 years from the proposed Project opening). As with the Existing and Opening Year scenarios, 2051 data were not available from the SBTAM or the STOPS model. VMT estimates for 2051 included development of VMT for both No Build and Build conditions. Linear extrapolation using 2016 and 2040 data was utilized to calculate the 2051 regional VMT for No Build conditions. Methodology described in Section 3.14.2 and the 2051 ridership estimates were used to assess the 2051 Project VMT. Project VMT was subtracted from the regional No Build VMT to develop the 2051 regional VMT for Build conditions. Table 3.14-17 shows the Design Year VMT for No Build conditions. Table 3.14-18 shows the No Build and Build VMT for the Design Year.

Table 3.14-17 Design Year (2051) Regional Vehicle Miles Traveled – No Build

	2016	2040	2051 (Design Year)
Daily Regional VMT (from SBTAM)	330,113,226	403,851,886	437,648,772

Source: SBCTA 2024

Table 3.14-18 Design Year (2051) Regional Vehicle Miles Traveled – No Build versus Build

	2051 No-Build VMT	2051 Project VMT	2051 Build VMT
Daily VMT	437,648,772	(45,234)	437,603,538

Source: SBCTA 2024

3.14.10.3 Vehicular Traffic and Design Year (2051) Traffic Volumes

Figure 3.14-15 illustrates the Design Year peak-hour volumes at the study intersections. Detailed volume development worksheets are included in Appendix Q.

3.14.10.4 Design Year (2051) Levels of Service

Table 3.14-19 summarizes the results of the LOS analysis for the study intersections. Detailed intersection LOS worksheets are included in Appendix Q. All intersections are forecasted to operate at a satisfactory LOS except for the following:

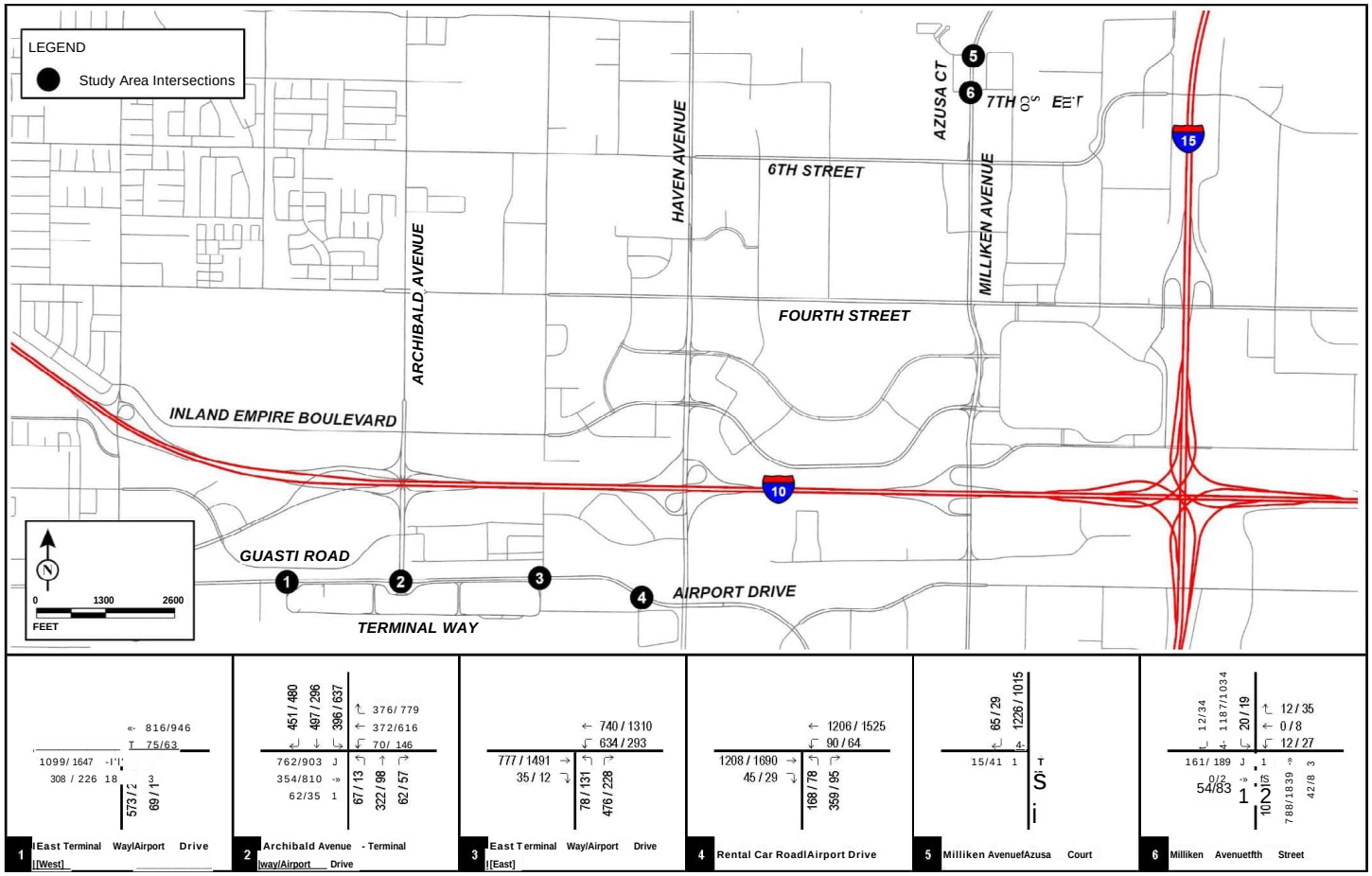
1. East Terminal Way/Airport Drive (West) (p.m. peak hour only);
2. Archibald Avenue – Terminal Way/Airport Drive (both a.m. and p.m. peak hours); and
3. East Terminal Way/Airport Drive (East) (a.m. peak hour only).

Table 3.14-19 Design Year (2051) No Build Intersection Levels of Service

					No Build						
					A.M. Peak Hour			P.M. Peak Hour			
	Intersection	Jurisdiction	LOS Standard	Control	Delay (sec.)	LOS		Delay (sec.)	LOS		Improvement Required?
1	East Terminal Way/ Airport Drive [West]	City of Ontario	E	Signal	40.5	D		81.9	F	*	Yes
2	Arch–bald Avenue - Terminal Way/ Airport Drive	City of Ontario	E	Signal	>100	F	*	>100	F	*	Yes
3	East Terminal Way/ Airport Drive [East]	City of Ontario	E	Signal	>100	F	*	30.8	C		Yes
4	Rental Car Road/ Airport Drive	City of Ontario	E	Signal	28.5	C		28.7	C		No
5	Milliken Avenue/ Azusa Court	City of Rancho Cucamonga	D	OWSC	15.2	C		14.5	B		No
6	Milliken Avenue/ 7th Street	City of Rancho Cucamonga	D	Signal	15.7	B		21.2	C		No

Notes:
OWSC = One-Way Stop Control; LOS = Level of Service
Delay = Average control delay in seconds (For OWSC/TWSC intersections, reported delay is for worst-case movement).
*Exceeds LOS Standard

Figure 3.14-15 Design Year Peak-Hour Volumes at Study Intersections



XXXX / YYYY
AM / PM Peak Hour Traffic Volumes

3.14.11 Impact Evaluation

3.14.11.1 Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle and pedestrian facilities?

3.14.11.1.1 No Project Alternative

While the proposed Project would not be constructed under the No Project Alternative, the No Project Alternative includes planned expansion, improvement projects, and routine maintenance activities for the existing roadway system and transit facilities. Construction and operation of these projects may result in roadway impacts; however, these planned projects would be subject to separate environmental review and, in an effort to reduce construction-related effects, would be required to comply with existing regulations, similar to those listed in Section 3.14.1.

Under the No Project Alternative, construction and operation of these projects may result in conflicts with existing program plans, ordinances or policies addressing the circulation system, including transit, roadways, bicycle, and pedestrian facilities. However, construction activities under the No Project Alternative would be reviewed by applicable jurisdictions, i.e., the City of Rancho Cucamonga or the City of Ontario with appropriate transit agencies consulted prior to construction activities. The operation activities associated with the No Project Alternative would advance the PlanRC and Ontario Plan's goals and policies which aim to improve circulation within the cities, including transit, roadway, bicycle and pedestrian facilities. In addition, the No Project Alternative is not anticipated to have any conflicts with existing program plans, ordinances or policies addressing the circulation system, including transit, roadways, bicycle, and pedestrian facilities. With adherence to federal, state, and local policies and plans, the No Project Alternative would result in less than significant.

3.14.11.1.2 Proposed Project

3.14.11.1.2.1 Construction Impacts

The anticipated 56 months construction period of the proposed Project would involve temporary transit, roadway, bicycle, and pedestrian circulation changes due to lane and sidewalk closures, detours, movement of construction equipment, and temporary relocation of bus stops. Construction activities that could impact the transportation network are described in Chapter 2 of this Draft EIR.

Because construction is a temporary condition, typically transportation plans, programs, and policies, as described in Section 3.14.1, do not specifically address construction activities of planned and proposed projects but rather provide guidance and goals for long-term transit and transportation planning strategies and solutions that reduce congestion, address air quality and greenhouse gas emissions, and provide equitable transit options. However, at the local level, goals and policies of General Plans provide some guidance that is applicable during project construction. For example, the Mobility and Access chapter of The City of Rancho Cucamonga PlanRC Goals MA-2 and MA-3, described in Section 3.14.1.3.6, address safe and equitable transportation systems. Further, Title 10 of the City of Rancho Cucamonga

Municipal Code, described in Section 3.14.1.3.7, contains regulations to address traffic regulations including, but not limited to, public safety on streets and sidewalks, pedestrian rights, and truck routes. Similarly, the Mobility Element of the Ontario Plan Goals M1-2, M1-3, addresses mitigation of impacts for new development, and roadway improvements, respectively, while Goal M2 addresses bicycle and walking facilities in the City, and Goal M3 addresses basic transportation needs of those transit-dependent. Title 4 of the City of Ontario Municipal Code, described in Section 3.14.1.3.9, includes regulations and standards that govern traffic, parking and loading, and development in the city.

As described previously in Section 3.14.2.2, construction activities, including staging/phasing, workers, hauling/deliveries, and machinery/equipment, and land closures have the potential to increase traffic volumes and congestion around intersections along the construction route. During construction, there may be some construction-related traffic and work that may temporarily impede movement of vehicles, transit, bicyclists and/or pedestrians. Although construction is anticipated to occur between 2025 and 2031, construction activities are temporary. Further, as shown on Table 2-2 in Chapter 2 of this Draft EIR the duration of the various construction activities will vary across the construction life cycle; for example, as described in Section 3.14.2.2.5, the excavation phase of construction would require the movement of more construction equipment and trucks, potentially contributing to additional traffic congestion and disruption to mobility in the proposed Project area during this time frame; however, once excavation is complete, movement of excavation-related equipment and materials would cease.

Full street closures are not anticipated during construction. However, detours associated with temporary lane closures would change vehicular circulation resulting in temporary access limitations such as queuing at intersections and interchanges. Further, it is anticipated that the road network near the TBM launch sites would experience higher levels of construction-related traffic. In addition, construction activities would temporarily restrict access to bicycle and pedestrian facilities. Although short-term in duration, construction activities could involve intermittent lane and sidewalk closures, traffic delays, and queuing which could impede vehicle, pedestrian, and bicycling circulation.

Although potential impacts during construction would be temporary, impacts to traffic and transportation system could be potentially significant during the duration of the proposed Project's construction activities. Implementation of MM-TRA-1 ensures a Transportation Management Plan (TMP) would be prepared by SBCTA to facilitate the safe and efficient flow of traffic in and around temporary construction zones. Further, MM-TR-1 ensures local residents, businesses and motorists are properly notified of construction activities that could affect daily travel through the area. All construction activities would be reviewed by the City of Rancho Cucamonga, the City of Ontario, and appropriate transit agencies prior to the start of construction to ensure compliance with all applicable codes related to construction activities, and the maintenance of public safety.

Construction of the proposed Project would potentially result in temporary impacts to traffic and the transportation system. However, construction activities would be phased and are temporary in duration. Implementation of MM-TR-1 would address any construction-related impacts to ensure that the proposed

Project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, and impacts would be less than significant with mitigation during construction for the proposed Project.

3.14.11.1.2.2 Operational Impacts

The proposed Project would be consistent with SB 375 through compliance with SCAG's RTP, and the SBCTA's LRTP. The proposed Project would comply with the Complete Streets Act of 2008 which requires that General Plans (which includes PlanRC and the Ontario Plan) accommodate a balanced, multimodal transportation network that meets the needs of all users of streets, roads, and highways in a manner that is suitable to applicable rural, suburban, or urban contexts. Goals and policies from PlanRC and the Ontario Plan that pertain to the circulation system are described in Section 3.10, Land Use and Planning.

As described in Section 3.10 (Land Use and Planning), the proposed Project's circulation elements would be consistent with the PlanRC chapters pertaining to the land use and mobility (circulation) system, including transit, roadway, bicycle and pedestrian facilities. The proposed Project would be consistent with the analyses conducted for the Mobility and Access Chapter of PlanRC in terms of LOS. The proposed Project is required to prepare an Environmental Assessment Report pursuant to National Environmental Policy Act (NEPA) with FTA as a lead agency, as well as an Environmental Impact Report pursuant to CEQA with SBCTA as the lead agency. The Transportation and Traffic Technical Report addressed both the NEPA and CEQA requirements and includes both LOS and VMT discussion and evaluation. The analysis within the Transportation Technical Report (SBCTA 2024; Appendix Q) utilizes LOS criteria to determine the significance of the proposed Project-generated trips impacts and whether mitigation is required.

In addition, the proposed Project would be consistent with the goals and policies of the Mobility Element of the Ontario Plan, as described in Section 3.14.1.3.8, specifically Goal M1, Policy M1-2, to mitigate impact traffic impacts of new development. by enhancing multimodal transportation networks, efficiently and safely accommodating the movement of people and products through the City of Ontario, following the City of Ontario's transportation system design standards, and generally contributing to the improvement of the City of Ontario's transportation system. Furthermore, the proposed Project would not change roadway designations from those in the Ontario Plan.

The proposed Project would also be consistent with SB 375 by complying with SCAG's RTP. In addition, the proposed Project would comply with ADA standards for Accessible Designs by designing the proposed walkways to be readily available to individuals with disabilities. As such, the proposed Project would not conflict with a program, plan, ordinance or policy, addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities. Therefore, impacts during the proposed Project operation would be less than significant.

3.14.11.2 Would the project conflict or be inconsistent with State CEQA Guidelines Section 15064.3, subdivision (b)?

3.14.11.2.1 No Project Alternative

Under the No Project Alternative, the proposed Project would not be constructed. State CEQA Guidelines Section 15064.3, subdivision (b), specifies applicable criteria for analyzing transport impacts. Specifically, it states the following:

> *"Transportation projects that reduce, or have no impacts on, vehicle miles traveled should be presumed to cause a less than significant transportation impact. For roadway capacity projects, agencies have the discretion to determine the appropriate measures of transportation impact consistent with CEQA and other applicable requirements."*

While the proposed Project would not be constructed under the No Project Alternative, the No Project Alternative includes planned expansion, improvement projects, and routine maintenance activities for the existing roadway system and transit facilities, and such projects would be subject to environmental review. Further, it is anticipated that planned transportation related projects would be consistent with all federal, state, regional and local goals and policies aimed at reducing environmental impacts from increased VMT, and therefore, under CEQA Guidelines, be presumed to cause a less than significant transportation impact related to exceedance of regional and local VMT thresholds. However, construction of foreseeable projects would likely result in a temporary increase in VMT due to trips generated by construction personnel traveling to and from the job sites, transport of construction equipment and materials, and removal of construction generated debris (e.g., dirt removed during excavations that is not reused on site). Impacts related to construction generated VMT increases of foreseeable projects would be analyzed during the environmental review process of these projects. However, it is anticipated that construction and operation VMT impacts would be less than significant.

3.14.11.2.2 Proposed Project

3.14.11.2.2.1 Construction Impacts

VMT is the current standard for evaluating transportation impacts under CEQA and is the basis for impact evaluation in this section. The discussion of LOS included in this section is for informational and disclosure purposes only.

Vehicular Traffic and Existing (2022) Traffic Volumes. Existing intersection counts were collected for the a.m. and p.m. peak hours at the study intersections in September 2022. Intersection volumes were collected during the a.m. and p.m. peak periods, from 7:00 to 9:00 a.m. and 4:00 to 6:00 p.m., respectively. Existing peak-hour volumes were developed based on the methodology outlined in Section 3.14.2

Figure 3.14-16 illustrate the existing lane geometries and traffic control at the study area intersections for Scenario 1 and Scenario 2, respectively. Figure 3.14-17, Figure 3.14-18 and Figure 3.14-19 illustrate the existing peak-hour turning movement volumes at the study area intersections for Scenario 1 and Scenario 2, respectively. Detailed count sheets and volume development worksheets are included in the Transportation Technical Report (SBCTA 2024; Appendix Q).

Existing (2022) Levels of Service. The LOS analysis was conducted based on the methodology outlined in Section 3.14.2, using the Synchro 11 software. Table 3.14-20 summarizes the LOS analysis at all study area intersections under existing conditions for Scenario 1 and Scenario 2.

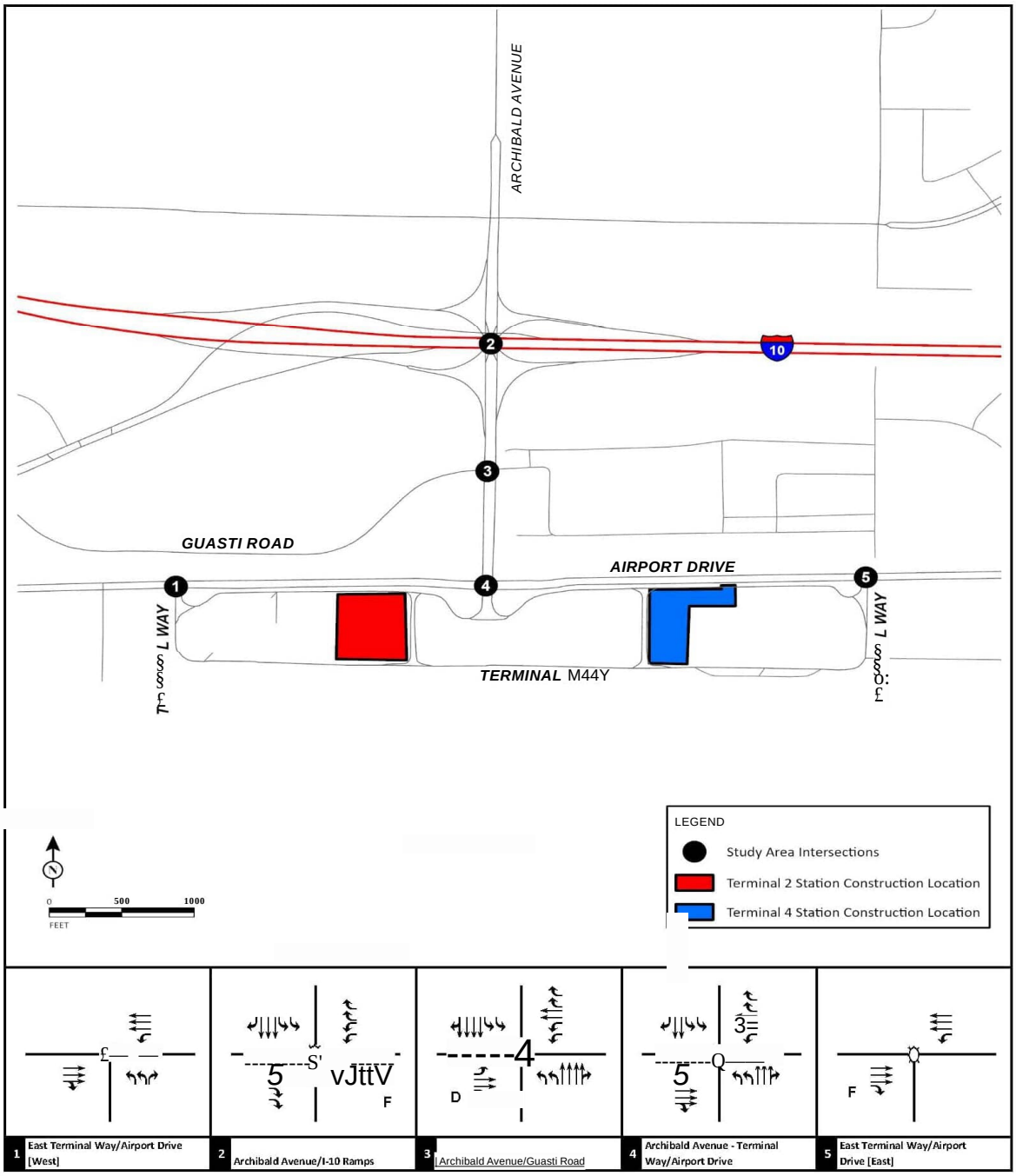
LOS worksheets are included in the Transportation Technical Report (SBCTA 2024; Appendix Q). All intersections are currently operating at a satisfactory LOS, except for the following:

- Archibald Avenue – Terminal Way/Airport Drive (p.m. peak hour only); and
- Milliken Avenue/4th Street (p.m. peak hour only).

Construction Traffic. As the proposed Project is being built, construction traffic would access the staging areas located at ONT Terminals 2 and 4, the Cucamonga Metrolink Station, and at either vent shaft design option. Trip generation for the construction traffic analysis was based on the methodology outlined in Section 3.14.2 (Methodology). Previously referenced Table 3.14-10 summarizes the construction traffic trip generation.

Construction traffic occurs in two scenarios based on the methodology documented in Section 3.14.2.2. Scenario 1 consists of construction occurring at the staging areas of ONT Terminals 2 and 4. Scenarios 2A and 2B consists of construction occurring at the staging areas of the Cucamonga Metrolink Station and the vent shaft design option 2 and vent shaft design option 4 locations.

Figure 3.14-16 Existing Lane Geometries and Traffic Control at Study Intersections for Scenario 1

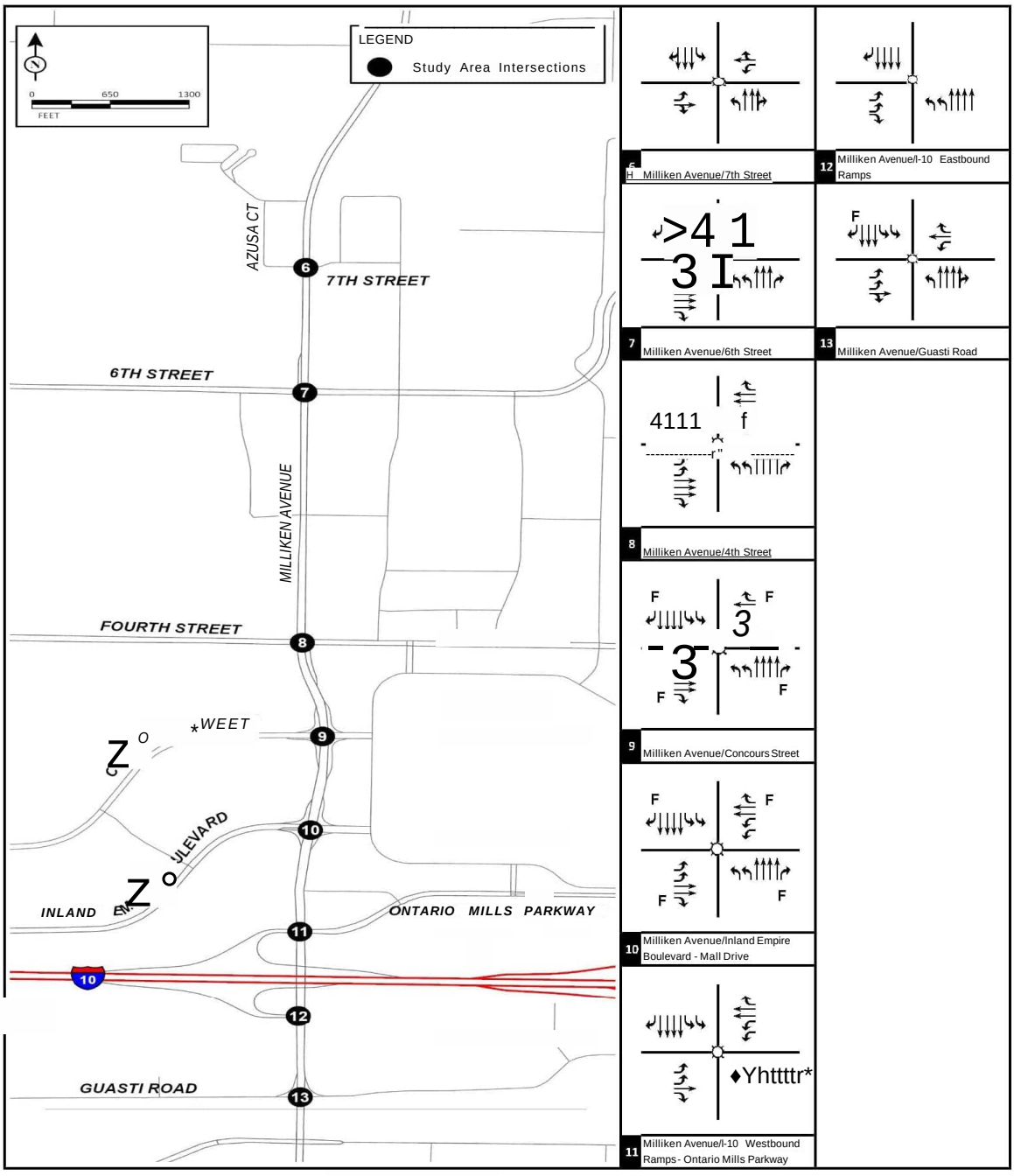


Legend

D De-Facto Right Turn D Signal

F Free Right Turn

Figure 3.14-17 Existing Lane Geometries and Traffic Control at Study Area Intersections for Scenario 2A and 2B

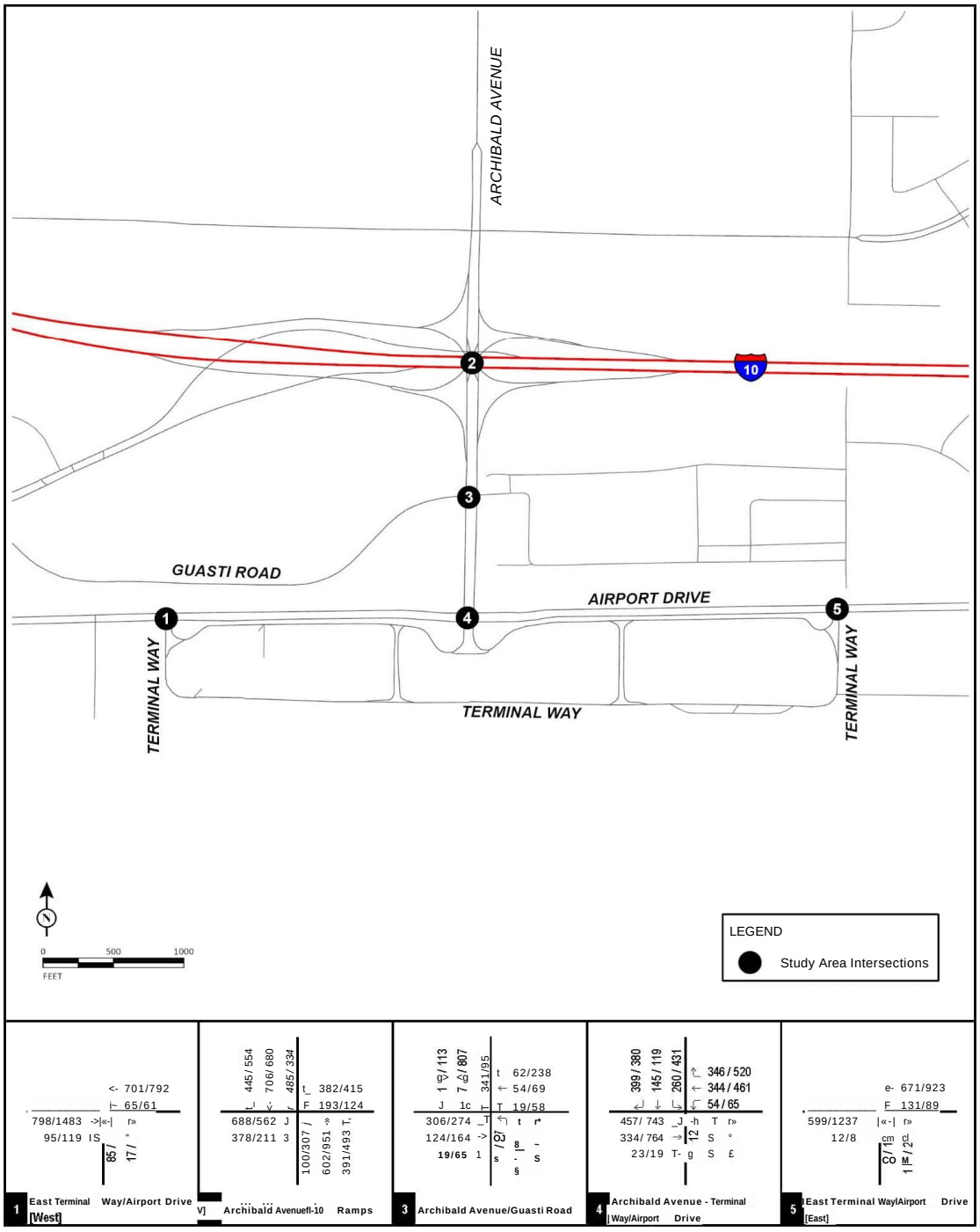


Legend

D Signal " " Driveway

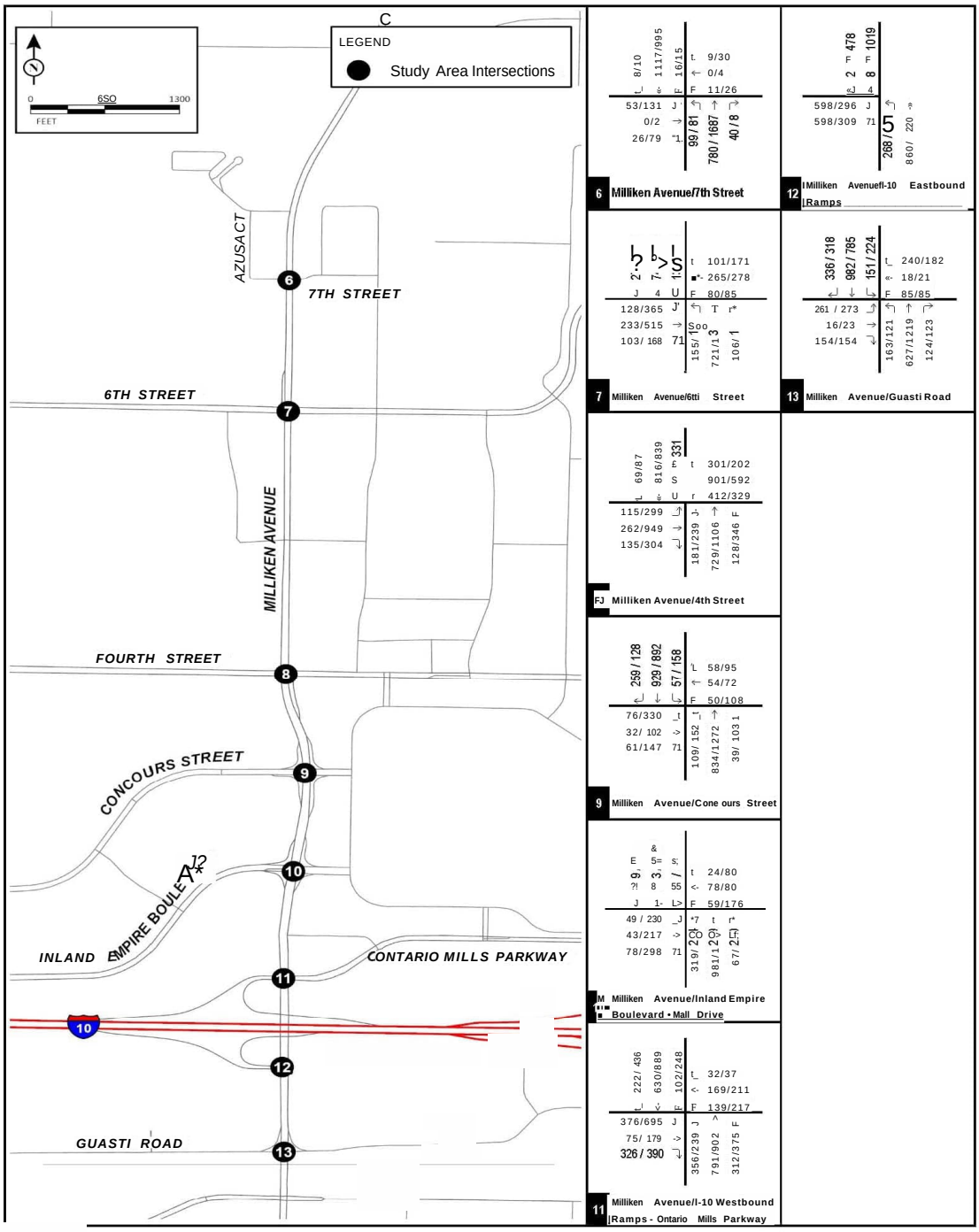
F Free Right Turn

Figure 3.14-18 Existing Peak-hour Turning Movement Volumes a
Study Area Intersections for Scenario 1



XXX/ YYY
AM / PM Peak HourTrips
------- Driveway

Figure 3.14-19 Existing Peak-hour Turning Movement Volumes at Study Area Intersections for Scenario 2A and 2B



XXXX / YYYY
AM / PM Peak Hour Trips
--------- Driveway

Table 3.14-20 Year 2025 Construction Traffic Analysis Intersection Levels of Service

	Intersection	Jurisdiction	LOS Standard	Control	No Build A.M. Peak Hour Delay (sec.)	LOS		No Build P.M. Peak Hour Delay (sec.)	LOS		Exceeds LOS Standard
1	East Terminal Way/Airport Drive [West]	City of Ontario	E	Signal	35.1	D		49.7	D		No
2	Archibald Avenue/I-10 Ramps	Caltrans	D	Signal	39.1	D		32.4	C		No
3	Archibald Avenue/Guasti Road	City of Ontario	E	Signal	51.4	D		42.3	D		No
4	Archibald Avenue - Terminal Way/Airport Drive	City of Ontario	E	Signal	67.9	E		>100	F	*	Yes
5	East Terminal Way/Airport Drive [East]	City of Ontario	E	Signal	26.5	C		22.8	C		No
6	Milliken Avenue/7th Street	City of Rancho Cucamonga	D	Signal	10.6	B		13.9	B		No
7	Milliken Avenue/6th Street	City of Rancho Cucamonga	D	Signal	27.3	C		39.2	D		No
8	Milliken Avenue/4th Street	City of Ontario/ City of Rancho Cucamonga	D	Signal	56.1	E	*	58.9	E	*	Yes
9	Milliken Avenue/Concours Street	City of Ontario	E	Signal	21.3	C		34.4	C		No
10	Milliken Avenue/Inland Empire Boulevard - Mall Drive	City of Ontario	E	Signal	27.0	C		33.3	C		No
11	Milliken Avenue/I-10 Westbound Ramps - Ontario Mills Parkway	Caltrans	D	Signal	41.1	D		44.4	D		No
12	Milliken Avenue/I-10 Eastbound Ramps	Caltrans	D	Signal	26.7	C		24.1	C		No
13	Milliken Avenue/Guasti Road	City of Ontario	E	Signal	50.3	D		46.7	D		No

Notes:
LOS = Level of Service
Delay = Average control delay in seconds (For OWSC/TWSC intersections, reported delay is for worst-case movement).
*Exceeds LOS Standard

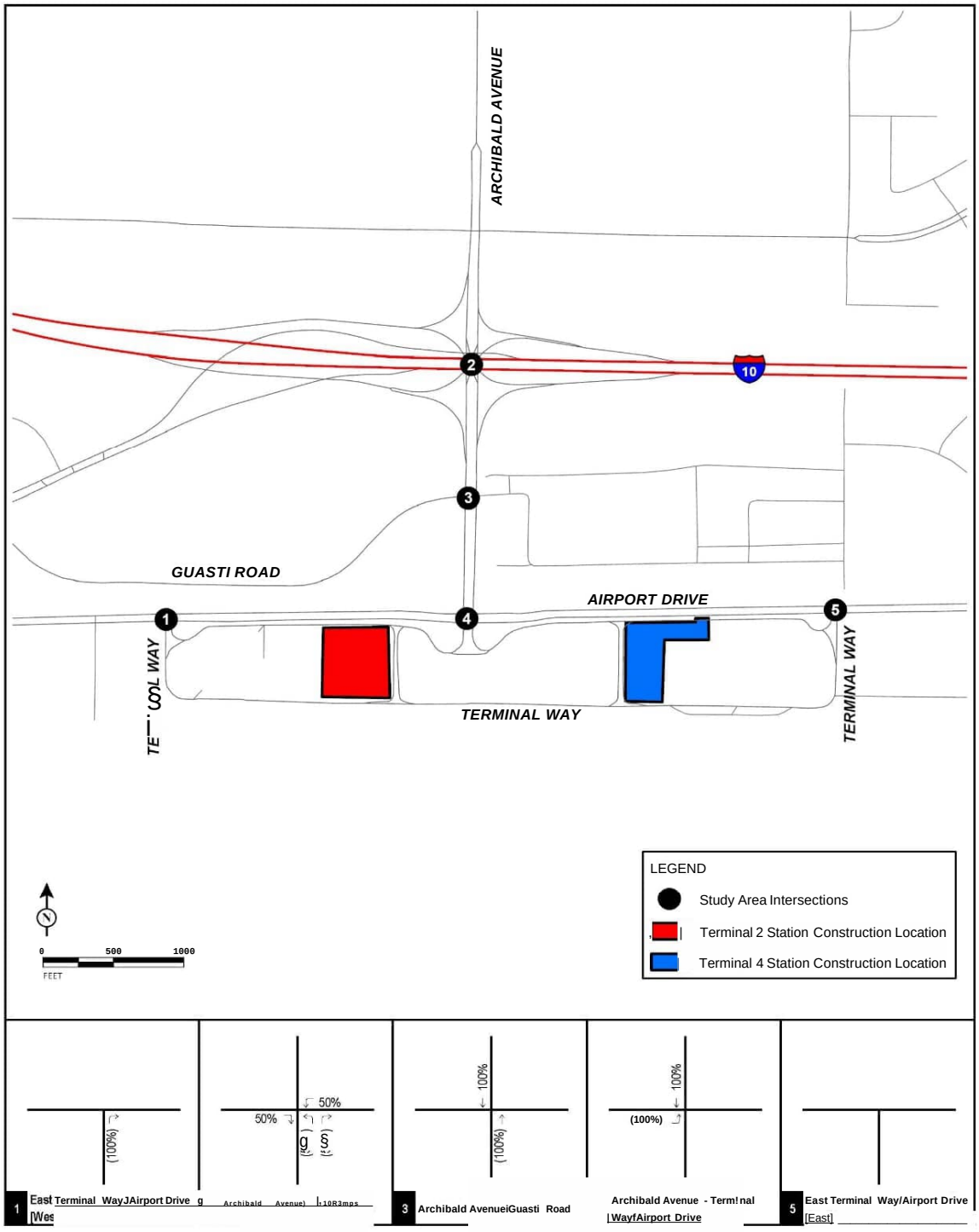
Construction Analysis—Scenario 1 Conditions. Figure 3.14-20 illustrates the construction traffic distribution for Terminal 2. Figure 3.14-21 illustrates the construction traffic distribution for Terminal 4. The construction traffic assignment is the product of the corresponding trip generation and trip distribution. Figure 3.14-22 illustrates the construction traffic trip assignment for the staging areas at Terminal 2. Figure 3.14-23 illustrates the construction traffic trip assignment for the staging areas at Terminal 2 and 4. Figure 3.14-24 illustrates the net construction-related traffic trip assignment for Scenario 1.

Existing with Scenario 1 construction traffic volumes were developed by adding the Scenario 1 construction traffic trip assignment to the existing peak-hour traffic volumes at the study area intersections. Figure 3.14-25 illustrates the existing with Scenario 1 construction traffic peak-hour turning movement volumes at the study area intersections. Detailed volume development worksheets are included in the Transportation Technical Report (SBCTA 2024; Appendix Q).

An intersection LOS analysis was conducted for existing with construction Scenario 1 conditions based on the methodology outlined in Section 3.14.2. Table 3.14-21 summarizes the results of the LOS analysis for the study area intersections affected by construction traffic for Scenario 1. Detailed intersection LOS worksheets are included in the Transportation Technical Report (SBCTA 2024; Appendix Q). All intersections are forecasted to operate at a satisfactory LOS under existing with construction Scenario 1 conditions except for the following:

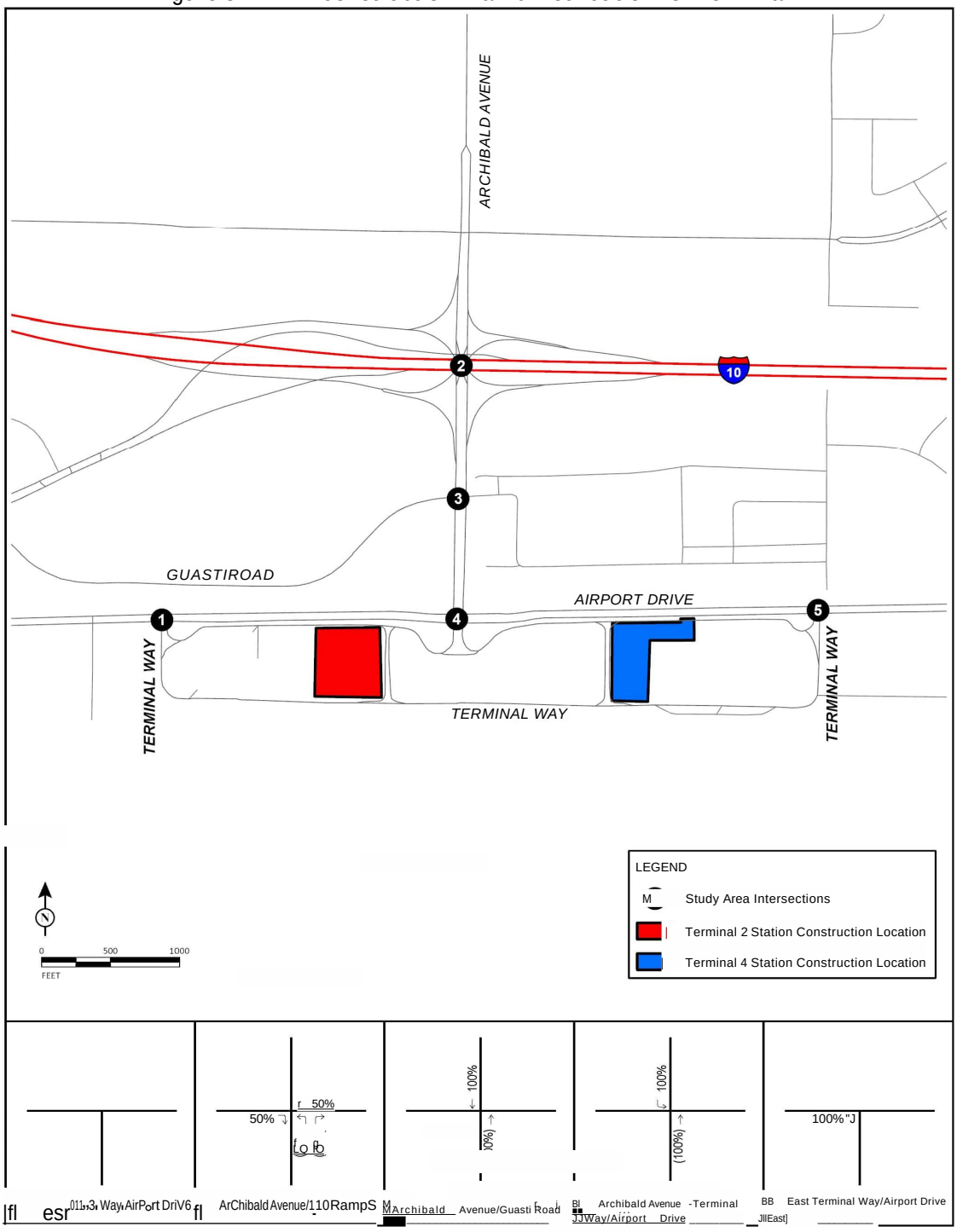
- Archibald Avenue – Terminal Way/Airport Drive (p.m. peak hour only).

Figure 3.14-20 Construction Traffic Distribution for Terminal 2



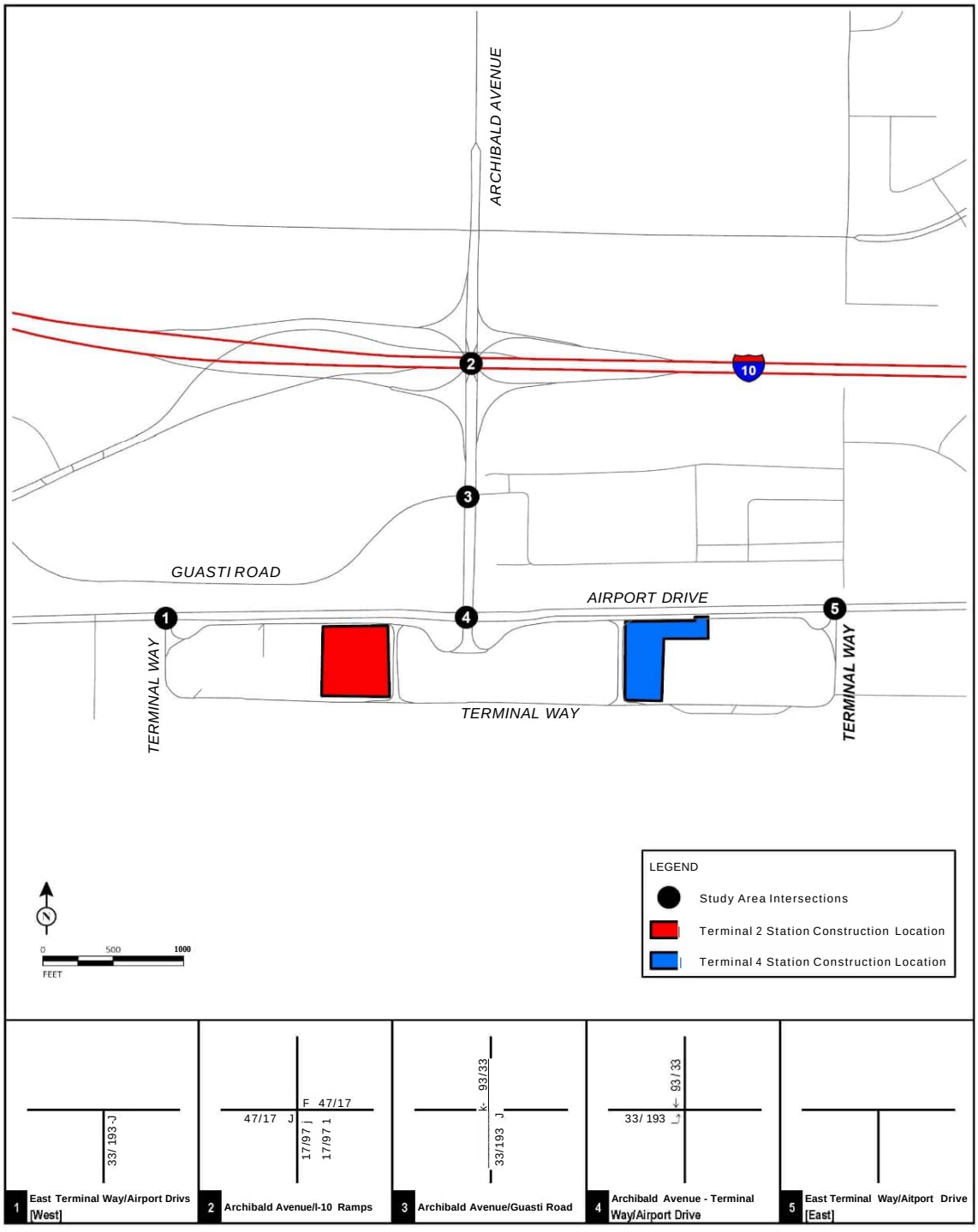
XXX%(YYY%)
Inbound (Outbound) Trip Distribution

Figure 3.14-21 Construction Traffic Distribution for Terminal 4



XXX%(YYY%)
Inbound (Outbound) Trip Distribution

Figure 3.14-22 Construction Traffic Trip Assignment for Staging Areas at Terminal 2



XXX / YYY
AM / PM Peak Hour Trips

Figure 3.14-23 Construction Traffic Trip Assignment for ONT Staging Areas at ONT Terminal 2 and ONT Terminal 4

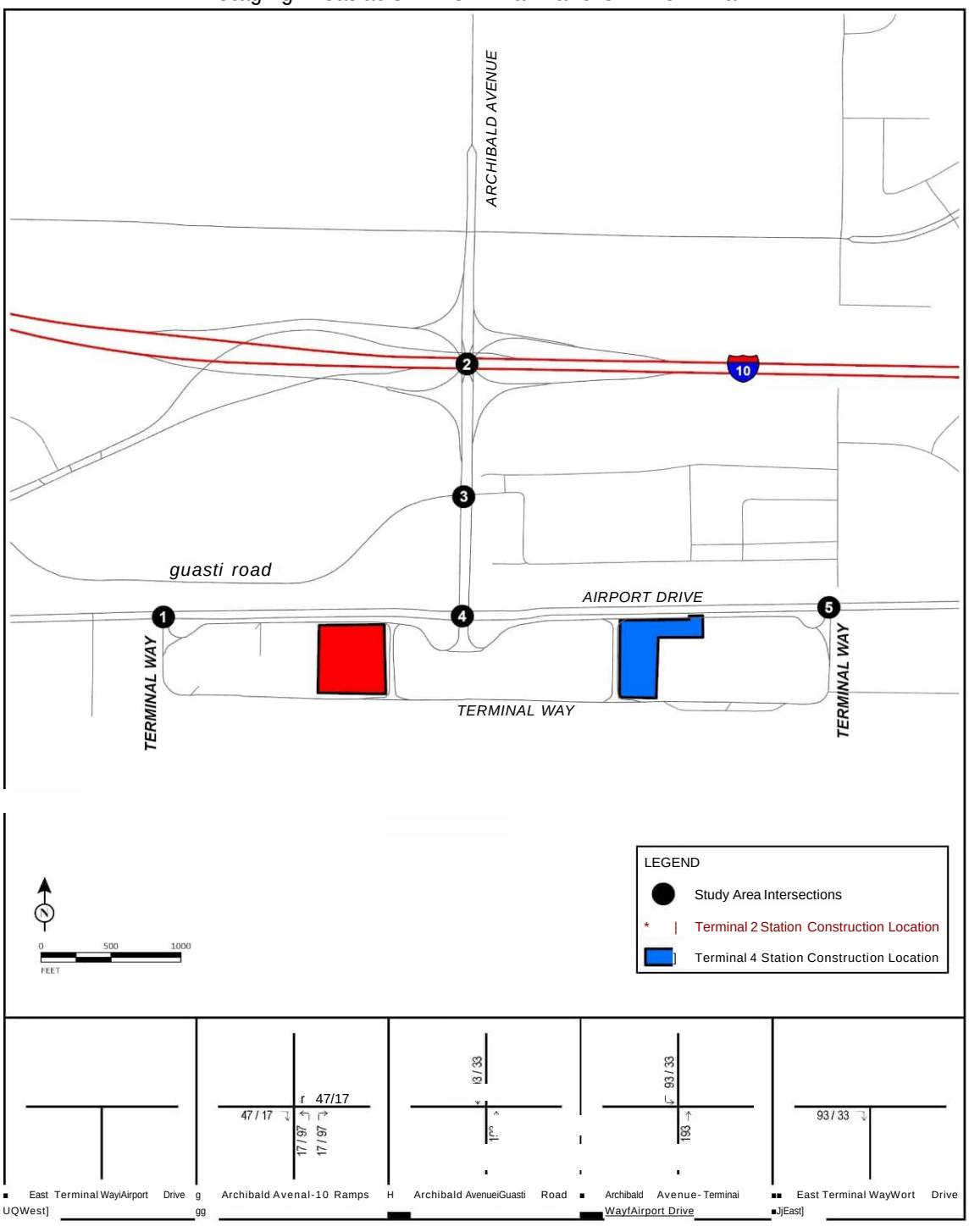
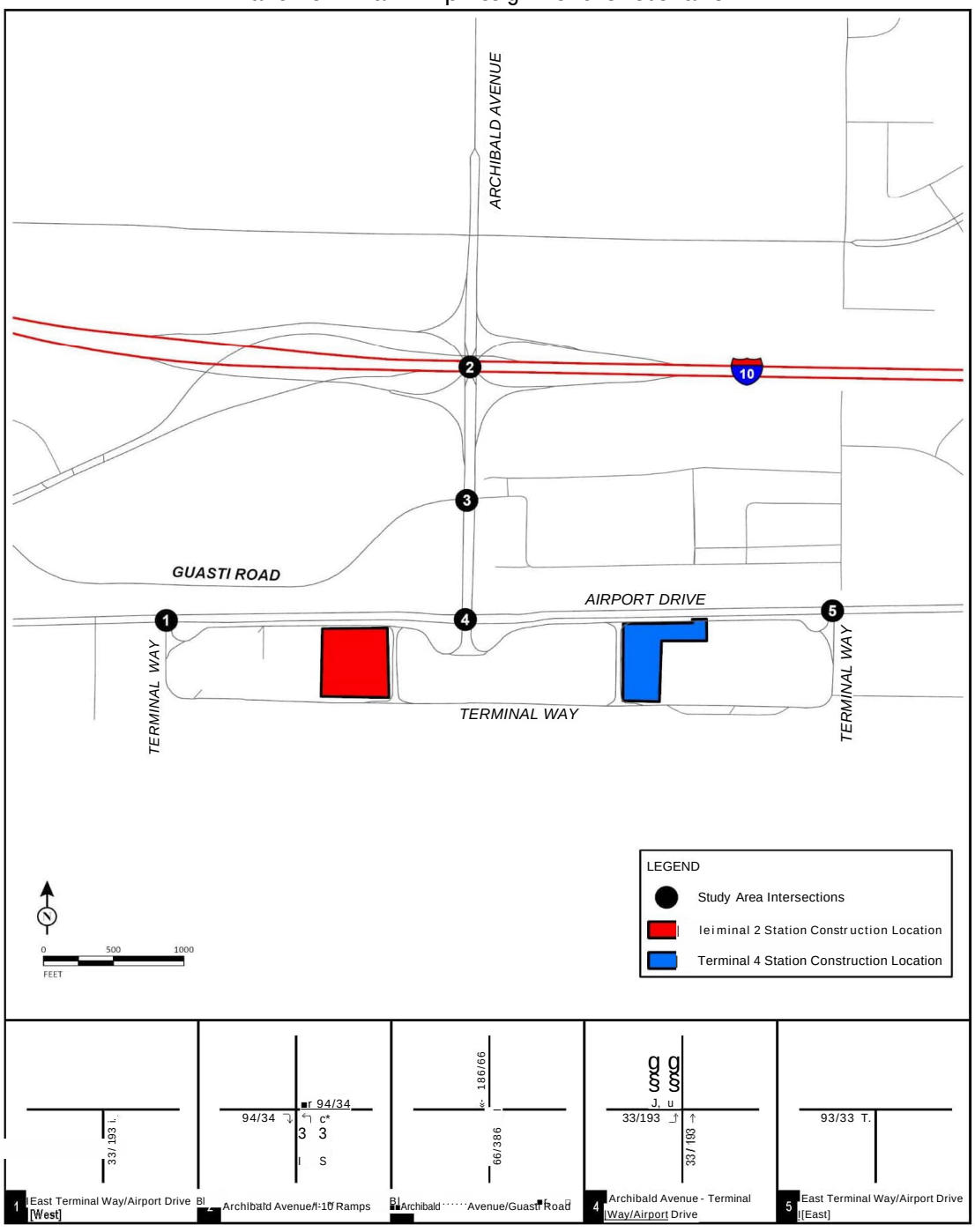
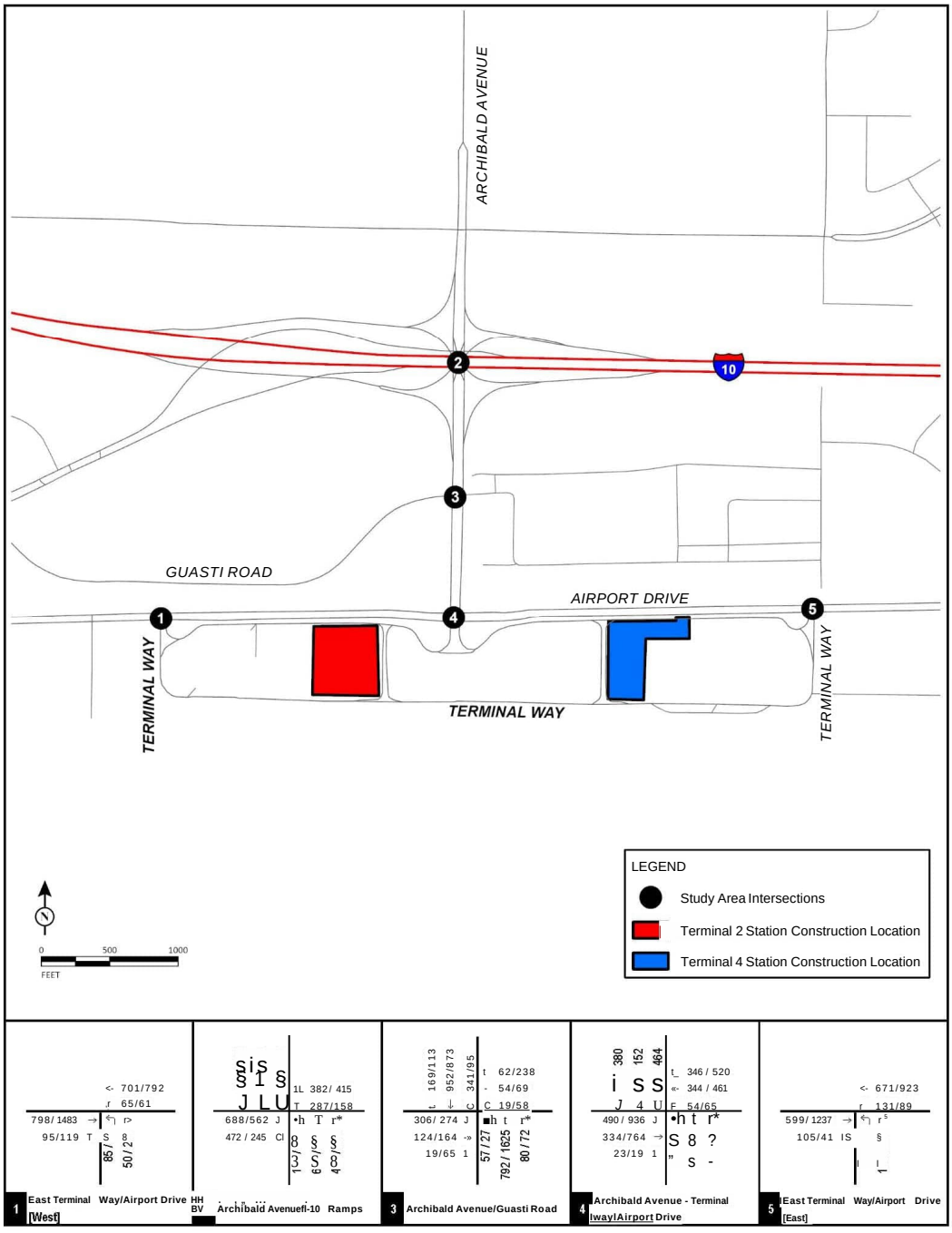


Figure 3.14-24 Net Construction-related Traffic of ONT Terminal 2 and Terminal 4 Trip Assignment for Scenario 1



XXX / YYY
AM / PM Peak Hour Trips
— — Driveway

Figure 3.14-25 Existing with Scenario 1 Construction Traffic Peak-hour Turning Movement Volumes at Study Area Intersections



XXX/YYY
AM / PM Peak Hour Trips
---- Driveway

Table 3.14-21 Construction Traffic Scenario 1 Intersection Levels of Service

	Intersection	Jurisdiction	LOS Standard	Control	No Build A.M. Peak Hour Delay (sec.)	LOS		No Build P.M. Peak Hour Delay (sec.)	LOS		Control	Construction Scenario 1 A.M. Peak Hour Delay (sec.)	LOS		Construction Scenario 1 P.M. Peak Hour Delay (sec.)	LOS		A.M. Peak Hour Increase in Delay (sec.)	P.M. Peak Hour Increase in Delay (sec.)	Exceeds LOS Standard
1	East Terminal Way/Airport Drive [West]	City of Ontario	E	Signal	35.1	D		49.7	D		Signal	35.4	D		52.6	D		0.3	2.9	No
2	Archibald Avenue/I-10 Ramps	Caltrans	D	Signal	39.1	D		32.4	C		Signal	39.3	D		32.6	C		0.2	0.2	No
3	Archibald Avenue/Guasti Road	City of Ontario	E	Signal	51.4	D		42.3	D		Signal	52.9	D		43.4	D		1.5	1.1	No
4	Archibald Avenue - Terminal Way/Airport Drive	City of Ontario	E	Signal	67.9	E		>100	F	*	Signal	74.1	E		>100	F	*	6.2	57.2	Yes
5	East Terminal Way/Airport Drive [East]	City of Ontario	E	Signal	26.5	C		22.8	C		Signal	26.5	C		22.8	C		0.0	0.0	No

Notes:
LOS = Level of Service
Delay = Average control delay in seconds (For OWSC/TWSC intersections, reported delay is for worst-case movement).
*Exceeds LOS Standard

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It should be noted that the intersection of Archibald Avenue – Terminal Way/Airport Drive is forecasted to operate at a deficient LOS even under the existing conditions and that increases in delay are temporary for the duration of the construction phase.

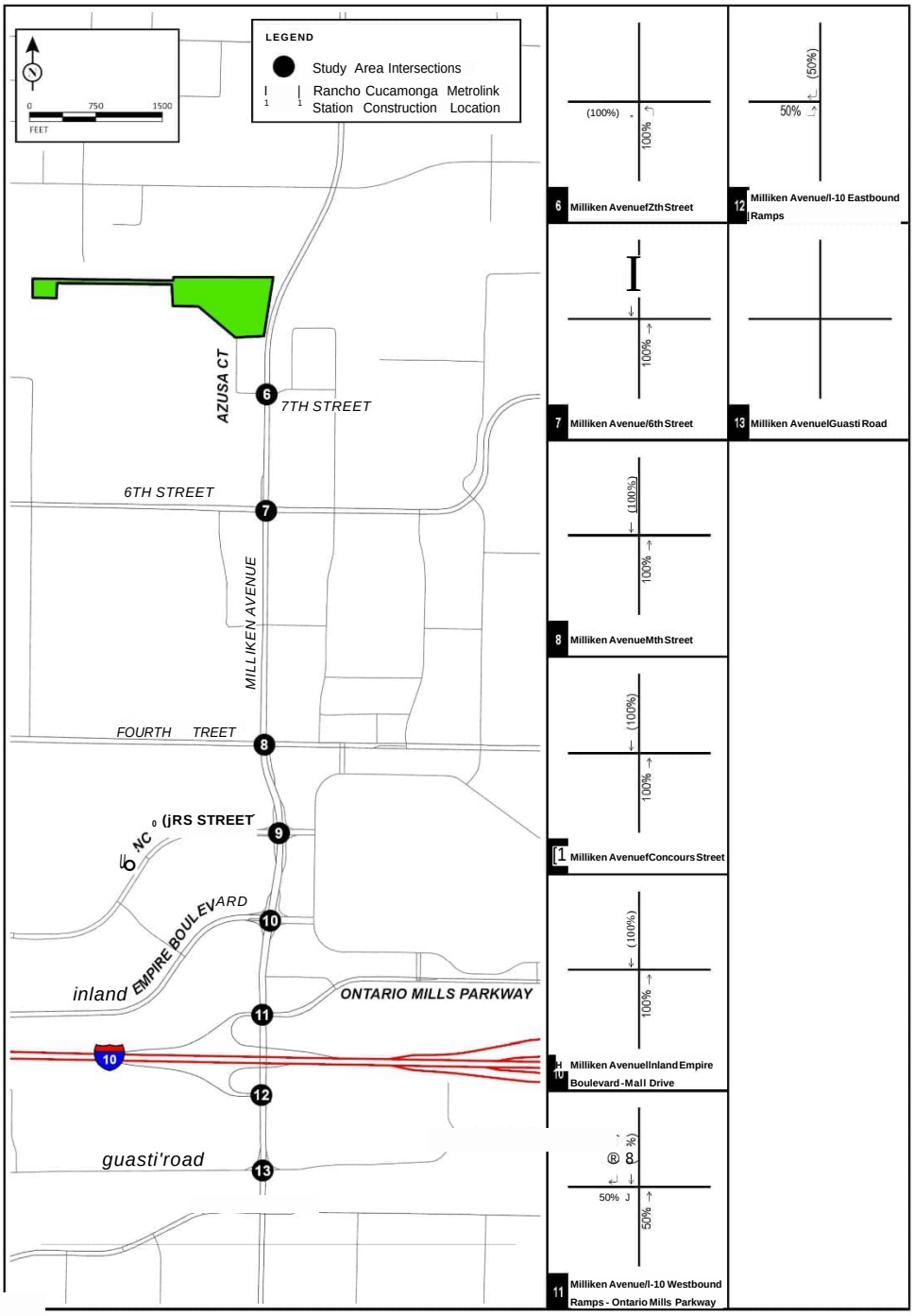
Construction Analysis – Scenario 2A and 2B Conditions. Figure 3.14-26 illustrates the construction traffic distribution for the proposed Cucamonga Station. Figure 3.14-27 illustrates the Scenario 2A construction traffic distribution for passenger vehicles for tunnel vent shaft design option 2. Figure 3.14-28 illustrates the Scenario 2A construction traffic distribution for haul trucks for tunnel vent shaft design option 2. Figure 3.14-29 illustrates the Scenario 2B construction traffic distribution for passenger vehicles for tunnel vent shaft design option 4. Figure 3.14-30 illustrates the Scenario 2B construction traffic distribution for haul trucks for tunnel vent shaft design option 4.

The construction traffic assignment is the product of the corresponding trip generation and trip distribution percentages. Figure 3.14-31 illustrates the construction trip assignment for the Cucamonga Metrolink Station. Figure 3.14-32 illustrates the Scenario 2A construction trip assignment for passenger vehicles for tunnel vent shaft design option 2. Figure 3.14-33 illustrates the Scenario 2A construction trip assignment for haul trucks for tunnel vent shaft design option 2. Figure 3.14-34 illustrates the Scenario 2B construction trip assignment for passenger vehicles for tunnel vent shaft design option 4. Figure 3.14-35 illustrates the Scenario 2B construction trip assignment for haul trucks for tunnel vent shaft design option 4. Figure 3.14-36 illustrates the net construction-related traffic trip assignment for Scenario 2 with the tunnel vent shaft design option 2. Figure 3.14-37 illustrates the net construction-related traffic trip assignment for Scenario 2 with the tunnel vent shaft design option 4.

It should be noted that the construction staging area access points for both tunnel shaft vent options are located at existing intersections but do not have conventional access points for public use. The construction staging area entrance for tunnel vent shaft design option 2 is located at the southwest corner of the intersection of Milliken Avenue/I-10 Westbound Ramps – Ontario Mills Parkway. Haul trucks would access the staging area by traveling southbound on Milliken Avenue, then turning bear-right at this intersection. Construction employees and staff are assumed to arrive by passenger vehicles and would access the staging area either by turning hard-right off the I-10 westbound off-ramp or by turning hard-left when traveling northbound on Milliken Avenue at this intersection. Haul trucks and passenger vehicles would exit the staging area by turning hard-right on Milliken Avenue.

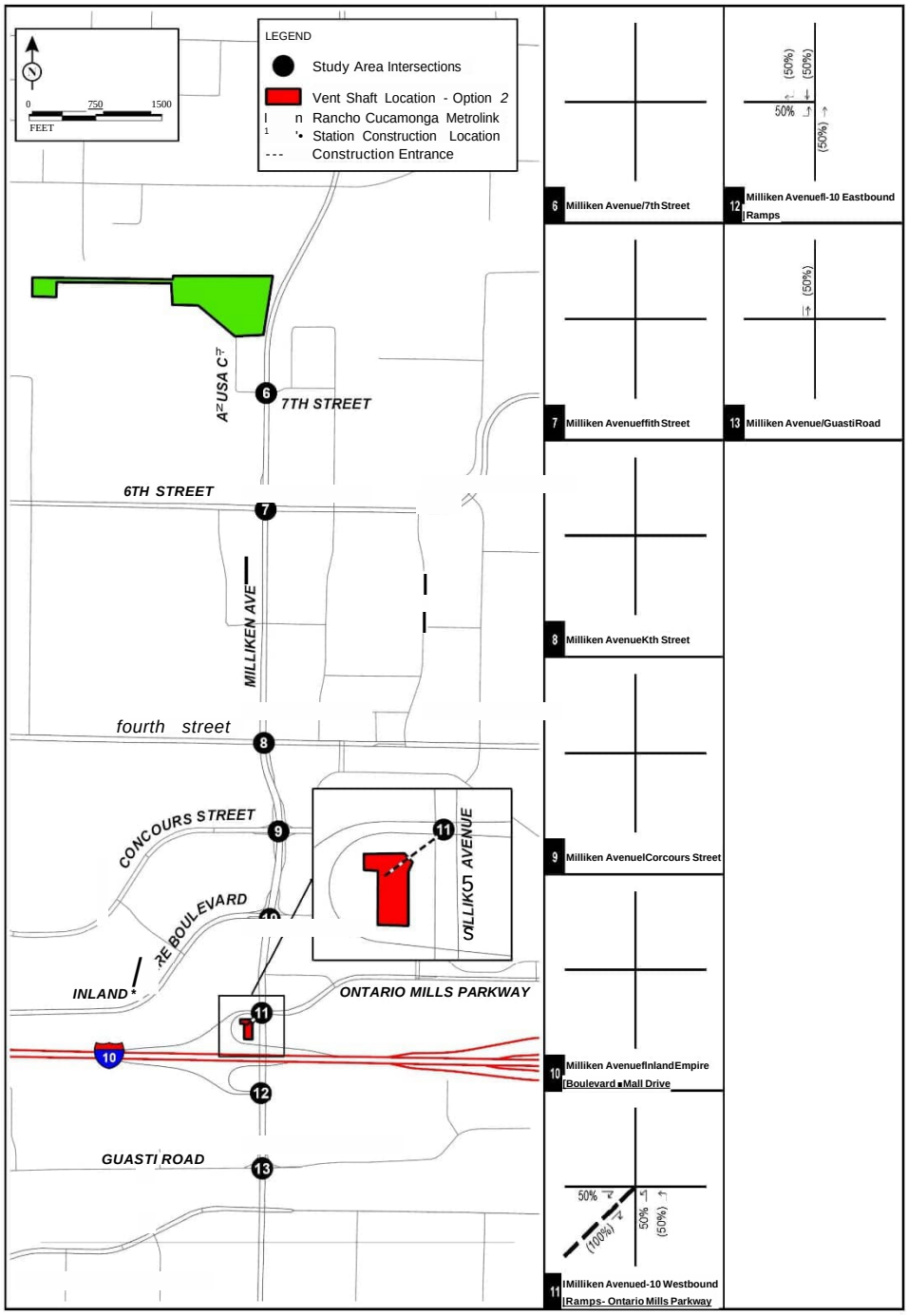
The construction staging area entrance for tunnel vent shaft design option 4 is located at the northwest corner of the intersection of Milliken Avenue/I-10 Eastbound Ramps. Haul trucks would access the staging area by turning bear-left at this intersection. Similar to tunnel vent shaft design option 2, construction employees and staff are assumed to arrive by passenger vehicles and would access the staging area either by turning hard-right when traveling southbound on Milliken Avenue or by turning bear-left when traveling northbound on Milliken Avenue. Haul trucks and passenger vehicles would exit the staging area by turning right directly onto the I-10 eastbound on-ramp.

Figure 3.14-26 Construction Traffic Distribution for Cucamonga Station



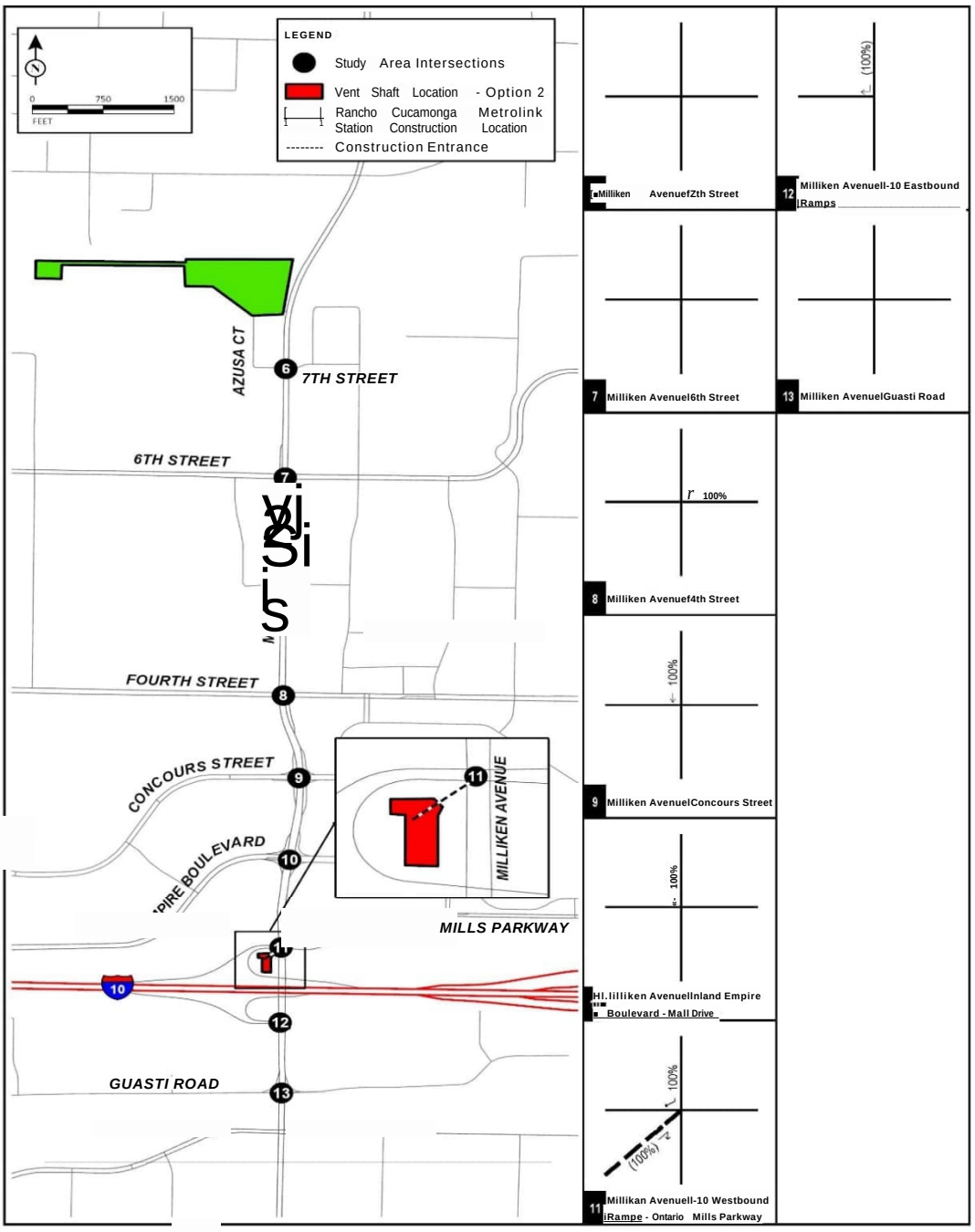
XXX%(YYY%)
Inbound (Outbound) Trip Distribution
— — Driveway

Figure 3.14-27 Construction Traffic Distribution for
Tunnel Vent Shaft Design Option 2 – Passenger Vehicles



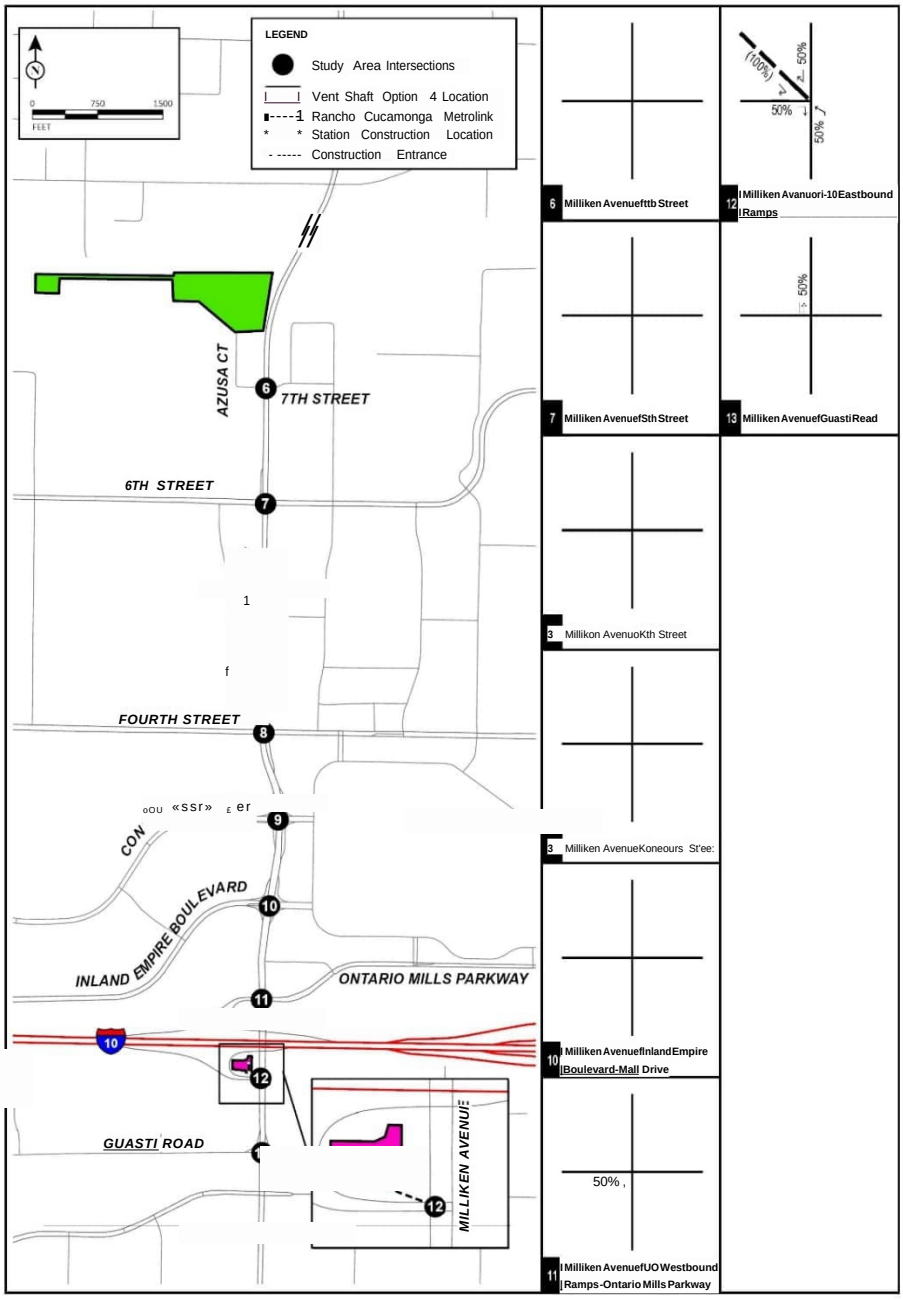
XXX%lYYY%)
Inbound (Outbound) Trip Distribution
— Construction Entrance

Figure 3.14-28 Construction Traffic Distribution for Tunnel Vent Shaft Design Option 2 – Haul Trucks



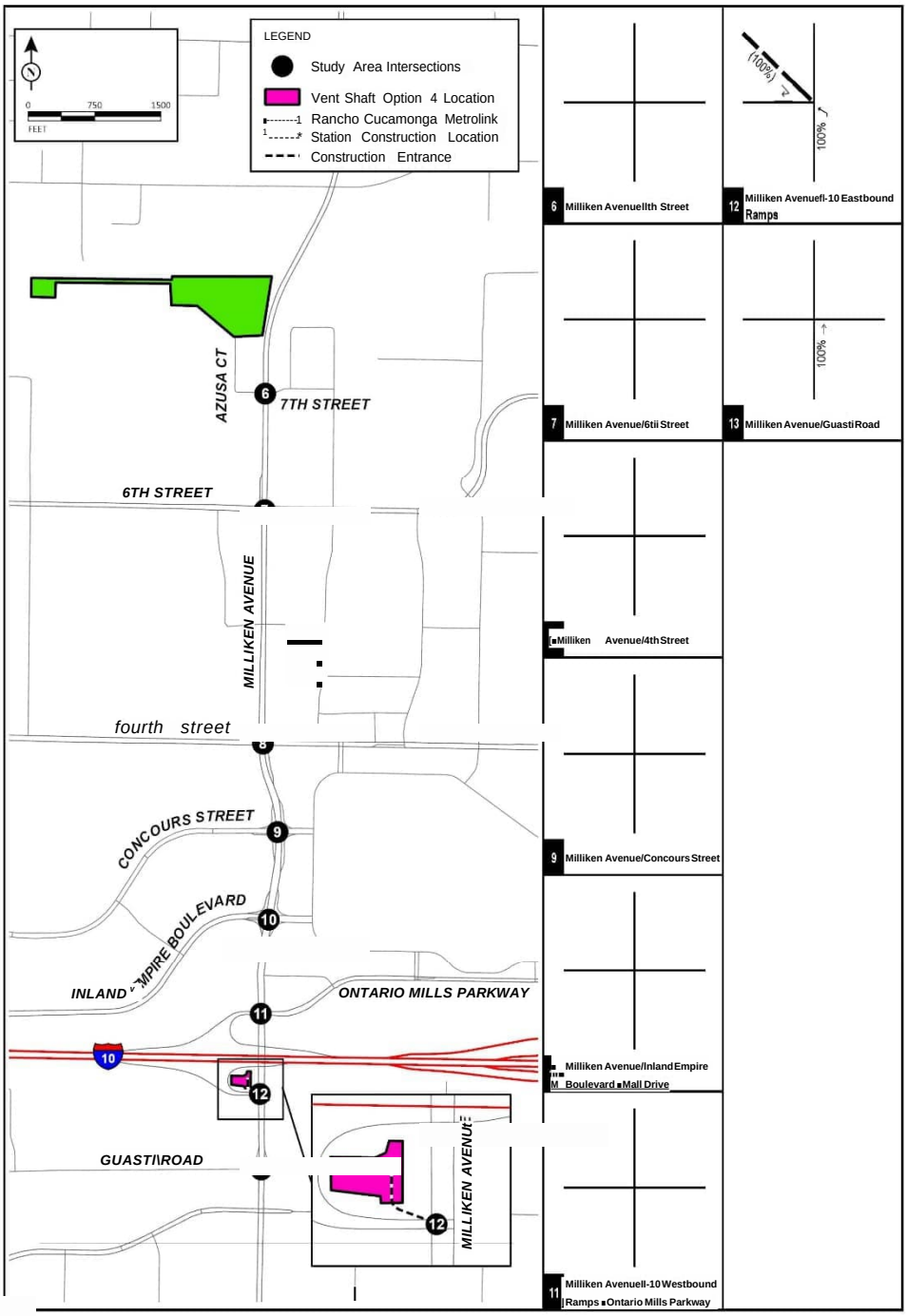
XXX%(YYY%)
Inbound (Outbound) Trip Distribution
-------- Construction Entrance

Figure 3.14-29 Construction Traffic Distribution for
Tunnel Vent Shaft Design Option 4 – Passenger Vehicles



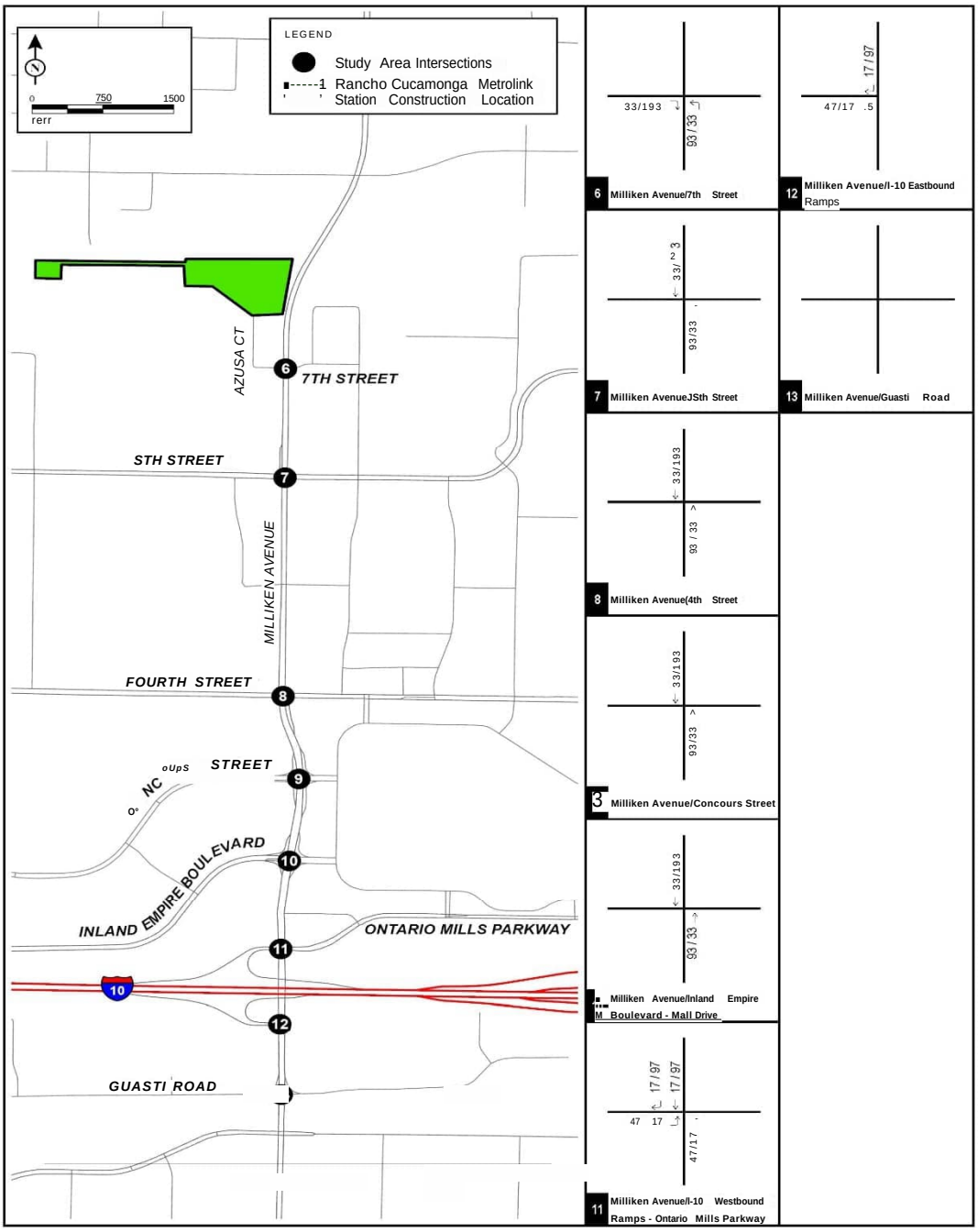
XXX%(YYY%)
Inbound (Outbound) Trip Distribution
— — Construction Entrance

Figure 3.14-30 Construction Traffic Distribution for Tunnel Vent Shaft Design Option 4 – Haul Trucks



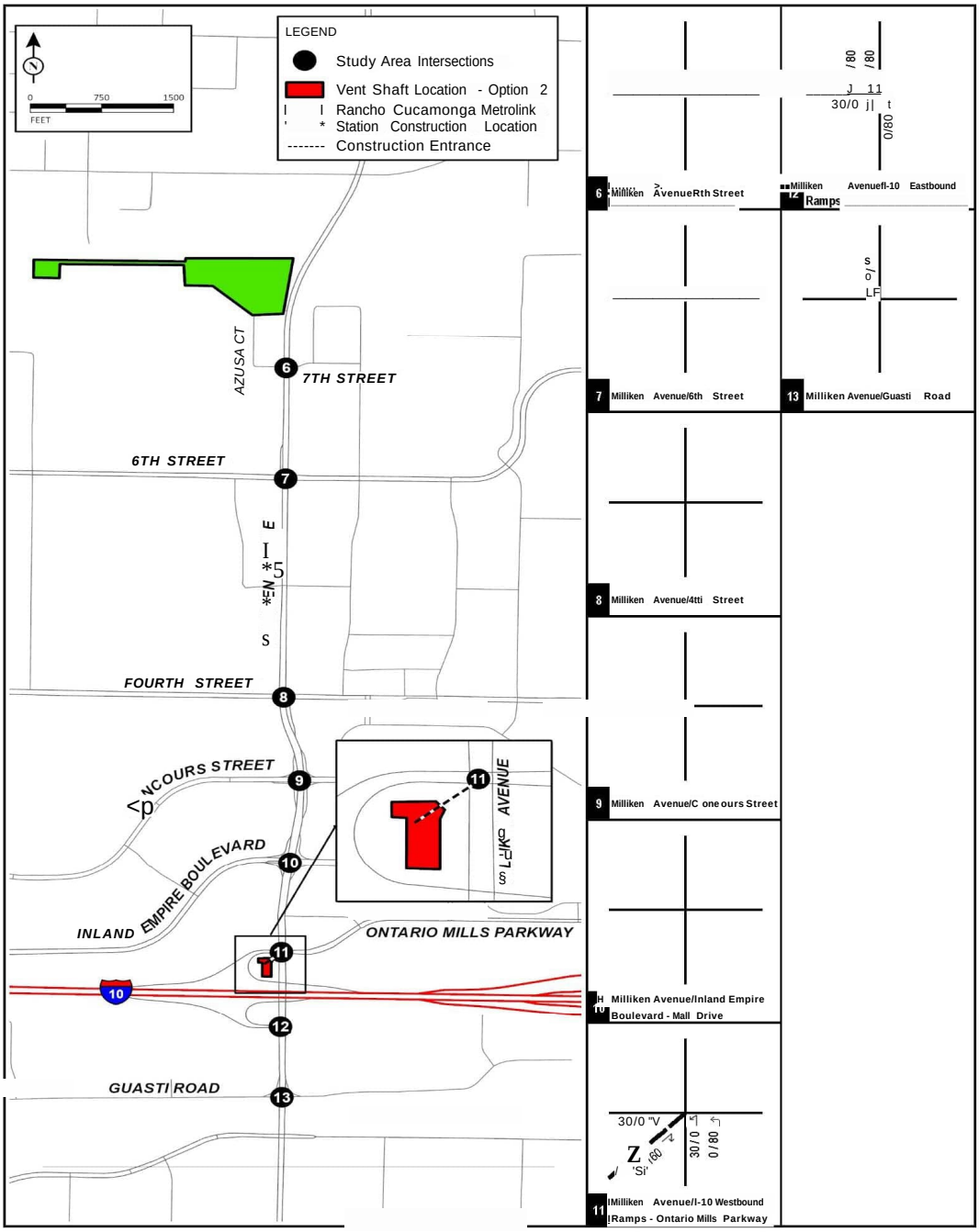
XXX%(YYY%)
Inbound (Outbound) Trip Distribution
— — Construction Entrance

Figure 3.14-31 Construction Trip Assignment for Rancho Cucamonga Station



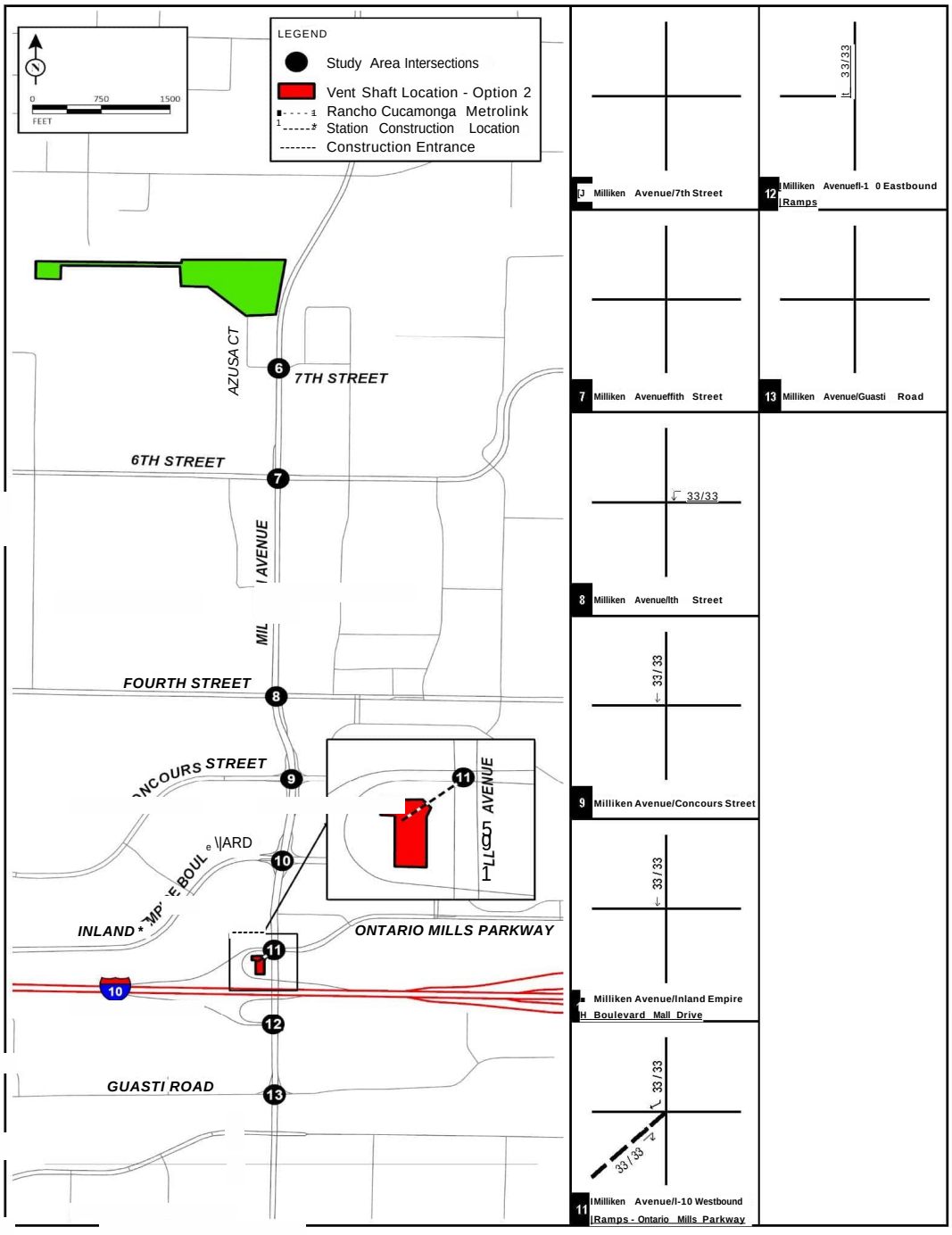
XXX / YYY
AM / PM Peak Hour Trips
---- Driveway

Figure 3.14-32 Construction Trip Assignment for
Tunnel Vent Shaft Design Option 2 – Passenger Vehicles



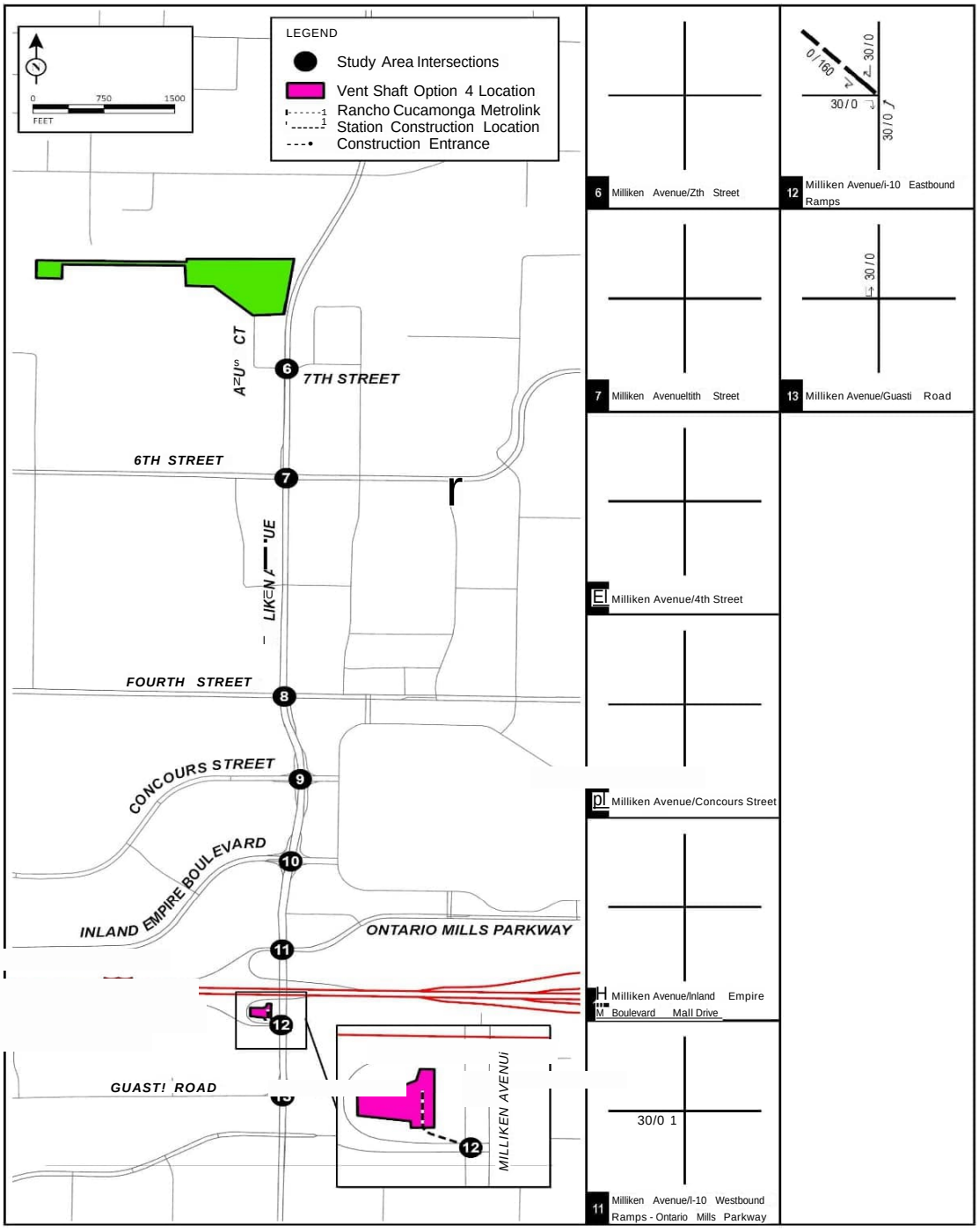
XXX/ YYY
AM / PM Peak Hour Trips
— - Construction Entrance

Figure 3.14-33 Construction Trip Assignment for Tunnel Vent Shaft Design Option 2 – Haul Trucks



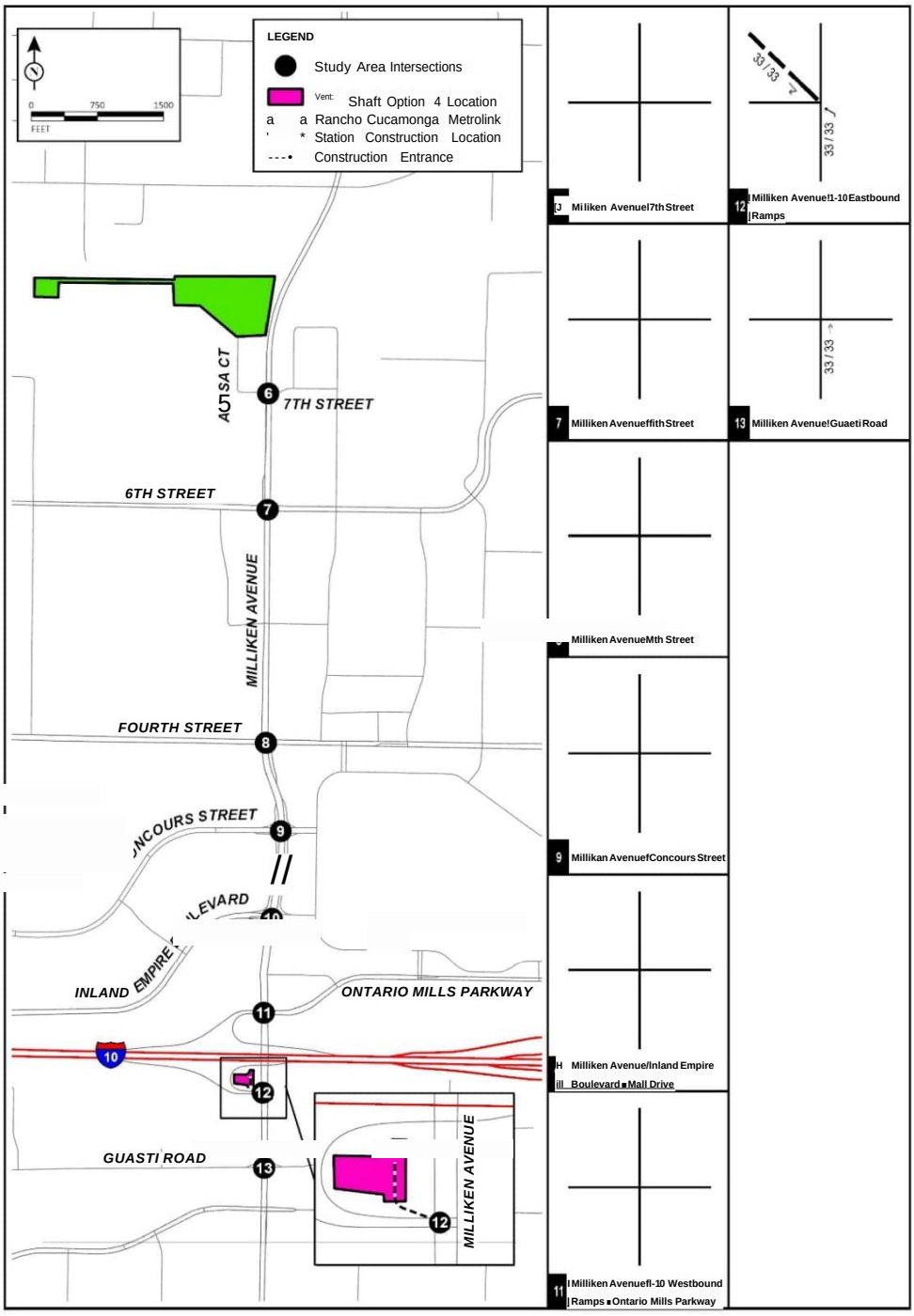
XX/YY
AM / PM Peak Hour Trips
— — Construction Entrance

Figure 3.14-34 Construction Trip Assignment for
Tunnel Vent Shaft Design Option 4 – Passenger Vehicles



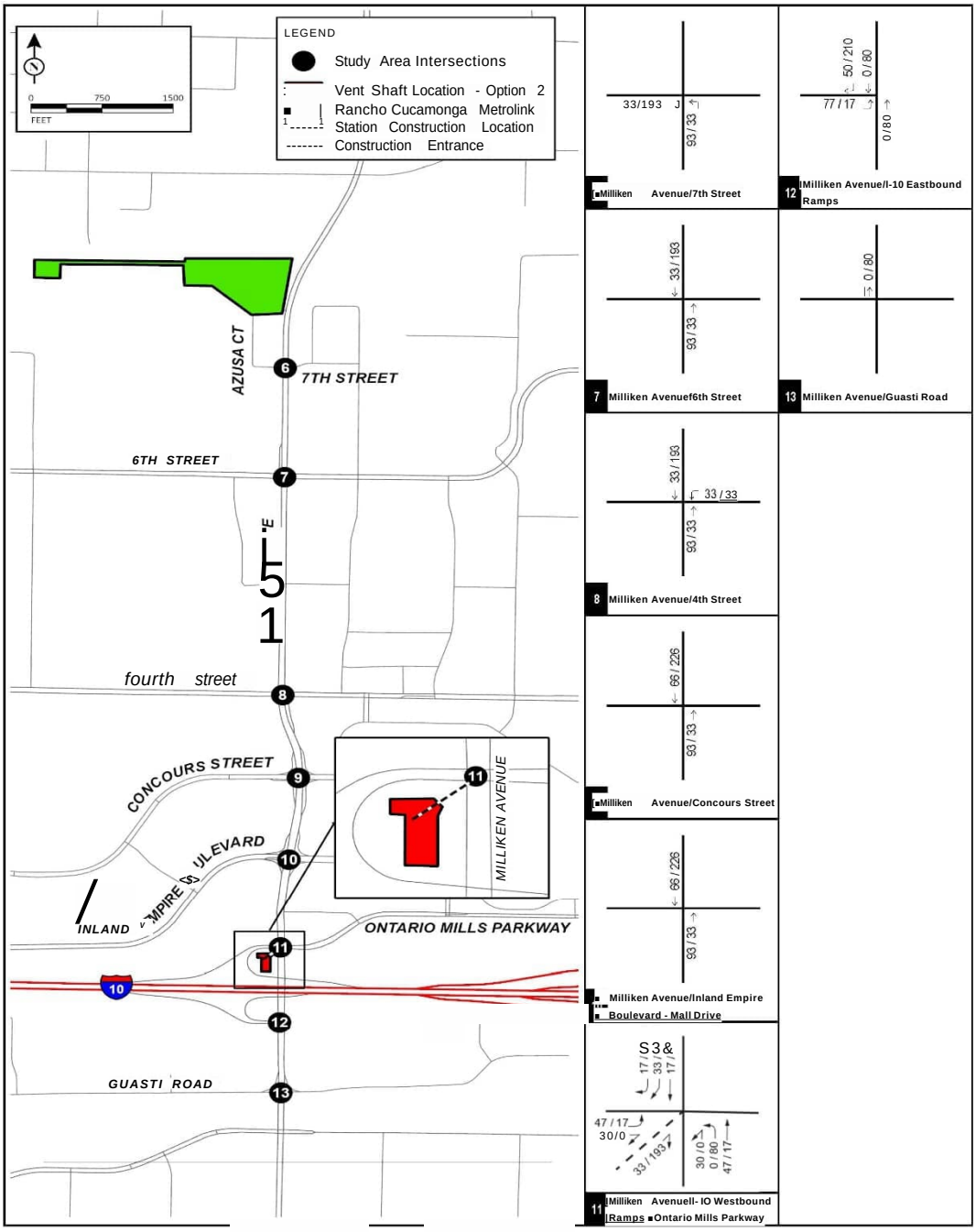
XXX / YYY
AM / PM Peak Hour Trips
— — Construction Entrance

Figure 3.14-35 Construction Trip Assignment for Tunnel Vent Shaft Design Option 4 – Haul Trucks



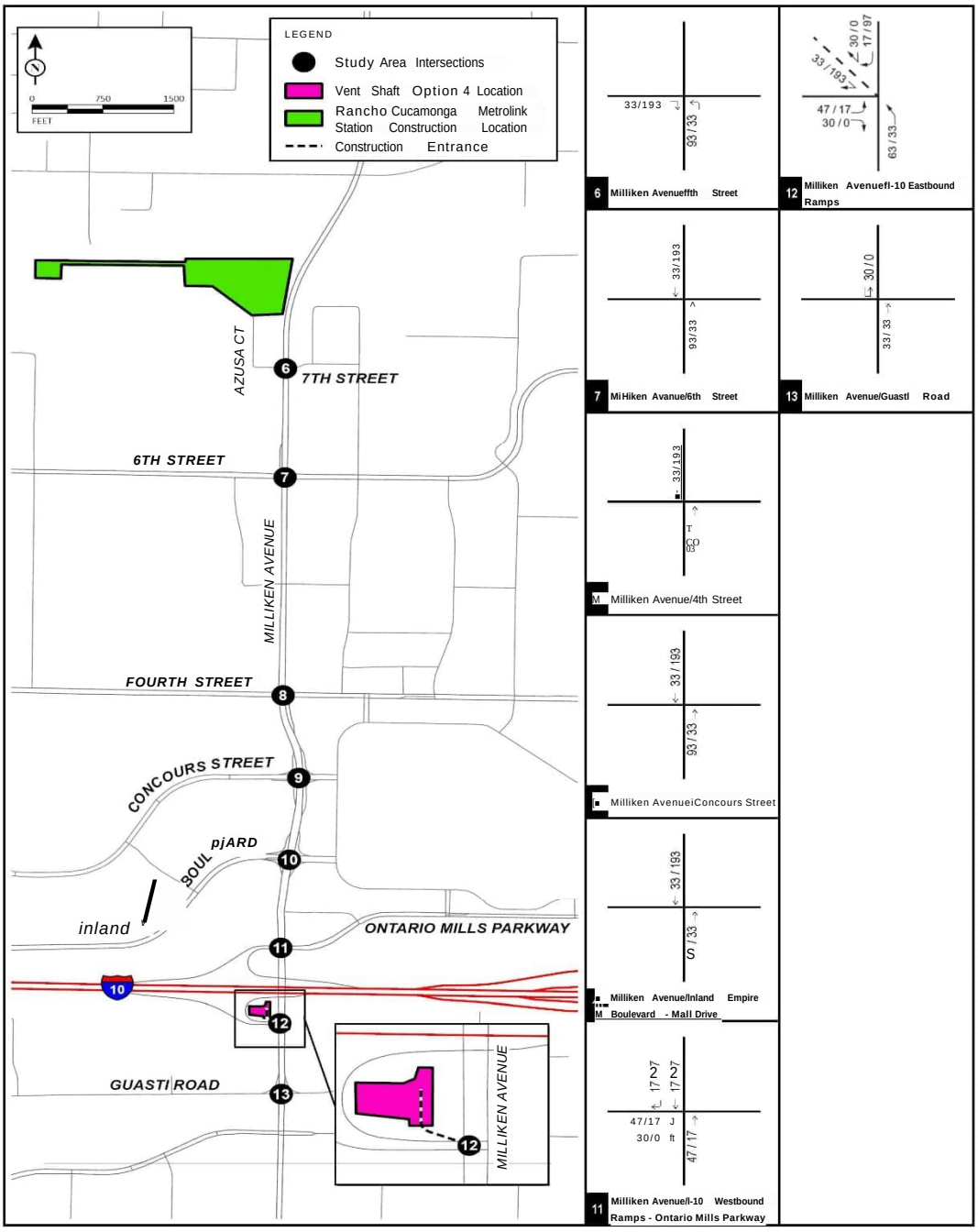
XX/YY
AM / PM Peak Hour Trips
— — Construction Entrance

Figure 3.14-36 Total Construction-related Traffic Trip Assignment for Scenario 2A with Tunnel Vent Shaft Design Option 2



XXX/ YYY
AM / PM Peak HourTrips
------- Construction Entrance

Figure 3.14-37 Total Construction-related Traffic Trip Assignment for Scenario 2B with Tunnel Vent Shaft Design Option 4



XXX / YYY
AM / PM Peak Hour Trips
------ - Construction Entrance

Existing with Scenarios 2A and 2B construction traffic volumes were developed by adding the respective Scenario 2A and 2B construction traffic trip assignment to the existing peak-hour traffic volumes at the study intersections. Figure 3.14-38-illustrates the traffic peak-hour turning-movement volumes at the study intersections under existing with Scenario 2A with tunnel vent shaft design option 2 construction conditions. Figure 3.14-39 illustrates the traffic peak-hour turning-movement volumes at the study intersections under existing with Scenario 2B with tunnel vent shaft design option 4 construction conditions. Detailed volume development worksheets are included in Appendix Q.

An intersection LOS analysis was conducted for existing with construction traffic Scenario 2A and 2B conditions based on the methodology outlined in Section 3.14.2. Table 3.14-22 summarizes the results of the LOS analysis for the study intersections affected by construction traffic for Scenario 2A with tunnel vent shaft design option 2. Table 3.14-23 summarizes the results of the LOS analysis for the study intersections affected by construction traffic for Scenario 2B with tunnel vent shaft design option 4. Detailed intersection LOS worksheets are included in Appendix Q.

All intersections are forecasted to operate at a satisfactory LOS under existing with Scenario 2A with tunnel vent shaft design option 2 construction conditions except for the following:

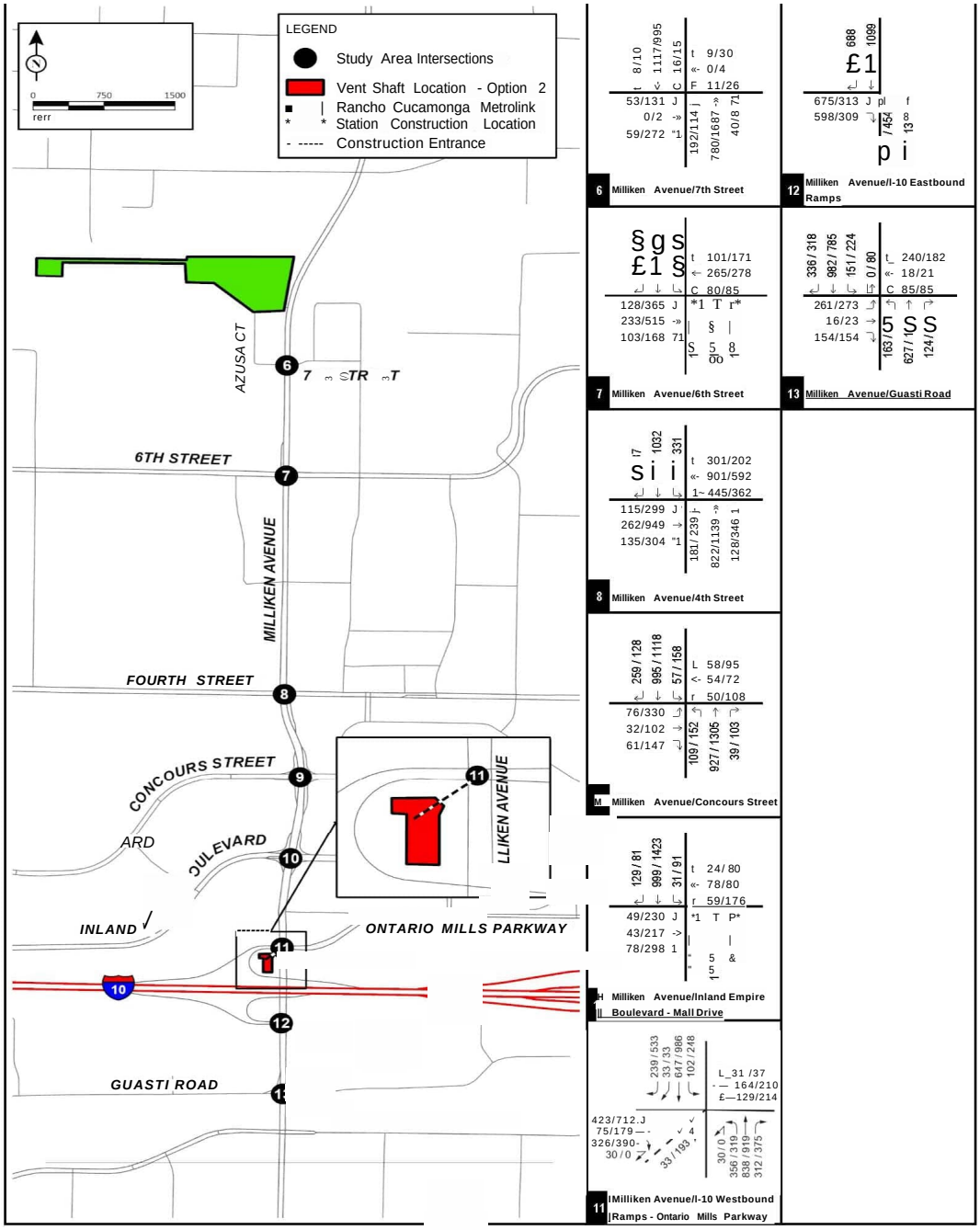
8. Milliken Avenue/4th Street (both a.m. and p.m. peak hours); and

11. Milliken Avenue/I-10 Westbound Ramps – Ontario Mills Parkway (p.m. peak hour only).

All intersections are forecasted to operate at a satisfactory LOS under existing with Scenario 2B with tunnel vent shaft design option 4 construction conditions except for the following:

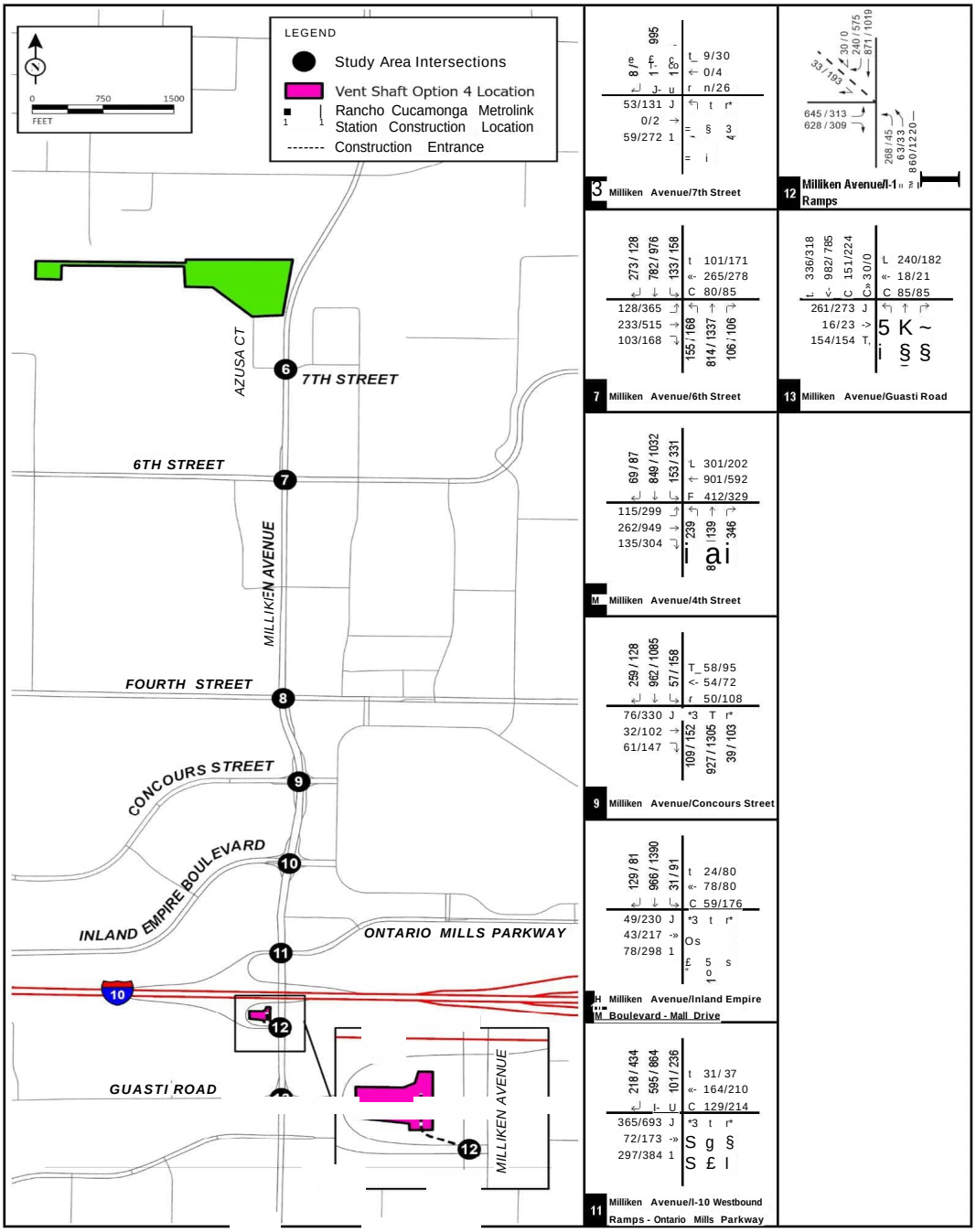
8. Milliken Avenue/4th Street (both a.m. and p.m. peak hours).

Figure 3.14-38 Existing with Scenario 2A Construction Traffic Peak-hour Turning-movement Volumes at Study Intersections



XXXX / YYYY
AM / PM Peak Hour Trips
— — Driveway

Figure 3.14-39 Existing with Scenario 2B Construction Traffic Peak-hour Turning-movement Volumes at Study Intersections



XXXX / YYYY
AM / PM Peak Hour Trips
— — Driveway

Table 3.14-22 Construction Traffic Scenario 2A Intersection Levels of Service

					No Build							Construction Scenario 2A						A.M. Peak Hour	P.M. Peak Hour	
					A.M. Peak Hour			P.M. Peak Hour				A.M. Peak Hour			P.M. Peak Hour					
	Intersection	Jurisdiction	LOS Standard	Control	Delay (sec.)	LOS		Delay (sec.)	LOS		Control	Delay (sec.)	LOS		Delay (sec.)	LOS		Increase in Delay (sec.)	Increase in Delay (sec.)	Exceeds LOS Standard
6	Milliken Avenue/7th Street	City of Rancho Cucamonga	D	Signal	10.6	B		13.9	B		Signal	16.2	B		20.0	B		5.6	6.1	No
7	Milliken Avenue/6th Street	City of Rancho Cucamonga	D	Signal	27.3	C		39.2	D		Signal	28.0	C		41.9	D		0.7	2.7	No
8	Milliken Avenue/4th Street	City of Ontario/City of Rancho Cucamonga	D	Signal	56.1	E	*	58.9	E	*	Signal	61.9	E	*	60.2	E	*	5.8	1.3	Yes
9	Milliken Avenue/Concours Street	City of Ontario	E	Signal	21.3	C		34.4	C		Signal	20.7	C		37.0	D		-0.6	2.6	No
10	Milliken Avenue/Inland Empire Boulevard – Mall Drive	City of Ontario	E	Signal	27.0	C		33.3	C		Signal	27.7	C		33.3	C		0.7	0.0	No
11	Milliken Avenue/I-10 Westbound Ramps – Ontario Mills Parkway	Caltrans	D	Signal	41.1	D		44.4	D		Signal	44.0	D		59.8	E	*	2.9	15.4	Yes
12	Milliken Avenue/I-10 Eastbound Ramps	Caltrans	D	Signal	26.7	C		24.1	C		Signal	26.6	C		23.9	C		-0.1	-0.2	No
13	Milliken Avenue/Guasti Road	City of Ontario	E	Signal	50.3	D		46.7	D		Signal	50.3	D		61.7	E		0.0	15.0	No

Notes:
LOS = Level of Service
Delay = Average control delay in seconds (For OWSC/TWSC intersections, reported delay is for worst-case movement).
*Exceeds LOS Standard

Table 3.14-23 Construction Traffic Scenario 2B Intersection Levels of Service

					No Build						Construction Scenario 2B						A.M. Peak Hour	P.M. Peak Hour	
					A.M. Peak Hour			P.M. Peak Hour				A.M. Peak Hour			P.M. Peak Hour					
	Intersection	Jurisdiction	LOS Standard	Control	Delay (sec.)	LOS		Delay (sec.)	LOS		Control	Delay (sec.)	LOS		Delay (sec.)	LOS		Increase in Delay (sec.)	Increase in Delay (sec.)	Exceeds LOS Standard
6	Milliken Avenue/7th Street	City of Rancho Cucamonga	D	Signal	10.6	B		13.9	B		Signal	16.2	B		20.0	B		5.6	6.1	No
7	Milliken Avenue/6th Street	City of Rancho Cucamonga	D	Signal	27.3	C		39.2	D		Signal	28.0	C		41.9	D		0.7	2.7	No
8	Milliken Avenue/4th Street	City of Ontario/City of Rancho Cucamonga	D	Signal	56.1	E	*	58.9	E	*	Signal	57.8	E	*	59.1	E	*	1.7	0.2	Yes
9	Milliken Avenue/Concours Street	City of Ontario	E	Signal	21.3	C		34.4	C		Signal	21.1	C		37.1	D		-0.2	2.7	No
10	Milliken Avenue/Inland Empire Boulevard – Mall Drive	City of Ontario	E	Signal	27.0	C		33.3	C		Signal	27.8	C		33.4	C		0.8	0.1	No
11	Milliken Avenue/I-10 Westbound Ramps – Ontario Mills Parkway	Caltrans	D	Signal	41.1	D		44.4	D		Signal	42.1	D		44.6	D		1.0	0.2	No
12	Milliken Avenue/I-10 Eastbound Ramps	Caltrans	D	Signal	26.7	C		24.1	C		Signal	27.1	C		24.4	C		0.4	0.3	No
13	Milliken Avenue/Guasti Road	City of Ontario	E	Signal	50.3	D		46.7	D		Signal	50.8	D		46.9	D		0.5	0.2	No

Notes:
LOS = Level of Service
Delay = Average control delay in seconds (For OWSC/TWSC intersections, reported delay is for worst-case movement).
*Exceeds LOS Standard

It should be noted that the intersection of Milliken Avenue/4th Street during the p.m. peak hour is forecasted to operate at a deficient LOS even under the existing condition. Furthermore, increases in delay for all intersections are temporary for the duration of the construction phase. Therefore, the proposed Project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit and roadway facilities, and impacts would be less than significant.

Transit Facilities. Construction of the proposed Project includes aboveground and belowground elements that would be designed in accordance with local and regional building requirements. Construction could result in a reduction of the number of travel lanes, or temporary closure of segments of adjacent roadways. Such impacts would be limited to the construction period of the proposed Project and would affect only adjacent streets or intersections. However, safety measures would be set in place in accordance with best management practices (BMPs), including wayfinding and signage, alternative travel routes, and maintaining access to local businesses and residences. Implementation of MM-TRA-1 ensures a TMP would be prepared by SBCTA to facilitate the flow of traffic in and around construction zones and would address any construction-related impacts to transit facilities; and impacts would be less than significant.

Roadway, Bicycle, and Pedestrian Facilities. Construction of the proposed Project includes aboveground and belowground elements that would be designed in accordance with local and regional building requirements. Construction could result in a reduction of the number of travel lanes or temporary closure of segments of adjacent roadways. Such impacts would be limited to the construction period of the proposed Project and would affect only adjacent streets or intersections. However, safety measures would be set in place in accordance with BMPs, including wayfinding and signage, alternative travel routes, and maintaining access to local businesses and residences. Implementation of MM-TRA-1 ensures a TMP would be prepared by SBCTA to facilitate the flow of traffic in and around construction zones and would address any construction-related impacts to roadway, bicycle, and pedestrian facilities. Therefore, the proposed Project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including roadways, bicycle, and pedestrian facilities, and impacts would be less than significant.

A qualitative analysis was conducted to analyze potential VMT impacts during the proposed Project construction. State CEQA Guidelines Section 15064.3, Subdivision (b), allows for a qualitative analysis of construction traffic for many projects. During construction, the proposed Project would temporarily increase VMT within the study area due to construction vehicles traveling to and from the construction staging areas and transporting excavated materials to local landfill sites. As the proposed Project has the potential to temporarily increase regional VMT during construction, the proposed Project would result in a significant impact. However, the proposed Project proposes to implement MM-TRA-1, which requires SBCTA to prepare a TMP to facilitate the flow of traffic in and around construction zones to minimize the increase in VMT anticipated during construction. The proposed mitigation measure would reduce regional

VMT during construction to a less than significant level. Therefore, with implementation of MM-TRA-1 the proposed Project would have a less than significant impact.

3.14.11.2.2.2 Operational Impacts

VMT is the current standard for evaluating transportation impacts under CEQA. However, it is understood that local land uses agencies such as the City of Rancho Cucamonga and the City of Ontario continue to recognize LOS within their respective plans, programs, ordinances and policies as they transition to VMT thresholds. As such, the discussion of LOS included in this section is for informational and disclosure purposes only.

3.14.11.2.2.3 Project Traffic

Table 3.14-24 the proposed Project trip generation. Opening Year (2031) Build and Design Year (2051) traffic volumes were developed by adding the proposed Project traffic to the existing traffic volumes.

Table 3.14-24 Propose Trip Generation (Traffic Operations Analysis)

Trip Generation by Analysis Scenarios	A.M. Peak Hour			P.M. Peak Hour			Daily
	In	Out	Total	In	Out	Total	
Opening Year (2031) Trip Generation							
Terminal 2 Trips[1, 2]	(3)	(3)	(6)	(2)	(1)	(3)	-
Terminal 4 Trips[1, 2]	(7)	(2)	(9)	(3)	(6)	(9)	-
Out-of-Region Visitors Renting Cars[2]	(1)	(1)	(2)	(1)	(1)	(2)	-
Rancho Cucamonga Metrolink Station Trips[3]	1	1	2	1	1	2	-
Net Opening Year (2031) Trip Generation	(10)	(5)	(15)	(5)	(7)	(12)	0
Design Year (2051) Trip Generation							
Terminal 2 Trips[1, 2]	(13)	(11)	(24)	(6)	(5)	(11)	-
Terminal 4 Trips[1, 2]	(5)	(2)	(7)	(3)	(5)	(8)	-
Out-Of-Region Visitors Renting Cars[2]	(3)	(2)	(5)	(2)	(1)	(3)	-
Rancho Cucamonga Metrolink Station Trips[3]	1	1	2	1	1	2	-
Net Design Year (2051) Trip Generation	(20)	(14)	(34)	(10)	(10)	(20)	0

Notes:

[1] Trips for Terminals 2 and 4 include air passengers who previously parked at the self-parking lots, air passengers who were previously dropped off, and employees parking for work.

[2] Terminal 2 and 4 trips consist of 95% of the trips that are anticipated to utilize other rail connections that connect to Metrolink and will utilize the new tunnel connection.

[3] 5% of the trips will be air passengers dropped off at the Rancho Cucamonga Metrolink station instead of being dropped off at the airport.

3.14.11.2.2.4 Opening Year (2031) Build Conditions.

For the purposes of this analysis, all proposed Project trips were considered to be regional trips, as proposed Project trips were considered to be traveling to ONT from the nearest freeways (I-10, I-15, and State Route 60). Figure 3.14-40 illustrates the Opening Year Peak-hour proposed Project trip assignment at the study intersections. Figure 3.14-41 illustrates the peak-hour traffic volumes at the study area intersections under Opening Year Build conditions. Table 3.14-25 summarizes the results of the Opening Year LOS analysis for the study area intersections. Detailed intersection LOS worksheets are included in

the Transportation Technical Report (SBCTA 2024; Appendix Q). All intersections are forecasted to operate at a satisfactory LOS except for:

- Archibald Avenue – Terminal Way/Airport Drive.

It should be noted that the intersection of Archibald Avenue – Terminal Way/Airport Drive is forecasted to operate at a deficient LOS under the existing conditions. Furthermore, the Opening Year conditions would improve the delay to better than the corresponding delay under existing conditions.

3.14.11.2.2.5 Design Year (2051) Build Conditions.

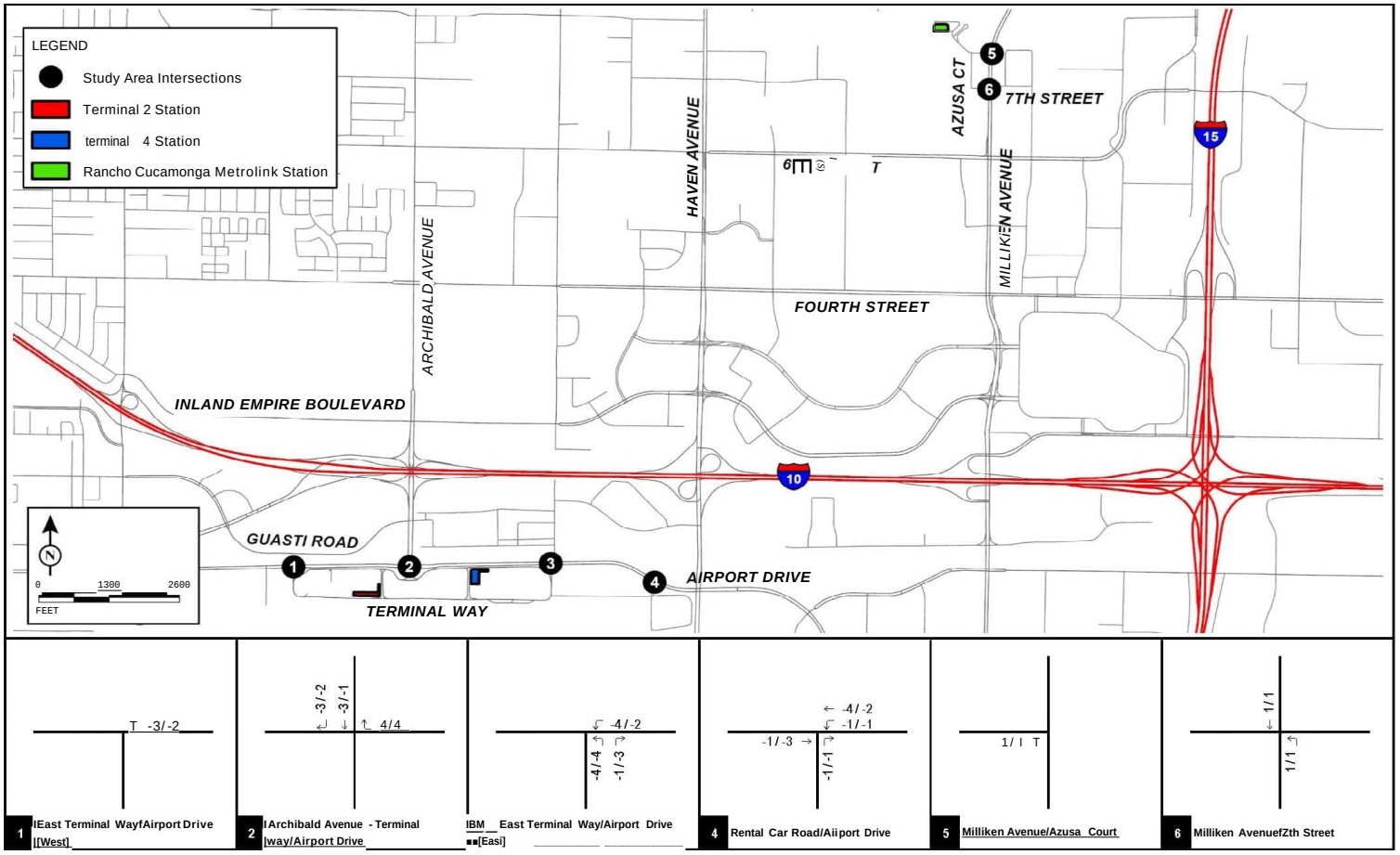
Figure 3.14-42 illustrates the Design Year Proposed Project trip assignment at all study area intersections. Figure 3.14-43 illustrates the peak-hour traffic volumes at the study intersections under Design Year Build conditions. Table 3.14-26 summarizes the results of the Design Year LOS analysis for the study area intersections. Detailed intersection LOS worksheets are included in the Transportation Technical Report (SBCTA 2024; Appendix Q). All intersections are forecasted to operate at a satisfactory LOS except for the following:

- Archibald Avenue – Terminal Way/Airport Drive (both a.m. and p.m. peak hours); and
- East Terminal Way/Airport Drive (East) (a.m. peak hour only).

It should be noted that the intersections forecasted to operate at a deficient LOS under the Design Year conditions are also forecasted to operate at a deficient LOS under the Design Year2051 conditions. Furthermore, the Design Year conditions would improve the delay to better than the corresponding delay under the existing conditions.

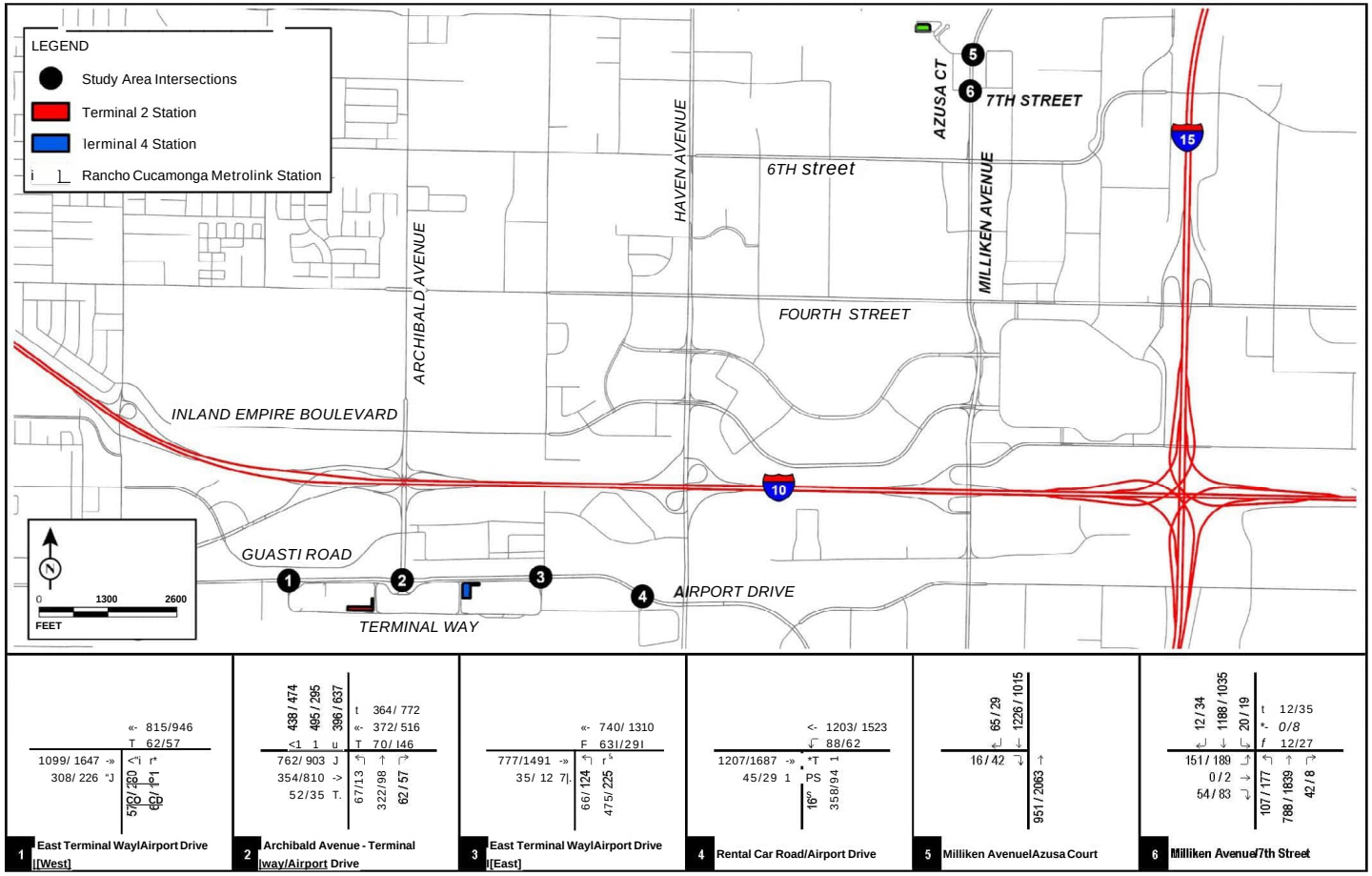
VMT is the current standard for evaluating transportation impacts under CEQA and is the basis for impact evaluation in this section. The discussion of LOS included in this section is for informational and disclosure purposes only.

Figure 3.14-40 Opening Year Peak-hour Proposed Project Trip Assignment at Study Intersections



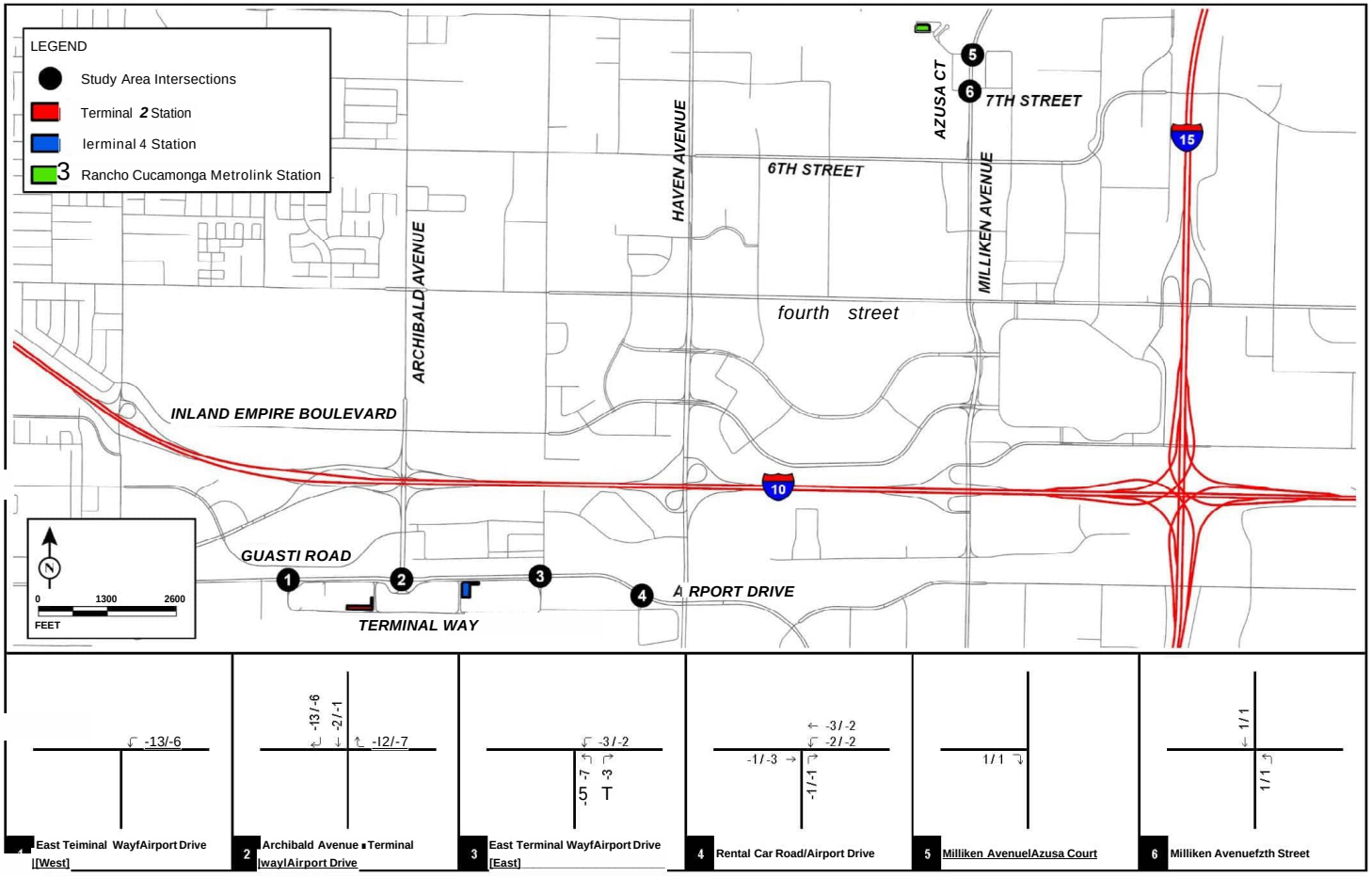
XX/ YY
AM / PM Peak Hour Traffic Volumes

Figure 3.14-41 Opening Year Peak-hour Volumes at Study Area Intersections



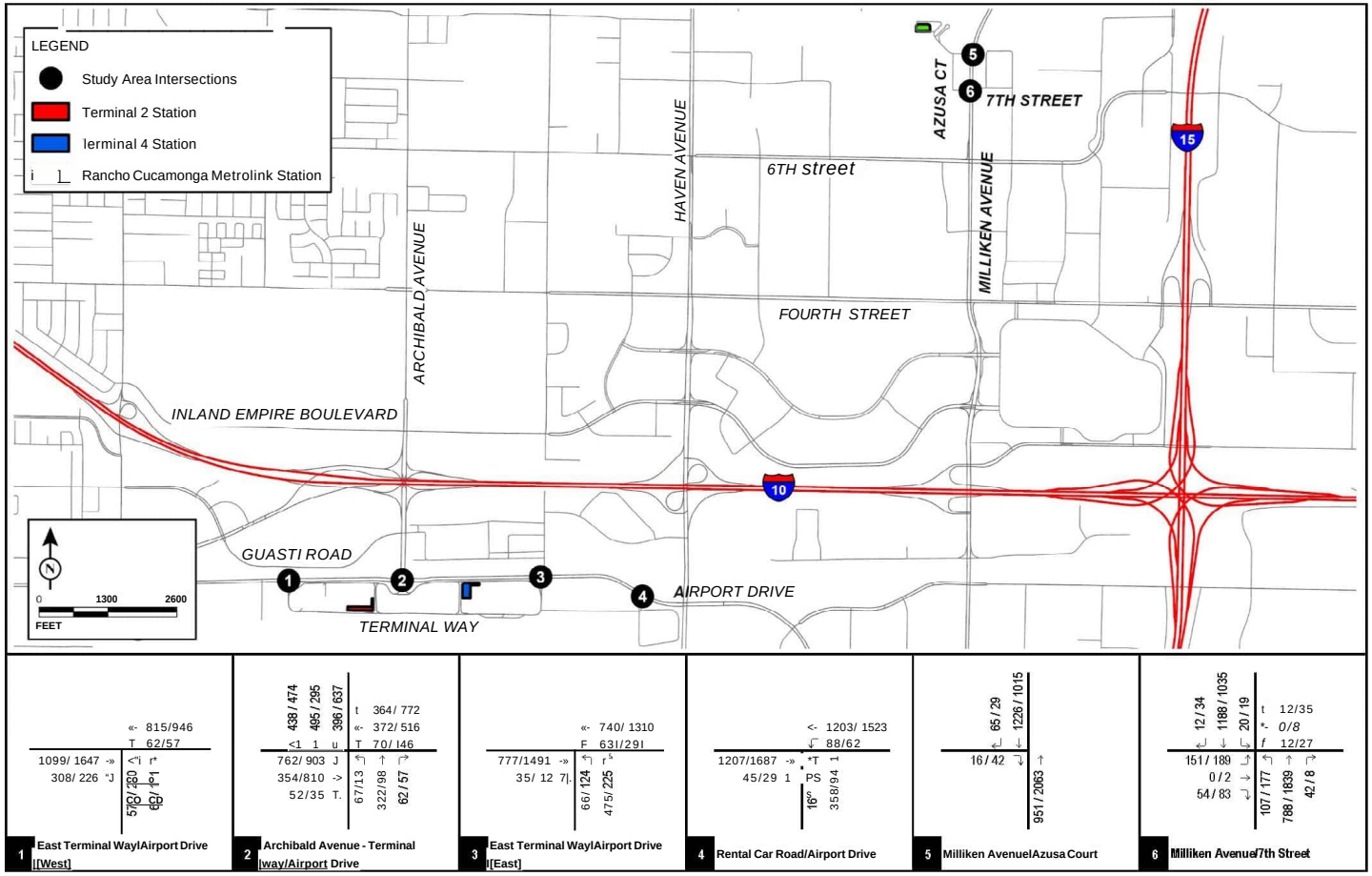
XXXX / YYYY
AM / PM Peak Hour Traffic Volumes

Figure 3.14-42 Design Year Proposed Project Trip Assignment at All Study Area Intersections



XXX/ YYY
AM / PM Peak Hour Traffic Volumes

Figure 3.14-43 Design Year Peak-hour Traffic Volumes at Study Area Intersections



XXXX / YYYY
AM / PM Peak Hour Traffic Volumes

Table 3.14-25 Opening Year (2031) Build Intersection Levels of Service

					No Build							Build						A.M. Peak Hour Increase in Delay (sec.)	P.M. Peak Hour Increase in Delay (sec.)	Improvement Required?
	Intersection	Jurisdiction	LOS Standard	Control	A.M. Peak Hour Delay (sec.)	LOS		P.M. Peak Hour Delay (sec.)	LOS		Control	A.M. Peak Hour Delay (sec.)	LOS		P.M. Peak Hour Delay (sec.)	LOS				
1	East Terminal Way/Airport Drive [West]	City of Ontario	E	Signal	36.2	D		56.9	E		Signal	33.8	C		56.9	E		-2.4	0.0	No
2	Archibald Avenue - Terminal Way/Airport Drive	City of Ontario	E	Signal	81.8	F	*	>100	F	*	Signal	76.9	E		>100	F	*	-4.9	-7.8	Yes
3	East Terminal Way/Airport Drive [East]	City of Ontario	E	Signal	32.8	C		27.0	C		Signal	22.5	C		27.0	C		-10.3	0.0	No
4	Rental Car Road/Airport Drive	City of Ontario	E	Signal	28.2	C		22.3	C		Signal	27.1	C		22.2	C		-1.1	-0.1	No
5	Milliken Avenue/Azusa Court	City of Rancho Cucamonga	D	OWSC	14.6	B		14.2	B		OWSC	14.7	B		14.3	B		0.1	0.0	No
6	Milliken Avenue/7th Street	City of Rancho Cucamonga	D	Signal	11.9	B		16.0	B		Signal	11.9	B		16.0	B		0.0	0.0	No

Notes:
OWSC = One-Way Stop Control; LOS = Level of Service
Delay = Average control delay in seconds (For OWSC/TWSC intersections, reported delay is for worst-case movement).
*Exceeds LOS Standard

Table 3.14-26 Design Year (2051) Build Intersection Levels of Service

	Intersection	Jurisdiction	LOS Standard	No Build Control	No Build A.M. Peak Hour Delay (sec.)	No Build A.M. Peak Hour LOS		No Build P.M. Peak Hour Delay (sec.)	No Build P.M. Peak Hour LOS		Build Control	Build A.M. Peak Hour Delay (sec.)	Build A.M. Peak Hour LOS		Build P.M. Peak Hour Delay (sec.)	Build P.M. Peak Hour LOS		A.M. Peak Hour Increase in Delay (sec.)	P.M. Peak Hour Increase in Delay (sec.)	Improvement Required?
1	East Terminal Way/Airport Drive [West]	City of Ontario	E	Signal	40.5	D		81.9	F	*	Signal	39.3	D		73.9	E		-1.2	-8.0	No
2	Archibald Avenue - Terminal Way/Airport Drive	City of Ontario	E	Signal	>100	F	*	>100	F	*	Signal	>100	F	*	>100	F	*	-4.6	-0.2	Yes
3	East Terminal Way/Airport Drive [East]	City of Ontario	E	Signal	>100	F	*	30.8	C		Signal	>100	F	*	30.5	C		-1.5	-0.3	Yes
4	Rental Car Road/Airport Drive	City of Ontario	E	Signal	28.5	C		28.7	C		Signal	27.1	C		28.4	C		-1.4	-0.3	No
5	Milliken Avenue/Azusa Court	City of Rancho Cucamonga	D	OWSC	15.2	C		14.7	B		OWSC	15.3	C		14.8	B		0.1	0.0	No
6	Milliken Avenue/7th Street	City of Rancho Cucamonga	D	Signal	15.7	B		21.2	C		Signal	15.8	B		21.3	C		0.1	0.1	No

Notes:
OWSC = One-Way Stop Control; LOS = Level of Service
Delay = Average control delay in seconds (For OWSC/TWSC intersections, reported delay is for worst-case movement).
*Exceeds LOS Standard

3.14.11.2.2.6 Transit Facilities

As demonstrated under the proposed Project VMT analysis, the proposed Project would reduce the overall regional VMT compared to the No Project Alternative. The proposed Project would provide connection from Cucamonga Metrolink Station to and from ONT. The proposed Project would not modify transit facilities (e.g., stations or bus stops) or decrease any existing transit service facilities. As such, the proposed Project would have a less than significant impact.

3.14.11.2.2.7 Roadway, Bicycle, and Pedestrian Facilities

The proposed Project would provide first/last-mile access for regional trips to and from ONT and would not modify the existing roadway network or bicycle and pedestrian facilities.

The proposed Project is a public transit project that is also a transportation improvement. Based on the State CEQA Guidelines, transportation projects that reduce or have no impact on VMT would be presumed to result in a less-than-significant impact. The proposed Project would provide first/last-mile access for regional trips to and from ONT, which would be a transportation improvement for the study area. Improvements to first/last-mile access encourage mode shift from automobiles to other modes, such as transit and nonmotorized travel. The proposed Project would encourage the use of transit for airport trips, thereby stimulating a mode shift from automobile to transit. As such, the proposed Project would reduce regional VMT and impacts during the proposed Project operation. Therefore, the proposed Project would have a less than significant impact.

3.14.11.3 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)?

3.14.11.3.1 No Project Alternative

The No Project Alternative includes planned expansion, improvement projects, and routine maintenance activities for the existing roadway system and transit facilities. Temporary short-term impacts on local streets adjacent to the No Project Alternative vicinity would experience potential extension of construction activities into the public ROW, which could result in a reduction in the number of travel lanes or temporary closure of segments of adjacent roadways. Any such impacts would be limited to the construction period of the No Project Alternative and would impact only adjacent streets or intersections. However, safety measures would be set in place in accordance with BMPs, including wayfinding and signage, alternative travel routes, and maintaining access to local businesses and residents. The No Project Alternative would be designed in accordance with local and regional design requirements such that operational activities are not anticipated to increase hazards on the existing circulation network due to any design features or incompatible uses. Therefore, construction and operational impacts would be less than significant.

3.14.11.3.2 Proposed Project

3.14.11.3.2.1 Construction Impacts

As previously described, construction of the proposed Project includes aboveground and below ground elements that would be designed in accordance with local and regional building requirements. Construction of the proposed Project will not result in hazards from any incompatible uses (e.g., farm equipment) as the construction equipment will be similar to equipment used in other roadway improvement projects such as backhoes, trucks, hand-held power equipment, generators, etc. Temporary short-term impacts on local streets adjacent to the proposed Project site would experience increased VMT due to roadway and infrastructure improvements, and the potential extension of construction activities into the public ROW could result in a reduction in the number of travel lanes or temporary closure of segments of adjacent roadways, which could result in increased hazards from geometric design (e.g., reduced sight lines due to temporary obstructions such as construction equipment parked in the roadway). Although such impacts would be limited to the construction period of the proposed Project and would impact only adjacent streets or intersections, implementation of a Transportation Management Plan to facilitate the flow of traffic and transit service in and around construction zones as outlined in MM-TRA-1, will reduce construction impacts related to hazards from geometric design features to less than significant.

3.14.11.3.2.2 Operational Impacts

The operation of the autonomous vehicles would occur with a closed system primarily within a below ground tunnel and would not present geometric hazards or incompatible uses within the existing roadway network. The aboveground proposed Project features (e.g., proposed stations, ventilation shaft [vent shaft], and MSF) would be constructed within existing surface parking lots for the Cucamonga Metrolink Station and ONT Terminals 2 and 4 and would be designed in accordance with local and regional design requirements. Moreover, access to existing parking lots will be maintained. As such, it is not anticipated that the proposed Project would substantially increase hazards on the existing circulation network due to any design features or incompatible uses. The proposed Project during operation would have a less than significant impact.

3.14.11.4 Would the project result in inadequate emergency access?

3.14.11.4.1 No Project Alternative

The No Project Alternative includes planned expansion, improvement projects, and routine maintenance activities for the existing roadway system and transit facilities which would be subject to their own environmental review. Temporary short-term construction impacts on local streets and freeways could occur adjacent to the No Project Alternative vicinity due to roadway and infrastructure improvements and the potential extension of construction activities into the public ROW. As such, the No Project Alternative could result in a reduction of the number of lanes or temporary closure of segments of adjacent roadways. Any such impacts would be limited to the construction period of the No Project Alternative and would

affect only adjacent streets or intersections. These short-term construction impacts would not interfere with any adopted emergency response or evacuation plans.

The No Project Alternative would be designed to Incorporate adequate emergency access (e.g., parking lot driveways, sufficient turning movements for emergency vehicles). Further, compliance with applicable San Bernardino County design criteria pertaining to emergency vehicle access, as well as the California Fire Code standards would ensure that operation of the No Project Alternative would not impair implementation of, or physically interfere with, any adopted emergency response or evacuation plans. Therefore, the No Project Alternative is not anticipated to result in inadequate emergency access for the existing circulation network during construction and operation; construction and operational impacts would be less than significant.

3.14.11.4.2 Proposed Project

3.14.11.4.2.1 Construction Impacts

Temporary short-term construction impacts on local streets and freeways could occur adjacent to the proposed Project site due to roadway and infrastructure improvements and the potential extension of construction activities into the public ROW. As such, the proposed Project could result in a reduction of the number of lanes or temporary closure of segments of adjacent roadways. Any such impacts would be limited to the construction period of the proposed Project and would affect adjacent streets or intersections. For example, construction for vent shaft design option 2 or vent shaft design option 4 could result in temporary lane or freeway ramp closures due to the close proximity of the staging area to existing roadways such as Milliken Avenue and the I-10 westbound ramps. Such impacts would be limited to the construction period of the vent shaft. Further, construction of the proposed Cucamonga Station and MSF, and the two passenger stations at ONT, could result in temporary access impacts such as closures and detours of ingress and egress routes, and drive aisles, at parking lots. Such impacts would be limited to the construction period of the Cucamonga Station, MSF, and two passenger stations at ONT. Implementation of a Transportation Management Plan, as outlined in MM-TRA-1, will facilitate the flow of traffic and transit service, including emergency vehicle response and access, in and around construction zones, including the vent shaft design option 2 or vent shaft design option 4 location, and at the proposed Cucamonga Station, MSF, and passenger stations at ONT. MM-TRA-1 will require coordination with first responders and emergency service providers to minimize delays due to construction activities. Further, safety measures would be set in place in accordance with BMPs, including wayfinding and signage, alternative travel routes, and maintaining access to local businesses and residences. With implementation of MM-TRA-1, short-term construction impacts would not interfere with any adopted emergency response or evacuation plans. Therefore, with implementation of MM-TRA-1, construction of the proposed Project is not anticipated to result in inadequate emergency access for the existing circulation network during construction, and impacts would be less than significant.

3.14.11.4.2.2 Operational Impacts

The proposed Project would primarily be underground, with the exception of the proposed at-grade stations, MSF, and vent shaft. The proposed Cucamonga Station and MSF would be located in the northwestern corner of the existing Cucamonga Metrolink Station parking lot, and two stations are proposed at ONT within the existing parking lots located across from Terminals 2 and 4. These parking lots currently have sufficient ingress and egress routes that allow emergency access. Once constructed, emergency and first responder access at vent shaft design option 2 or vent shaft design option 4 would be via surface ground access from either Milliken Avenue or the ramp termini. The proposed Project, including the Cucamonga Station, MSF, vent shaft design option 2 or vent shaft design option 4, and passenger stations at ONT would be designed to incorporate adequate emergency access (e.g., parking lot driveways, sufficient turning movements for emergency vehicles) at the proposed Project termini. Further, compliance with applicable San Bernardino County design criteria pertaining to emergency vehicle access, as well as the California Fire Code standards would ensure that operation of the proposed Project would not impair implementation of, or physically interfere with, any adopted emergency response or evacuation plans. As such, the proposed Project is not anticipated to result in inadequate emergency access for the existing circulation network during the proposed Project operation; operational impacts would be less than significant.

3.14.12 Mitigation Measures

The following mitigation measure would be implemented for the proposed Project during construction.

MM TRA-1: San Bernardino County Transportation Authority and the contractor shall prepare a Transportation Management Plan as needed to facilitate the flow of traffic and transit service in and around construction zones. The Transportation Management Plan shall include, at minimum, the following measures:

- Schedule a majority of construction-related travel (i.e., deliveries, hauling, and worker trips) during off-peak hours, and, where feasible, maintain two-way traffic circulation along affected roadways during peak hours. Avoid the closure of two major adjacent streets where feasible.
- Designated routes for project haul trucks primarily utilize the Interstate-10 corridor. These routes shall be consistent with land use and mobility plans and situated to minimize noise, vibration, and other possible impacts.
- Develop detour routes to facilitate traffic movement through construction zones without significantly increasing cut-through-traffic in adjacent residential areas.
- Develop and implement an outreach program and public awareness campaign in coordination with the California Department of Transportation, the City of Rancho Cucamonga, the City of Ontario and the San Bernardino County to inform the

general public about the construction process and planned roadway closures, potential impacts, and mitigation measures.

- Provide wayfinding signage, lighting, and access to specify pedestrian safety amenities (such as handrails, fences, and alternative walkways) during construction.
- Where construction encroaches on sidewalks, walkways and crosswalks, special pedestrian safety measures shall be used, such as detour routes and temporary pedestrian barricades.
- Coordinate with first responders and emergency service providers to minimize impacts on emergency response.
- Maintain customer and delivery access to all operating businesses near construction work areas.
- The Project contractor shall encourage construction workers to participate in vanpool and carpool opportunities to reduce congestion and vehicle miles travelled on the regional transportation network.
- The Project contractor shall be encouraged to hire local construction workers who would have lower commute distance to the construction site.

No mitigation measures are required for transportation or traffic during operation activities for the proposed Project.

3.14.13 Impacts After Mitigation

3.14.13.1 Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle and pedestrian facilities?

With implementation of a TMP under MM-TRA-1, the proposed Project would have a less than significant impact.

3.14.13.2 Conflict or be inconsistent with State CEQA Guidelines Section 15064.3, subdivision (b)?

With implementation of a TMP under MM-TRA-1, the proposed Project would have a less than significant impact.

3.14.13.3 Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

With implementation of MM-TRA-1, the proposed Project would have a less than significant impact.

3.14.13.4 Result in inadequate emergency access?

With implementation of a TMP under MM-TRA-1, the proposed Project would have a less than significant impact.

3.15 TRIBAL CULTURAL RESOURCES

3.15.1 Introduction

This section of this Draft Environmental Impact Report provides a summary of the evaluation of the impacts to tribal cultural resources from the implementation of the proposed Ontario International Airport (ONT) Connector Project (Project). This section also discusses the existing tribal cultural resources environment and sets forth the relevant regulatory requirements that apply to the analysis of the proposed Project's impacts on tribal cultural resources. Detailed information for tribal cultural resources is included in the Cultural Resources Identification and Eligibility Assessment Technical Report (SBCTA 2024; Appendix G).

3.15.2 Regulatory Framework

3.15.2.1 Federal

3.15.2.1.1 Archaeological Resources Protection Act

Archaeological Resources Protection Act of 1979 regulates the protection of archaeological resources and sites that are on federal lands and Indian lands.

3.15.2.1.2 Native American Graves Protection and Repatriation Act of 1990

Native American Graves Protection and Repatriation Act of 1990 sets provisions for the intentional removal and inadvertent discovery of human remains and other cultural items from federal and tribal lands. It clarifies the ownership of human remains and sets forth a process for repatriation of human remains, associated funerary objects, and sacred religious objects to the Native American groups claiming to be lineal descendants or culturally affiliated with the remains or objects. It requires any federally funded institution housing Native American remains or artifacts to compile an inventory of all cultural items within the museum or with its agency and to provide a summary to any Native American tribe claiming affiliation.

3.15.2.1.3 National Park Service—National Register Bulletin 38

National Park Service has prepared guidelines to assist in the documentation of traditional cultural places/properties (TCPs) by public entities. National Register Bulletin 38 is intended to be an aid in determining whether properties have traditional cultural significance and if they are eligible for inclusion in the National Register of Historic Places (National Register). It is also intended to assist federal agencies, State Historic Preservation Officers, Certified Local Governments, tribes, and other historic preservation practitioners who need to evaluate such properties when considering their eligibility for the National

Register as part of the review process prescribed by the Advisory Council on Historic Preservation. TCPs are a broad group of places that can include:

- A location associated with the traditional beliefs of a Native American group about its origins, its cultural history, or the nature of the world;
- A rural community whose organization, buildings and structures, or patterns of land use reflect the cultural traditions valued by its long-term residents;
- An urban neighborhood that is the traditional home of a particular cultural group, and that reflects its beliefs and practices;
- A location where Native American religious practitioners have historically gone, and are known or thought to go today, to perform ceremonial activities in accordance with traditional cultural rules of practice; and
- A location where a community has traditionally carried out economic, artistic, or other cultural practices important in maintaining its historic identity.

3.15.2.2 State

3.15.2.2.1 California Environmental Quality Act

California Environmental Quality Act (CEQA) (Sections 21000 et seq.) and CEQA Guidelines (Sections 15000 et seq.) requires state and local agencies to identify the significant environmental impacts of their actions, including potential significant impacts associates with tribal cultural resources, and to avoid or mitigate those impacts, when feasible. CEQA applies to all discretionary projects undertaken or subject to approval by the State of California's public agencies.

CEQA states that it is the policy of the State of California to "take all action necessary to provide the people of this state with… historic environmental qualities… and preserve for future generations examples of the major periods of California history." Under the provisions of CEQA, "A project with an effect that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment."

3.15.2.2.2 Native American Heritage Commission

Public Resource Code (PRC) Section 5097.91 established the Native American Heritage Commission (NAHC), the duties of which include inventorying places of religious or social significance to Native Americans and identifying known graves and cemeteries of Native Americans on private lands. PRC Section 5097.98 specifies a protocol to be followed when NAHC receives notification of a discovery of Native American human remains from a County Coroner.

3.15.2.2.3 Assembly Bill 52

AB 52 requires local governments to obtain the results of a Sacred Lands File (SLF) search from NAHC and consult with California Native American tribes that request such consultation. Taking into account tribal cultural, scientific, and archaeological values, the consultation process is intended to identify potential impacts to tribal cultural resources and define appropriate mitigation prior to the release of a CEQA document for public review. Pursuant to AB 52, a tribe has 30 days from notification of a project to request consultation.

3.15.2.2.4 California Public Resources Code Section 21074

California PRC Section 21074 defines tribal cultural resources as follows.

A) Tribal cultural resources are either of the following: (1) Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following: (a) Included or determined to be eligible for inclusion in the California Register of Historical Resources; (b) Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1. (2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

B) A cultural landscape that meets the criteria of subdivision (a) is a tribal cultural resource to the extent that the landscape is geographically defined in terms of the size and scope of the landscape.

C) A historical resource described in Section 21084.1, a unique archaeological resource as defined in subdivision (g) of Section 21083.2, or a "nonunique archaeological resource" as defined in subdivision (h) of Section 21083,2 may also be a tribal cultural resource if it conforms with the criteria of subdivision (a).

3.15.2.3 Regional

There are no regional regulations applicable to tribal cultural resources that are relevant to the proposed Project.

3.15.2.4 Local

A list of relevant local goals and policies are discussed in the Cultural Resources Identification and Eligibility Assessment Technical Report (SBCTA 2024; Appendix G). A summary of local goals and policies is provided in the following section.

3.15.2.4.1 San Bernardino County

The San Bernardino County General Plan, Cultural Resources (CR) Element (San Bernardino County 2020) sets forth goals and policies that are applicable to the proposed Project.

- Goal CR-1 supports tribal cultural resources.
    - Policy CR-1.1 notifies and coordinates with tribal representatives.
    - Policy CR-1.2 supports collaboration with local tribes on countywide planning. Policy CR-1.3 ensures project and resource-specific mitigation and avoidance of known tribal cultural resources. Policy CR-1.4 supports local tribe resource monitoring.

3.15.2.4.2 City of Rancho Cucamonga General Plan

The City of Rancho Cucamonga General Plan, Volume 4, includes a Work Plan that covers operations of the City of Rancho Cucamonga and provides staff with standard conditions of approval as a starting point for project evaluation, and a Placemaking Toolkit that helps the City of Rancho Cucamonga and landowners meet the land use and community character expectations (City of Rancho Cucamonga 2021). The Work Plan includes standard conditions of approval addressing environmental issues associated with development identified within the General Plan for tribal cultural resources.

3.15.2.4.3 City of Rancho Cucamonga Municipal Code

The proposed Project would be subject to the City of Rancho Cucamonga Municipal Code, Chapter 2.24, Historic Preservation. Section 2.24.010 states that the City of Rancho Cucamonga recognizes that "the protection, enhancement, perpetuation and use of resources of historic, cultural, and architectural significance, located within the City of Rancho Cucamonga are of aesthetic and economic value to the city." These resources "contribute to the City's character, atmosphere, and reputation, and the economic, cultural, and aesthetic standing. Therefore, it is imperative that the City safeguard these irreplaceable resources for the welfare, enjoyment, and education of the present and future community" (City of Rancho Cucamonga 2022).

3.15.2.4.4 City of Ontario General Plan

The City of Ontario General Plan, Community Design (CD) Element (City of Ontario 2022) sets forth goals and policies are applicable to the proposed Project for the analysis of tribal cultural resources effects.

- Goal CD-4 supports historic buildings, streets, landscapes, neighborhoods, people, businesses, and social and community organizations in Ontario.
    - Policy CD4-1 manages inventory on cultural resources.

- Policy CD4-2 collaborates with property owners and developers on historic buildings, streetscapes, and unique neighborhoods.
- Policy CD4-6 promotes public involvement in preservation.

3.15.3 Methodology

As part of the Cultural Resource Assessment of the proposed Project area, a search of the SLF from NAHC on was requested on May 27, 2022. Results of the SLF search were obtained on June 29, 2022 (Attachment B [Confidential] of Appendix G, the Cultural Resources Identification and Eligibility Assessment Technical Report). NAHC determined that there were no known Native American cultural resources within the immediate proposed Project area. However, NAHC requested that 17 individuals representing area Native American tribal groups be contacted to request additional information about sensitive Native American resources in the proposed Project vicinity. Outreach letters were sent to each of the Native American contacts on July 27, 2022. Three responses have been received to date and are included in Attachment B [Confidential] of Appendix G.

Formal notifications were provided to California Native American tribal representatives who may have interest in projects within the geographic area traditionally and culturally affiliated with the tribe(s) pursuant to California PRC Section 21080.3.1(b). Native American groups may have knowledge about cultural resources in the area and may have concerns about adverse effects from development on TCPs, as defined in National Register Bulletin 38. San Bernardino County Transportation Authority (SBCTA) sent requests to all contacts who requested notification pursuant to the requirements of State Assembly Bill 52 (AB 52). Responses were received from the Agua Caliente Band of Cahuilla Indians and the Quechan Indian Tribe indicating the proposed Project area is not located within the tribes' Traditional Use Area. In the summer of 2022, the Yuhaaviatam of San Manuel Nation (formerly known as the San Manuel Band of Mission Indians) provided SBCTA with an email with proposed mitigation measures recommended for approval to conclude AB 52 consultation.

3.15.4 CEQA Thresholds of Significance

According to Appendix G of the 2024 CEQA Guidelines, implementation of the proposed Project may result in a potentially significant impact if it would:

- Cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is listed or eligible for listing in the California Register of Historical Resources (California Register), and in the local register of historical resources as defined in PRC Section 5020.1 (k).

- Cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is 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 PRC Section 5024.1. In applying the criteria set forth in subdivision (c) of PRC Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

3.15.5 Existing Setting

Chronologies of prehistoric cultural change in Southern California have been attempted numerous times, and several are reviewed in California Archaeology (Moratto 2004). No single description is universally accepted, as the various chronologies are based primarily on material developments identified by researchers familiar with sites in a particular region, and variation exists essentially due to the differences in those items found at the sites. Small differences occur over time and space, which combine to form patterns that are variously interpreted.

Currently, two primary regional culture chronology syntheses are commonly referenced in the archaeological literature. The first, Wallace (1955), describes four cultural horizons or time periods: Horizon I – Early Man (9000–6000 Before Christ [BC]), Horizon II – Milling Stone Assemblages (6000 – 3000 BC), Horizon III – Intermediate Cultures (3000 BC–Anno Domini [AD] 500), and Horizon IV – Late Prehistoric Cultures (AD 500–historic contact). This chronology was refined using absolute chronological dates obtained after 1955 (Wallace 1978).

The second cultural chronology (Warren 1968) is based broadly on Southern California prehistoric cultures and was also revised (Warren 1984; Warren and Crabtree 1986). Warren's (1984) chronology includes five periods in prehistory: Lake Mojave (7000–5000 BC), Pinto (5000–2000 BC), Gypsum (2000 BC–AD 500), Saratoga Springs (AD 500–1200), and Protohistoric (AD 1200–historic contact). Changes in settlement pattern and subsistence focus are viewed as cultural adaptations to a changing environment, which begins with gradual environmental warming in the late Pleistocene; continues with the desiccation of the desert lakes, followed by a brief return to pluvial conditions; and concludes with a general warming and drying trend, with periodic reversals that continue to the present.

3.15.5.1 Ethnography

The proposed Project area is within the traditional cultural territories of the Gabrielino (Kroeber 1925; Heizer 1968). Tribal territories were somewhat fluid and changed over time. The first written accounts of the Gabrielino are attributed to the mission fathers, and later documentation was by Johnston (1962), Blackburn (1962–1963), and Hudson (1971), and others.

The territory of the Gabrielino included portions of Los Angeles, Orange, and San Bernardino counties during ethnohistoric times, and also extended inland into northwestern Riverside County (Kroeber 1925; Heizer 1968). It encompassed an extremely diverse environment that included coastal beaches, lagoons and marshes, inland river valleys, foothills, and mountains (Bean and Shipek 1978).

The Gabrielino caught and collected seasonally available food resources and led a semi-sedentary lifestyle, living in permanent communities along inland watercourses and coastal estuaries. Individuals from these villages took advantage of the varied resources available. Seasonally, as foods became available, native groups moved to temporary camps to collect plant foods such as acorns, buckwheat, chía, berries, and fruits, and to conduct communal rabbit and deer hunts. They also established seasonal camps along the coast and near bays and estuaries to gather shellfish and hunt waterfowl (Hudson 1971).

The Gabrielino lived in small communities, which were the focus of family life. Patrilineally linked, extended families occupied each village (Kroeber 1925; Bean and Smith 1978). Both clans and villages were apparently exogamous, marrying individuals from outside of the clan or village (Heizer 1968). Gabrielino villages were politically independent and were administered by a chief, who inherited his position from his father. Shamans guided religious and medical activities, while group hunting or fishing was supervised by individual male specialists (Bean and Smith 1978).

The nearest historically known Gabrielino community was Tooypinga, located approximately nine miles west of the Archaeological Study Area (McCawley 1996).

3.15.6 Impact Evaluation

3.15.6.1 Would the Project **cause a substantial adverse change in the significance of a tribal cultural** resource, de**fi**ned in Public Resources Code S**ection** 21074 as either a site, feature, place, cultural landscape that is geographically de**fi**ned 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 l**isted or eligible for listing in the California Register of Historical Resources, a in the local register of historical resources as defined in Public Resources Code Section 5020.1** (k).

3.15.6.1.1 No Project Alternative

The No Project Alternative includes planned expansion, improvement projects, and routine maintenance activities for the existing roadway system and transit facilities. The No Project Alternative area is located in a built environment; however, construction activities could impact previously unrecorded tribal cultural resources. The No Project Alternative would be subject to project- and site-specific evaluation of tribal cultural resources, and mitigation would be required to reduce any potential impacts. Adherence to existing regulations would ensure that the impact to tribal cultural resources is less than significant.

3.15.1.1.1 Proposed Project

3.15.6.1.1.1 Construction Impacts

No built historical resources, as defined in State CEQA Guidelines Section 15064.5 or PRC Section 5020.1(k), have been identified to be located within the proposed Project area. As described in Section 3.15.3, Native American consultation was conducted in compliance with AB 52. The tribes consulted pursuant to AB 52 did not provide information regarding specific known tribal cultural resources within the proposed Project area. No tribal cultural resources are listed or eligible for listing in the California Register or in a local register existing within the proposed Project area, and there are no known tribal cultural resources in the proposed Project site. Consequently, the proposed Project site is considered unlikely to contain significant tribal cultural resources.

Therefore, although the potential remains for ground-disturbing activities (e.g., excavation activities) associated with construction of the proposed Project to damage tribal cultural resources, the likelihood of encountering tribal cultural resources with significant research potential in the proposed Project site is considered very low. However, if any previously unknown tribal cultural resources are discovered during ground-disturbing construction activities, impact to tribal cultural resources could be potentially significant. Implementation of MM-TCR-1 would reduce this impact to less than significant impact by ensuring scientific recovery and evaluation of any tribal cultural resources.

If the archaeologist or historian determines that a tribal cultural resource discovered during construction is a unique archaeological resource, the archaeologist may record the site and submit the recordation form to the San Bernardino County Museum Archeological Data Center. The archaeologist or historian shall prepare a report of the results of any study prepared as part of a mitigation plan, following accepted professional practice. Copies of the report shall be submitted to the San Bernardino County Museum Archeological Data Center, the City of Rancho Cucamonga, or the City of Ontario. MM-TCR-1 would provide scientific recovery and evaluation of any archaeological resources that could be encountered, which would ensure that important scientific information that could be provided by these resources is not lost. Implementation of the MM-TCR-1 for the proposed Project would reduce the impact of construction on tribal cultural resources to less than significant.

3.15.6.1.1.2 Operational Impacts

There are no tribal cultural resources listed or eligible for listing in the California Register or in a local register existing within the proposed Project area, and there are no known tribal cultural resources in the proposed Project site. Therefore, operation of the proposed Project is not anticipated to affect tribal cultural resources. With compliance with existing regulations protecting tribal cultural resources, as described in Section 3.15.2, operation of the proposed Project would result in a less than significant impact related to tribal cultural resources.

3.15.6.2 **Would the Project 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 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 **Resource Code Section** 5024.1, the lead agency shall consider the significance of the resource **to a California Native American tribe.**

3.15.6.2.1 No Project Alternative

The No Project Alternative is located in a built environment; however, the potential exists that construction activities could impact previously unrecorded tribal cultural resources. If previously unrecorded tribal cultural resources are present, that would represent a potentially significant impact to tribal cultural resources. However, the No Project Alternative would be subject to project- and site-specific evaluation of tribal cultural resources, and mitigation would be required to reduce any potential impacts. Adherence to existing regulations would ensure that the impact to tribal cultural resources is less than significant.

3.15.6.2.2 Proposed Project

3.15.6.2.2.1 Construction Impacts

The proposed Project area exists within the Serrano ancestral territory land and, therefore, is of interest to the Yuhaaviatam of San Manuel Nation tribe. However, due to the nature and location of the proposed Project and given the Yuhaaviatam of San Manuel Nation tribe's Cultural Resources Department's present knowledge, the Yuhaaviatam of San Manuel Nation does not have any concerns with the proposed Project's implementation. However, Yuhaaviatam of San Manuel Nation tribe requested that MM-TCR-1 be incorporated into the proposed Project due to tunnel boring and other ground-disturbing construction activities. Implementation of MM-TCR-1 would reduce the impacts on tribal cultural resources to less than significant by providing for scientific recovery and evaluation of any tribal cultural resources that are encountered, which would ensure that important scientific information that could be provided by these resources is not lost. With implementation of MM-TCR-1, the proposed Project during construction would have a less than significant impact to tribal cultural resources.

3.15.6.2.2.2 Operational Impacts

The results of the SLF search for the proposed Project were obtained from NAHC on June 29, 2022. It determined that there were no known Native American cultural resources within the immediate proposed Project area. There were no tribal cultural resources listed or eligible for listing in the California Register or in a local register existing within the proposed Project area, and there are no known tribal cultural resources in the proposed Project site. It is not anticipated that operation of the proposed Project would affect tribal cultural resources because there are no known tribal cultural resources in the proposed Project site. With compliance with existing regulations protecting tribal cultural resources, as described

in Section 3.15.2, the proposed Project during operation would have a less than significant impact to tribal cultural resources.

3.15.7 Mitigation Measures

The following mitigation measure would be implemented for construction of the proposed Project.

MM-TCR-1 Areas found during construction to contain significant tribal cultural resources shall be examined by a qualified consulting archaeologist or historian for appropriate protection and preservation. If evidence of potential tribal cultural resources is observed, construction near the resources shall cease, the appropriate Native American tribal groups shall be consulted, and, in coordination with the appropriate Native American tribal groups, a qualified archaeologist or historian shall determine whether the resource uncovered during construction is a tribal cultural resource as defined under Public resources Code Section 21074. The appropriate Native American tribal groups shall be contacted in the event of any pre-contact and/or historic-era cultural resources discovered during project implementation; and will be provided information regarding the nature of the find, so as to provide Tribal input with regards to significance and treatment. Should the find be deemed significant, as defined by CEQA (as amended, 2015), a cultural resource Monitoring and Treatment Plan shall be created by the archaeologist, in coordination with the appropriate Native American tribal groups, and all subsequent finds shall be subject to this Plan. This Plan shall allow for a monitor to be present that represents the appropriate Native American tribal groups for the remainder of the project's construction activities, should the appropriate Native American tribal groups elect to place a monitor on-site.

Any and all archaeological/cultural documents created as a part of the project (isolate records, site records, survey reports, testing reports, etc.) shall be supplied to San Bernardino County Transportation Authority for dissemination to the appropriate Native American tribal groups. San Bernardino County Transportation Authority shall, in good faith, consult with the appropriate Native American tribal groups.

It is not anticipated that operation of the proposed Project would affect tribal cultural resources. Mitigation measures would not be required.

3.15.8 Impacts After Mitigation

3.15.8.1 **Would the Project 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 listed or eligible for **listing in the California Register of Historical Resources, a in the** local register of historical resources as **defined in Public Resources Code Section 5020.1** (k).

With implementation of MM-TCR-1, the proposed Project would have a less than significant impact.

3.15.8.2 **Would the Project 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 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 **Resource Code Section** 5024.1, the lead agency shall consider the significance of the resource **to a California Native American tribe.**

With implementation of MM-TCR-1, the proposed Project would have a less than significant impact.

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3.16 UTILITIES AND SERVICE SYSTEMS

3.16.1 Introduction

This section of this Draft Environmental Impact Report (EIR) provides a summary of the evaluation of the impacts on utilities and service systems related to implementation of the proposed Ontario International Airport (ONT) Connector Project (Project). Detailed information for utilities and service systems are included in the Utilities Services Technical Report (SBCTA 2024; Appendix R). For purposes of this Draft EIR, utilities includes water supply, solid waste collection and disposal, wastewater conveyance and treatment, stormwater drainage, telecommunication, and natural gas. Electricity is discussed in Section 3.5 (Energy) of this Draft EIR. Stormwater and stormwater drainage facilities are also discussed in Section 3.9 (Hydrology and Water Quality) of this Draft EIR.

3.16.2 Regulatory Framework

3.16.2.1 Federal

3.16.2.1.1 Clean Water Act

Federal Clean Water Act (CWA) establishes regulatory requirements for potable water supplies including raw treated water quality criteria. United States Environmental Protection Agency (USEPA) established primary drinking water standards in CWA Section 304. States are required to ensure that potable water retailed to the public meets these standards. Standards for a total of 81 individual constituents have been established under federal Safe Drinking Water Act (SDWA) in 1985. USEPA may add constituents in the future. Under CWA, USEPA is granted authority to implement pollution control programs. The City of Rancho Cucamonga and the City of Ontario are both required to monitor water quality and conform to regulatory requirements of CWA.

3.16.2.1.2 Safe Drinking Water Act

Federal SDWA falls under CWA and establishes federal standards for contaminants in public drinking water. State primary and secondary drinking water standards are promulgated in California Code of Regulations (CCR) Title 22 Sections 64431 through 64501. The primary standards are health-based thresholds established for numerous toxic substances. Secondary drinking water standards incorporate non-health risk factors including taste, odor, and appearance.

3.16.2.1.3 Federal Water Pollution Control Act

The major piece of federal legislation dealing with wastewater is federal Water Pollution Control Act, which is designed to restore and preserve the integrity of the nation's waters. Federal Water Pollution Control Act, popularly known as CWA, is a comprehensive statute aimed at restoring and maintaining the chemical, physical, and biological integrity of the nation's waters. Enacted originally in 1948, the Act was

amended numerous times until it was reorganized and expanded in 1972. It continues to be amended almost every year. In addition to the Federal Water Pollution Control Act, other federal environmental laws regulate the location, type, planning, and funding of wastewater treatment facilities.

3.16.2.1.4 Resource Conservation and Recovery Act

Resource Conservation and Recovery Act (RCRA) was enacted in 1976, granting USEPA authority to control the generation, transportation, treatment, storage, and disposal of solid waste. RCRA, Volume 40 of Code of Federal Regulations, Part 258, contains regulations for municipal solid waste landfills and requires states to implement their own permitting programs incorporating the federal landfill criteria. The federal regulations address the location, operation, design, groundwater monitoring, and closure of landfills.

3.16.2.1.5 Telecommunications Act of 1996

Telecommunications Act of 1996 was enacted to promote business competition in the telecommunications market. The Federal Communications Commission is responsible for implementing Telecommunications Act of 1996 and is the primary authority for communications law, regulation, and technological innovation.

3.16.2.2 State

3.16.2.2.1 California Environmental Quality Act

California Environmental Quality Act (CEQA; Section 21000 et seq.) and CEQA Guidelines (Section 15000 et seq.) require state and local agencies to identify the significant environmental impacts of their actions, including potential significant impacts associated with utilities service systems, and to avoid or mitigate those impacts, when feasible.

3.16.2.2.2 California Safe Drinking Water Act

California enacted its own SDWA, which sets drinking water standards that are equal to or more stringent than federal standards. Health and Safety Code Section 116355 grants State Water Resources Control Board (SWRCB) primary responsibilities for regulating all public water systems. The California Department of Health Services (CDHS) has been granted primary enforcement responsibility for SDWA. CCR Title 22 establishes CDHS authority and stipulates drinking water quality and monitoring standards. These standards are equal to, or more stringent than, the federal standards.

3.16.2.2.3 Recycled Water Regulations

USEPA, SWRCB, Regional Water Quality Control Boards (RWQCBs), and CDHS all have a role in regulating the use of recycled water in the State of California. SWRCB has adopted Resolution Number (No.) 77-1

(Policy with Respect to Water Reclamation in California) which empowers SWRCB and RWQCBs to encourage and consider funding for water reclamation projects that do not impair water rights or beneficial in-stream uses. CDHS determines how recycled water may be used in California and designates the level of treatment (i.e., un-disinfected secondary, disinfected secondary, or disinfected tertiary) required for each of these permitted uses (CCR Title 22).

RWQCBs implement the SWRCB's Guidelines for Regulation of Water Reclamation and issue waste discharge permits that serve to regulate the quality of recycled water. CDHS develops policies protecting human health and comments and advises on RWQCB permits.

3.16.2.2.4 State Water Resources Control Board

SWRCB and nine other RWQCBs are responsible for the protection of water quality in California. SWRCB establishes statewide policy and regulations for the implementation of water quality control programs that are required by federal and state water quality statutes and regulations.

RWQCBs develop and implement Water Quality Control Plans (Basin Plans) that recognize and reflect regional differences in water quality, beneficial uses, and characteristics. The Santa Ana River Basin Plan establishes groundwater and surface water quality standards in the basin in addition to identifying water quality problems in the region. When known, water quality problem causes and remediation actions to be taken by Santa Ana RWQCB (SARWQCB) and others are outlined.

The City of Rancho Cucamonga and the City of Ontario both lie within SARWQCB's jurisdiction which includes the Middle Santa Ana River watersheds. SARWQCB prepared a Basin Plan which serves as the basis for regulatory programs and an implementation plan describing the necessary actions to achieve and maintain water quality standards.

3.16.2.2.5 Urban Water Management Planning Act

Urban Water Management Planning Act (UWMP Act; California Water Code [CWC], Division 6, Part 2.6, Section 10610 et seq.) was developed due to concerns over potential water supply shortages throughout California. It requires information on water supply reliability and water use efficiency measures. Urban water suppliers are required, as part of UWMP Act, to develop and implement Urban Water Management Plans (UWMPs) to describe water supply, service area demand, population trends and efforts to promote efficient use and management of water resources. An UWMP is intended to serve as a water-supply-and-demand planning document that is updated to reflect changes in the water supplier's service area including water supply trends and conservation and water use efficiency policies.

3.16.2.2.6 California Code of Regulations Title 22

CWC requires CDHS to establish water reclamation criteria. In 1975, CDHS prepared CCR Title 22 regulations to satisfy this requirement. CCR Title 22 regulates production and use of reclaimed water in

California by establishing three categories of reclaimed water: primary effluent, secondary effluent, and tertiary effluent. Primary effluent typically includes grit removal and initial sedimentation or settling tanks. Secondary effluent is adequately disinfected, oxidized effluent which typically involves aeration and additional settling basins. Tertiary effluent is adequately disinfected, oxidized, coagulated, clarified, filtered effluent which typically involves filtration and chlorination. In addition to defining reclaimed water uses, CCR Title 22 also defines requirements for sampling and analysis of effluent and specifies design requirements for treatment facilities.

3.16.2.2.7 Water Conservation Projects Act

California's requirements for water conservation are codified in the Water Conservation Projects Act of 1985 (Water Code Sections 11950–11954):

> *11952(a). It is the intent of the Legislature in enacting this chapter to encourage local agencies and private enterprise to implement potential water conservation and reclamation projects….*

3.16.2.2.8 California Water Code Section 10910 et seq.

Senate Bill (SB) 610 was adopted in 2001 and reflects the growing awareness of the need to incorporate water supply and demand analysis at the earliest possible stage in the land use planning process. SB 610 amended the statutes of UWMP Act, as well as CWC Section 10910 et seq.

Water supply planning under CWC Section 10910 requires reviewing and identifying adequate available water supplies necessary to meet the demand generated by certain qualifying projects, as well as the cumulative demand for the general region over the next 20 years, under a broad range of water conditions. For areas served by public water systems, this information is typically in the current UWMP. CWC Section 10910 requires the identification of the public water supplier. Under CWC Section 10910, a Water Supply Assessment needs to be prepared only if a project exceeds specific thresholds of development as identified in CWC Section 10912 (a).

3.16.2.2.9 California Integrated Waste Management Board

At the state level, the management of solid waste is governed by regulations established by California Department of Resources Recycling and Recovery (CalRecyle), which delegates local permitting, enforcement, and inspection responsibilities to local enforcement agencies. In 1997, some of the regulations adopted by RWQCB pertaining to landfills (Title 23, Chapter 15) were incorporated with CalRecyle regulations (Title 14) to form CCR Title 27.

3.16.2.2.10 California Integrated Waste Management Act (Assembly Bill 939)

In 1989, the State Legislature adopted California Integrated Waste Management Act (Assembly Bill [AB] 939) which established a waste management hierarchy to divert solid waste consisting of the following in order of importance: source reduction, recycling, composting, environmentally safe transformation, land disposal. In addition, AB 939 required each county to create an Integrated Waste Management Plan (IWMP) and each city to develop a Source Reduction and Recycling Element (SRRE). SRREs are also required to be prepared for both county and city General Plans.

In 1989, the State Legislature adopted AB 939, which established an integrated waste management hierarchy that consists of the following in order of importance: source reduction, recycling, composting, and land disposal of solid waste. The law also requires that each county prepare a new IWMP. A number of changes to the municipal solid waste diversion requirements under AB 939 were adopted, including a revision to the statutory requirement for 50-percent (%) diversion of solid waste. Under these provisions, local governments would continue to divert 50% of all solid waste on and after January 1, 2000. Public Resources Code Section 41780 clarifies that, under AB 939, jurisdictions shall continue to divert 50% of all solid waste on and after January 1, 2000, through source reduction, recycling, and composting activities.

3.16.2.2.11 California Senate Bill 1383

In September 2016, Governor Jerry Brown signed into law SB 1383 (Lara, Chapter 395, Statutes of 2016). SB 1383 establishes statewide reduction targets for methane emissions which are a significant source of greenhouse gas (GHG) emissions that contribute to global climate change. The reduction targets are to achieve a 50% reduction in the level of statewide disposal of organic waste from the 2014 level by 2020, and a 75% reduction by 2025. In addition, no more than 20% of currently disposed edible food is recovered for human consumption by 2050. Effective on January 1, 2022, cities must establish an organics collection program for all single-family residential properties, multi-family residences, and business.

3.16.2.2.12 California Assembly Bill 341

AB 341 Chapter 476 established a statewide solid waste diversion goal of 75% by 2020. AB 341 also requires businesses producing 4 or more cubic yards of solid waste per week or multi-family residential dwellings of five or more units to separate recyclables from trash and subscribe to recycling services, self-haul their recyclables, or contract with a permitted private recycler.

3.16.2.2.13 Local Government Construction and Demolition Guide (Senate Bill 1374)

SB 1374 aims to assist jurisdictions with diverting their construction and demolition (C&D) waste material, with a primary focus on CalRecycle developing and adopting a model C&D diversion ordinance for voluntary use by California jurisdictions.

3.16.2.2.14 California Code of Regulations Title 24 Part 6

CCR Title 24 promotes efficient energy use in new buildings constructed in California. The standards regulate energy consumed for heating, cooling, ventilation, water heating, and lighting. The standards are enforced through the local building permit process. These standards would apply to the proposed Project facilities.

3.16.2.3 Regional

3.16.2.3.1 Santa Ana Regional Water Quality Resources Control Board National Pollutant Discharge Elimination System Permitting

Municipal and industrial non-stormwater discharges in the City of Rancho Cucamonga and the City of Ontario require a National Pollutant Discharge Elimination System (NPDES) permit from SARWQCB. This permit is required for municipal stormwater systems, construction projects, and industrial facilities. The permit sets limits to the amount of pollutants allowed in each facility's discharge.

3.16.2.4 Local

A list of relevant local goals and polices are discussed in the Utilities and Service Technical Report (SBCTA 2024; Appendix R). Not all of the local jurisdictions have specific General Plan policies or ordinances related to utilities and service systems. A summary of local goals and policies is provided in the following section.

3.16.2.4.1 San Bernardino County

3.16.2.4.1.1 San Bernardino County General Plan

San Bernardino County's Countywide Plan (General Plan) Infrastructure and Utilities, Natural Resources, Renewable Energy and Conservation Elements focus on the County's water supply, wastewater, solid waste, energy, and conservation. A brief summary of applicable goal and policies is provided in the following section.

3.16.2.4.1.1.1 Infrastructure and Utilities Element

- Goal IU-1 addresses water supply and infrastructure.
    - Policy IU-1.1 requires that new development be connected to a public water system or a County-approved well.
    - Policy IU-1.3 encourages recycled water use.
    - Policy IU-1.4 encourages greywater use for non-potable purposes.
    - Policy IU-1.6 addresses user fees.

  - Policy IU-1.7 addresses areas vital for groundwater recharge.
  - Policy IU-1.8 addresses groundwater management coordination.
  - Policy IU-1.9 addresses water conservation.
  - Policy IU-1.10 addresses connected water systems.
  - Policy IU-1.11 addresses water storage and conveyance.
- Goal IU-3 addresses stormwater drainage.
  - Policy IU-3.1 addresses regional flood control.
  - Policy IU-3.2 addresses local flood control.
  - Policy IU-3.4 addresses natural floodways.
  - Policy IU-3.5 addresses fair share requirements for new developments.
- Goal IU-4 addresses solid waste management.
  - Policy IU-4.1 addresses landfill capacity.
  - Policy IU-4.2 addresses transfer stations.
  - Policy IU-4.3 addresses waste diversion.
  - Policy IU-4.4 addresses landfill funding.
- Goal IU-5 addresses power and communication systems.
  - Policy IU-5.1 addresses electricity and natural gas service.
  - Policy IU-5.2 encourages expanded high-speed internet and wireless communication.
  - Policy IU-5.3 addresses underground facilities.
  - Policy IU-5.4 addresses electric transmission lines.
  - Policy IU-5.5 addresses energy and fuel facilities.
  - Policy IU-5.6 addresses efficient development construction and coordination.

Natural Resources Element

- Goal NR-2 addresses water quality goals. Policy NR-2.1 addresses coordination on water quality.
  - Policy NR-2.2 addresses water management plans.
  - Policy NR-2.4 addresses wastewater discharge.
  - Policy NR-2.5 addresses stormwater discharge.

3.16.2.4.1.1.2 Renewable Energy and Conversation Element

- Goal RE-1 addresses energy conservation and efficiency.
    - Policy RE-1.2 addresses optimization of energy efficiency in the built environment.
    - Policy RE 1.2.2 encourages property owners to participate in a property assessed clean energy (PACE) program for access to energy efficiency retrofit financing.
    - Policy RE 1.2.3 encourage utilities to expand free to low-cost audit and retrofit programs in the built environments.
    - Policy RE 1.2.6 encourage new development to comply with the optional energy efficiency measures of the CALGreen Code.
    - Policy RE-1.4 encourages residents and businesses to conserve energy.
    - Policy RE 1.4.1 encourages collaboration with utilities.
    - Policy RE 1.4.2 encourages collaboration with the California Energy Commission (CEC), utilities, and local partners to launch online energy tracking competitions.
- Goal RE-6. Addresses county government systems.
    - Policy RE-6.7 addresses on-site RE generation systems through streamlining of permit requirements.

3.16.2.4.2 City of Rancho Cucamonga

3.16.2.4.2.1 City of Rancho Cucamonga General Plan

The Public Facilities and Services Element of the City of Rancho Cucamonga's General Plan (City of Rancho Cucamonga 2021a) describes policies for utilities and service systems within the City. The following goals and policies are relevant to water resources in the proposed Project area:

3.16.2.4.2.1.1 Public Facilities (PF) and Services Element

- Goal PF-5 addresses water-related infrastructure.
    - Policy PF-5.1 addresses water treatment facilities.
    - Policy PF-5.2 addresses wastewater treatment needs in the region.
    - Policy PF-5.3 addresses recycled water expansion.
- Goal PF-6 addresses solid waste management. The volume of solid waste that enters regional landfills is minimized and the amount of recycling increased.
    - Policy PF-6.1 encourages recycling and organics collection.
    - Policy PF-6.2 addresses organic processing facilities.

- Goal PF-7 addresses utility infrastructure.
    - Policy PF-7.1 addresses emerging communications technologies.
    - Policy PF-7.2 addresses access to high-speed internet.
    - Policy PF-7.3 addresses utility equipment.
    - Policy PF-7.4 addresses planned streets segments and utility facilities.
    - Policy PF-7.5 addresses secondary (non-utility) uses of utility facilities and sites.
    - Policy PF-7.6 addresses the development and phasing of public facilities.

3.16.2.4.2.1.2 Resource Conservation (RC) Element

- Goal RC-2 addresses water resources.
    - Policy RC-2.2 addresses groundwater recharge.
    - Policy RC-2.5 addresses water conservation.
    - Policy RC-2.6 addresses irrigation.
    - Policy RC-2.7 encourages the use of greywater to meet or offset on-site non-potable water demand.
- Goal RC-6 addresses climate change.
    - Policy RC-6.2 encourages renewable energy installations and facilitate green technology and business.
    - Policy RC-6.3 encourages a reduction in community-wide energy consumption.
    - Policy RC-6.10 encourages the construction of buildings that are certified Leadership in Energy and Environmental Design (LEED) or equivalent, emphasizing technologies that reduce GHG emissions.
    - Policy RC-6.12 addresses reduced water supplies.
- Goal RC-7 encourages energy efficient communities that rely primarily on renewable and non-polluting energy sources.
    - Policy RC-7.7 addresses sustainable design.
    - Policy RC-7.13 addresses energy-efficient infrastructure.
    - Policy RC-7.15 addresses utility preservation.
- Goal S-5 addresses emerging hazards.
    - Policy S-5.6 addresses underground utilities.

3.16.2.4.2.2 City of Rancho Cucamonga Municipal Code

The City of Rancho Cucamonga Municipal Code (RCMC) contains regulations pertaining to water and recycled water use, stormwater, waste management, and telecommunication facilities. The following RCMC sections and chapter apply to the proposed Project:

- RCMC Section 8.17.030 assigns sole discretion to the city council to make decisions regarding solid waste and recycling collection services for residential and commercial/industrial customers. Additionally, Section 8.19.010 requires construction and demolition waste providers to have an agreement with the City of Rancho Cucamonga before collecting or disposing of those types of wastes.
- RCMC requires that all places where people congregate, reside, or are employed (businesses, residences, and buildings) are connected to a sanitary sewer or approved on-site wastewater treatment system pursuant to the SARWQCB's discharge requirements. City permits, siting requirements, and operational requirements are also required for such systems under Sections 19.28.080, 19.28.210, 19.28.220.
- RCMC Section 19.20.220 prohibits non-stormwater discharges unless authorized by the city engineer and if the SARWQCB deems them compliant with set discharge limits. The city engineer is also required to approve water quality management plans for qualifying land development or redevelopment projects (Section 19.20.260).
- RCMC Chapter 19.20, otherwise known as the Storm Water and Urban Runoff Management and Discharge Control Ordinance, was adopted to comply with CWA, the City of Rancho Cucamonga's NPDES permits, and to enhance the quality of water bodies and courses. Regulations apply to connections to the City of Rancho Cucamonga's stormwater system, prohibited discharges, NPDES permits, implementation of best management practices, spill containment, immediate notification and written notification of accidental discharge, and property owner responsibility for illegal discharges.

3.16.2.4.2.3 Cucamonga Valley Water District Urban Water Management Plan

The Cucamonga Valley Water District (CVWD) is the water supplier for the City of Rancho Cucamonga. CVWD serves more than 3,000 customers (i.e., individual metered accounts), and it supplies more than 3,000 acre-feet of water annually to its customers for municipal purposes (CVWD 2021a). The CVWD's 2020 UWMP reflects the current supply and demand situation along with an updated presentation of future supplies, demand forecasts, and measures to monitor and control future demand. The UWMP, along with other City of Rancho Cucamonga planning documents, is used to guide the City of Rancho Cucamonga's water use and management efforts through the year 2045. The UWMP incorporates water supply reliability determinations that could result from potential prolonged drought, regulatory revisions, and/or changing climatic conditions.

3.16.2.4.3 City of Ontario

3.16.2.4.3.1 City of Ontario General Plan

The City of Ontario's General Plan (City of Ontario 2022c) outlines the goals and policies regarding water resources within the Environmental Resources Element. The following goals and policies are relevant to utilities and service systems in the proposed Project area.

3.16.2.4.3.1.1 Environmental Resources (ER) Element

- Goal ER-1 addresses water and wastewater management.
  - Policy ER-1.1 addresses local water supply management.
  - Policy ER-1.2 addresses proper water uses.
  - Policy ER-1.3 addresses conservation and sustainable water supply.
  - Policy ER-1.4 reviews proper supply-demand water balance.
  - Policy ER-1.5 addresses water resource management.
  - Policy ER-1.6 addresses development and urban run-off quality.
  - Policy ER-1.7 addresses urban runoff quality.
  - Policy ER-1.8 addresses wastewater management.
- Goal ER-2 addresses solid waste and recycling.
  - Policy ER-2.1 mandates the city shall meet or exceed AB 939 requirements.
  - Policy ER-2.2 addresses hazardous and electronic wastes.
  - Policy ER-2.3 encourages purchasing products made from recycled materials.
- Goal ER-3 addresses a cost effective and reliable energy system.
  - Policy ER-3.1 addresses conservation strategy.
  - Policy ER-3.2 encourages green development communities.
  - Policy ER-3.3 addresses building and site design.
  - Policy ER-3.4 addresses green development for public buildings.
  - Policy ER-3.5 addresses the procurement of fuel-efficient and alternative energy vehicles and equipment.
  - Policy ER-3.6 addresses generation-renewable sources.

3.16.2.4.3.2 City of Ontario Municipal Code

The City of Ontario Municipal Code (OMC) contains regulations pertaining to water and recycled water use, stormwater, waste management, and telecommunication facilities. The following OMC chapters apply to the proposed Project:

- OMC Title 6, Chapters 8A–8C apply to water management within the City of Ontario. Chapter 8A applies to water conservation strategies and policies to be implemented during various stages of water shortages. Chapter 8B sets requirements and regulations related to water services such as water service connection fees. Chapter 8C relates to recycled water and its usage.
- Solid waste is managed through OMC Title 6, Chapter 3. This chapter ensures the City of Ontario compliance with state solid waste management regulations by reducing waste generation, promoting reuse, and requiring solid waste collection for recycling and composting.
- OMC Title 6, Chapter 6 provides guidance in the maintenance of the stormwater systems and maintaining the health and safety of the public. This maintenance is accomplished through regulations that control discharges from spills, dumping, or disposal of materials other than stormwater; reduce the discharge of pollutants in all stormwater discharges to the maximum extent practicable; and protect and enhance the water quality of local, state, and federal watercourses, water bodies, groundwater, and wetlands pursuant to and consistent with CWA.
- OMC Title 9, Chapter 1 (Development Code 5.03.4200) requires review of the installation of antennas and wireless communication facilities.

3.16.2.4.3.3 City of Ontario Urban Water Management Plan

The City of Ontario 2020 UWMP reflects the City of Ontario's current supply and demand situation along with an updated presentation of future supplies, demand forecasts, and measures to monitor and control future demand. The UWMP, along with the City of Ontario's Water Master Plan and other city planning documents, is used by city staff to guide the city's water use and management efforts through the year 2045. The City of Ontario 2020 UWMP incorporates water supply reliability determinations that could result from potential prolonged drought, regulatory revisions, and/or changing climatic conditions The UWMP provides the City of Ontario with a planning document for long-term resource planning to ensure adequate water supplies are available to meeting existing and future water supply needs.

3.16.3 Methodology

Data for this section were obtained from the San Bernardino County General Plan (2020), San Bernardino County Code, the City of Rancho Cucamonga General Plan (2021a), the City of Rancho Cucamonga Municipal Code, the Cucamonga Valley Water District 2020 UWMP documents (Cucamonga Valley Water District 2021), the City of Ontario General Plan (2022), the City of Ontario Municipal Code, the City of Ontario 2020 UWMP documents, and other relevant documents related to utilities and service systems.

3.16.4 CEQA Thresholds of Significance

According to Appendix G of the 2024 CEQA Guidelines, implementation of the proposed Project may result in a potentially significant impact if it would:

- Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects;
- Not have sufficient water supplies available to serve the proposed Project and reasonably foreseeable future development during normal, dry, and multiple dry years;
- Result in a determination by the wastewater treatment provider which serves or may serve the proposed Project that it does not have adequate capacity to serve the proposed Project's projected demand in addition to the provider's existing commitments;
- Generate solid waste more than state or local standards, or more than the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals; and
- Not comply with federal, state, and local management and reduction statutes and regulations related to solid waste.

3.16.5 Existing Settings

3.16.5.1 Water Supply

The proposed Project receives water resources services through the City of Rancho Cucamonga and the City of Ontario. The proposed Project does not receive water resources services from San Bernardino County.

3.16.5.1.1 City of Rancho Cucamonga

CVWD provides domestic water for the City of Rancho Cucamonga and the northern portion of the proposed Project. The water sources for CVWD (CVWD 2021b; City of Rancho Cucamonga 2021a) are described as follows:

- Thirty percent of the water is delivered to CVWD by the State Water Project. This water is treated at CVWD's Lloyd W. Michael Water Treatment Plant. The treated water flows into storage reservoirs and then into the distribution system to consumers.
- Sixty-five percent of the water delivered to CVWD consumers is groundwater pumped from the Cucamonga Basin and Chino Basin aquifers. Groundwater is pumped from hundreds of feet below the earth's surface. This water is treated at CVWD's Arthur H. Bridge and Royer Nesbit Water Treatment Plants. The water is disinfected as it flows into storage reservoirs and then into the distribution system to consumers.

- Five percent of the water delivered to CVWD consumers in 2021 was local canyon and tunnel water. These sources include Cucamonga Canyon, Deer Canyon, Day Canyon, East Etiwanda Canyon, and a number of tunnels in the local San Gabriel Mountains. This water is treated at CVWD's Arthur H. Bridge or Lloyd W. Michael Water Treatment Plants, then flows into storage reservoirs, and then into the distribution system to consumers.

Table 3.16-1 presents the current and projected population and water use demand of the area encompassed by the CVWD's service area and the actual and projected demands for water use.

Table 3.16-1 Cucamonga Valley Water District Current and Projected Population and Water Use Demand

	2020 (Actual)	2025 (Projected)	2030 (Projected)	2035 (Projected)	2040 (Projected)	2045 (Projected)
Total Population	198,979	207,151	225,483	231,531	236,573	236,573
Total Water Use	46,021 AFY	51,569 AFY	56,092 AFY	57,650 AFY	58,949 AFY	58,949 AFY

Notes: AFY = acre-feet per year
Source: CVWD 2021a

3.16.5.1.2 City of Ontario

Ontario Municipal Utilities Company (OMUC)aft provides domestic water for the City of Ontario and the southern portion of the proposed Project. Water sources for OMUC are described as follows (OMUC 2021):

- OMUC purchases surface water from the State Water Project (via Inland Empire Utilities Agency [IEUA] and supplied by Metropolitan Water District [MWD] of Southern California) treated locally by Water Facilities Authority using conventional water treatment methods.
- Groundwater supplies consist of the City of Ontario-owned wells (local groundwater), San Antonio Water Company, and Chino Basin Desalter Authority wells.

Table 3.16-2 presents the current and projected population and water use demand of the area encompassed by the OMUC's service area and the actual and projected demands for water use.

Table 3.16-2 Ontario Municipal Utilities Company Current and Projected Population and Water Use Demand

	2020 (Actual)	2025 (Projected)	2030 (Projected)	2035 (Projected)	2040 (Projected)	2045 (Projected)
Total Population	178,409	232,583	266,339	300,095	362,903	362,903
Total Volume of Water Use	32,109 AFY	40,382 AFY	45,048 AFY	49,076 AFY	57,609 AFY	57,609 AFY

Source: City of Ontario 2021a

3.16.5.2 Wastewater

3.16.5.2.1 San Bernardino County

The proposed Project does not receive wastewater services from San Bernardino County, as San Bernardino County provides wastewater services to unincorporated locations within the county. The proposed Project receives wastewater services through the City of Rancho Cucamonga and the City of Ontario.

3.16.5.2.2 City of Rancho Cucamonga

Wastewater conveyance (pipes and pump stations) is handled by CVWD, and wastewater is processed by CVWD and IEUA. CVWD oversees the facilities and infrastructure that transport wastewater to treatment plants operated by IEUA. At IEUA treatment plants, wastewater is subject to tertiary-level water treatment, an advanced process that produces effluent suitable for re-use. IEUA operates wastewater Regional Plant No. 4 located at the intersection of 6th Street and Etiwanda Avenue in the City of Rancho Cucamonga (City of Rancho Cucamonga 2021a).

Wastewater in the City of Rancho Cucamonga is conveyed through pipes and pump stations by CVWD and treated by IEUA. CVWD maintains approximately 37,600 sewer connections and six separate sewer sheds connecting to IEUA and serves over 40.6 square miles within the City of Rancho Cucamonga, portions of the City of Upland, the City of Ontario, and the unincorporated portion of San Bernardino County (City of Rancho Cucamonga 2021b). Facilities and infrastructure transporting wastewater to IEUA treatment plants are management by CVWD. Wastewater is treated at IEUA plants through various processes, including but not limited to, preliminary screening, grit removal, tertiary, and anerobic digestion (CVWD 2021a). Water produced from IEUA treatment plants is used for non-potable uses such as landscaping or discharged into the Pacific Ocean in compliance with applicable local, state, and federal standards.

Currently, IEUA-operated wastewater treatment facilities (e.g., Regional Plant No. 4) have an average treatment volume of 10 million gallons per day. The treatment capacity of Regional Plan No. 4 is 14 million gallons; thus, it is expected to have adequate capacity through year 2030 (City of Rancho Cucamonga 2021b).

3.16.5.2.3 City of Ontario

The City of Ontario maintains a sewer system consisting of approximately 425 miles of sewer mains ranging from 4 to 48 inches in diameter. The systems include four pump stations and approximately 11,000 feet of associated force mains, but primary operations are by gravity (City of Ontario 2022a). There are three pump stations that serve the City of Ontario. Two are the City of Ontario-owned; the first serves a residential neighborhood, and the second serves a commercial/industrial area located in the

eastern portion of the City of Ontario. The third pump is privately owned and serves a residential neighborhood located in the southeastern portion of the City of Ontario.

Wastewater generated by the City of Ontario is treated by IEUA which provides sewer utility services. The City of Ontario's sewer systems connect with IEUA regional trunk sewers which transport wastewater to one or more of the regional treatment plants owned by IEUA for treatment. Wastewater in the City of Ontario is directed mainly to Regional Water Plant No. 1. Regional Water Plant No. 1 currently is treating a daily average flow of 33 million gallons per day, leaving an additional 27.3 million gallons per day of excess capacity (City of Ontario 2022a). IEUA has seen a decrease in sewage flow volumes since 2013 and, thus, anticipates a continued excess capacity which will accommodate the City of Ontario's growth. The City of Ontario has a Sewer System Management Plan (SSMP) that provides a plan and schedule for the proper management, operation, and maintenance of all its sanitary sewer systems. The SSMP ensures compliance with state requirements through ordinances, service agreements, and other legally binding procedures.

3.16.5.3 Stormwater Drainage

The proposed Project area is urbanized; and much of the proposed Project area is paved and impervious to stormwater. Unlike sewage, which goes to treatment plants, urban runoff flows untreated through the storm drain system. Anything thrown, swept, or poured into the street, gutter, or catch basin (the curbside openings that lead into the storm drain system) flows directly into channels, rivers, and eventually the ocean. Storm drains and flood control facilities within the proposed Project area include channels, storm drains, street waterways, and natural drainage courses.

The City of Rancho Cucamonga and the City of Ontario own, operate, and maintain a storm drainage system for the purpose of conveying storm runoff to reduce or eliminate flooding under peak storm flow conditions. While the primary purpose of the storm drain system is to reduce or eliminate flood hazards, the system carries both dry- and wet-weather urban runoff and the pollutants associated with activities from urban land use. Urban runoff (both dry and wet weather) discharges into storm drains.

The City of Rancho Cucamonga's and the City of Ontario's storm drainage and flood control system provide both regional and local drainage and provide debris basins and spreading grounds designed to reduce mud flows. The City of Rancho Cucamonga and the City of Ontario are responsible for the localized facilities. San Bernardino County Flood Control District (SBCFCD) is responsible for regional flood control facilities. The City of Rancho Cucamonga, the City of Ontario, and SBCFCD coordinate together the preparation of regional drainage plans. The City of Rancho Cucamonga and the City of Ontario drainage plans provide a drainage system consisting of regional mainline, secondary regional, and master plan facilities that will adequately convey a 100-year storm event based upon certain drainage criteria.

Stormwater and other surface water runoff are conveyed to a municipal storm drain. Most local drainage networks are controlled by structural flood control measures. The majority of the length of the proposed Project is along major arterials with curb and gutter features. There are multiple storm drains and drainage features within the proposed Project Footprint.

3.16.5.4 Solid Waste

Solid waste collections services are provided by Burrtec Waste Industries (Burrtec) for the City of Rancho Cucamonga (City of Rancho Cucamonga 2022). Burrtec is the only business permitted to haul waste in the City of Rancho Cucamonga (City of Rancho Cucamonga 2019). The City of Ontario's solid waste collection service is provided by the City of Ontario's Integrated Waste Department (IWD) within the Public Works Agency (City of Ontario 2022b). Solid waste generated in the City of Rancho Cucamonga, the City of Ontario, and within the proposed Project area are transferred and processed at Burrtec's West Valley Materials Recovery Facility (MRF) located at 13373 Napa Street in Fontana, California. The MRF is under the administration of San Bernardino County Department of Public Health. West Valley MRF is 33.10 acres in size and has a design capacity of 8,282 tons per day, with a maximum capacity to receive up to 7,500 tons per day. Solid waste is sent to the MRF for processing, recycling, or landfilling (CalRecyle 2022c). At the MRF, trash is mechanically and manually sorted in order to ensure that the maximum amount of waste is recycled, and the minimum amount is separated for landfill disposal.

The solid waste that is not diverted at West Valley MRF is sent to Mid-Valley Landfill, El Sobrante Landfill, and Badlands Landfill (CalRecycle 2022a). Table 3.16-3 shows the existing capacities of each of these landfills, as well as their anticipated closure dates. As of 2006, the City of Ontario has a diversion rate of 64%, and the City of Rancho Cucamonga has a diversion rate of 57% (CalRecycle 2019).

The City of Rancho Cucamonga and the City of Ontario have a C&D waste diversion program to divert materials generated from a construction or demolition project from landfill disposal to recycling or reuse if the project is valued over $100,000 (United States dollars). Materials targeted for recycling include wood, rock, soil, green waste, asphalt, brick, concrete, cardboard, paper, ceiling tile, ceramic tile, gypsum drywall, metal, plastic, and carpet. The C&D waste diversion program requires diverting at least 65% of the total construction and demolition debris generated by the proposed Project to reuse or recycling. The C&D waste diversion program is described as follows:

> City of Rancho Cucamonga. The City of Rancho Cucamonga requires permit applicants to submit a deposit before a building and/or demolition permit is issued. Deposits are reimbursable if applicants provide proof that at least 65% of the waste was diverted from landfill disposal by recycling or reuse with acceptable documentation. In addition to the deposit, there are other administrative fees to offset expenses incurred in administering the program (City of Rancho Cucamonga 2019).

Table 3.16-3 Landfill Capacity

Landfill	Location	Total Acreage	Remaining Capacity (tons)	Maximum Capacity (tons)	Estimated Closure Date	Maximum Daily Loads (tons)
Mid-Valley Landfill	2390 North Alder Avenue Rialto, California, 92377	498	61,219,377	101,300,000	2045	7,500
El Sobrante Landfill	10910 Dawson Canyon Road Corona, California, 91719	1322	143,977,170	209,910,000	2047	16,054
Badlands Landfill	31125 Ironwood Avenue Moreno Valley, California, 92555	278.00	7,800,000	34,400,000	2026	4,800

Source: CalRecycle 2022d

City of Ontario. The City of Ontario requires all building and demolition permit applicants to submit a Form-1 Construction & Demolition Recycling Plan (CDRP) and Form-2 CDRP Summary Report to the OMUC-Solid Waste Department (City of Ontario 2018). Prior to C&D activities, an Applicant for a building and demolition permit is required to prepare Form-1 CDPR. Approval from IWD of Form-1 CDRP for each project is a condition to issuing a building or demolition permit. Upon project completion, an Applicant is required to prepare Form-2 CDRP Summary Report. Approval of Form-2 is a condition of issuing the certificate of occupancy for the project. With Form-2, documentation is required demonstrating compliance with the requirement to divert a minimum of 65% of the total construction and demolition debris generated by a project.

3.16.5.5 **Telecommunications**

Telecommunications is the transmission of communication over a long distance. Telecommunications consists of technologies such as fiber optics, electric wave transmission lines, and wireless transmissions, with the methods of transmission evolving rapidly as science and technology advance. The City of Rancho Cucamonga and the City of Ontario partner with a commercial service provider to deliver gigabit-speed internet as part of the Fiber Optic Master Plan. The City of Rancho Cucamonga and the City of Ontario construct, own, and maintain the physical broadband infrastructure. The availability of reliable high-speed internet is essential to businesses, schools, and homes. The current telecommunication

services in the City of Rancho Cucamonga include cable services, satellite services, internet services, and telephone services. Current telecommunication services in the City of Ontario include cable services, internet services, and telephone services.

3.16.5.6 Natural Gas

Southern California Gas Company (SoCalGas) provides natural gas service to the City of Rancho Cucamonga and the City of Ontario. Like other private utility suppliers, SoCalGas is regulated by California Public Utilities Commission. Natural gas from SoCalGas is transported through gas mains located throughout urbanized areas and is maintained by the company (City of Rancho Cucamonga 2021b; City of Ontario 2019). Natural gas comes from the ground and is considered a "fossil fuel" similar to coal and oil. As both the City of Rancho Cucamonga and the City of Ontario experience urban growth, demand for natural gas will increase. New facilities to support this growth would be provided by SoCalGas in accordance with demand.

3.16.6 Impact Evaluation

3.16.6.1 R**equire or result in the relocation or construction of new or expanded** water, wastewater **treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental e**ffects?

3.16.6.1.1 No Project Alternative

The No Project Alternative includes planned expansion, improvement projects, and routine maintenance activities for the existing roadway system and transit facilities. The No Project Alternative would be subject to project- and site-specific evaluation of the utilities and service systems, and mitigation would be required to reduce any potential impacts. With compliance with federal, state, and local regulations the No Project Alternative would have a less than significant impact to water, storm water drainage, or telecommunication facilities. The No Project Alternative may require wastewater service during construction, which would result in a less than significant impact. Wastewater service would not be required during operation, therefore, would result in no impact. Additionally, the No Project Alternative does not require the use of natural gas, and would result in no impact on natural gas services during construction or operation.

3.16.6.1.2 Proposed Project

3.16.6.1.2.1 Construction Impacts

Water conveyance infrastructure currently exists in the vicinity of the proposed Project site that serves surrounding land uses, and the proposed Project would connect to the existing infrastructure during construction. A majority of these connections would not require relocation, substantial demolition, or construction of new water conveyance infrastructure. As required by law, all water utility connections

would be in accordance with all applicable Uniform Codes, City Ordinances, Public Works standards, and Water Division criteria. Existing water conveyance infrastructure throughout the proposed Project area would provide the infrastructure necessary to provide water service to the proposed Project. Construction would be temporary, and it is unlikely that new on-site and off-site improvements (both public and private) would be required to provide adequate service for the incremental increase in water demand during construction (e.g. dust control).

Implementation of the proposed Project would comply with stormwater-related federal, local, and state requirements. Current stormwater infrastructure exists in the vicinity of the proposed Project site that also serves surrounding land uses. The existing channels and associated stormwater drains are adequate to accommodate stormwater flows from construction of the proposed Project. No relocation or expansion of stormwater drainage facilities would be required for the implementation of the proposed Project during construction. It is not anticipated that the implementation of the proposed Project would require expansion or relocation of existing wastewater conveyance infrastructure.

Telecommunication facilities are present within the proposed Project area and would mostly not need to be relocated. However, construction of the emergency access shaft would require relocation of the Caltrans fiber-optic duct bank. Telecommunication facilities would be available to the proposed Project area during construction. Natural gas facilities are present within the proposed Project area and would not need to be relocated. Although there would be no natural gas demand for the proposed Project during construction, natural gas facilities would be available to the proposed Project area. The proposed Project would not exceed available or planned supply for natural gas, and new infrastructure would not be required to serve the proposed Project site.

The proposed Project would coordinate with existing utilities service providers to ensure that any potential impact to utilities services would be minimal. It is not anticipated that there would be any service interruptions during construction of the proposed Project. The proposed project such as tunnel alignment would generally occur below the existing utilities 70 feet below ground. For areas where the tunnel comes to surface and relocation of the utility system is required would coordinate with the existing utility service providers to reduce any potential impact to service disruptions.

With compliance with federal, state, and local regulations, as included in Section 3.16.2 (Regulatory Framework), the proposed Project would have a less than significant impact to water, storm water drainage, wastewater treatment or telecommunication facilities. Implementation of the proposed Project would not require natural gas and therefore, there would be no impact to natural gas.

3.16.6.1.2.2 Operational Impacts

The proposed Project would not substantially increase water usage at the proposed Project site during operation. The existing water pipes throughout the proposed Project site would provide the infrastructure necessary to provide water service to the proposed Project and would not require

relocation. During operation, water demand would primarily be for landscaping and autonomous vehicles washing. In addition, implementation of the proposed Project would not substantially increase wastewater treatment needs at the proposed Project site. Water conveyance infrastructure currently exists in the vicinity of the proposed Project site that serves surrounding land uses. The proposed Project would connect to the existing infrastructure and would not require substantial demolition, relocation or construction of a new water conveyance infrastructure. As required by law, all water utility connections would be in accordance with all applicable Uniform Codes, City Ordinances, Public Works standards, and Water Division criteria. The potential wastewater would discharge into the local sanitary sewer system maintained by CVWD and OMUC. The proposed Project's maintenance and storage facility (MSF) would require construction of a restroom facility to serve the staff. Implementation of the proposed Project would represent a small percentage of the remaining operating capacity at the wastewater treatment plants that serve the proposed Project area, and it is anticipated that the existing plants could adequately serve the additional demand generated by the proposed Project without requiring expansions or relocations to these facilities.

Implementation of the proposed Project would comply with stormwater-related federal, local, and state requirements. The existing channels and associated stormwater drains are adequate to accommodate additional stormwater flows from the implementation of the proposed Project. Current stormwater infrastructure exists in the vicinity of the Project site that also serves the surrounding land uses and do not require relocation. No new stormwater drainage facilities would be required for the implementation of the proposed Project.

The proposed Project would include a secure communications network that would connect all field locations to a central control facility, which would be located within a proposed station area and the MSF. The underlying concept of the communications network is for a high-speed optical-data backbone to interconnect all equipment and devices requiring monitoring, communications, or control to a central control facility. The telecommunication facilities at present within the proposed Project area would not require relocation and would remain available during operation.

The proposed Project would not require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, or telecommunications facilities during operation. With compliance with existing state and local regulations the proposed Project would have a less than significant impact.

Because SoCalGas declares itself a "reactive" utility that would provide natural gas as customers request its services, SoCalGas would have adequate supply of natural gas to serve the proposed Project area, and the level of service provided to the surrounding area would not be impaired by the proposed Project development. However, there would be no demand of natural gas for the proposed Project. The proposed Project would not exceed available or planned supply, and new infrastructure would not be required to serve the proposed Project site, nor would existing natural gas infrastructure need relocation and the proposed Project would have no impact.

3.16.6.2 Have sufficient water supplies available to serve the project and reasonably foreseeable **future development during normal, dry, and multiple dry years**?

3.16.6.2.1 No Project Alternative

The No Project Alternative includes planned expansion, improvement projects, and routine maintenance activities for the existing roadway system and transit facilities. It is not anticipated that the No Project Alternative would substantially increase water usage compared to existing uses during construction to require additional water supplies. The No Project Alternative would not result in the creation of housing or infrastructure that would induce or accelerate population or household growth during construction to substantially increase water demands. Although, construction could require water use, the water use would be temporary and minimal compared to the overall projected water supply in the CVWD's and OMUC's services areas. The local Water Management policies and existing data indicate that sufficient water entitlements and resources exist to adequately serve the No Project Alternative proposed Project site during operation. Impacts to water supply would be less than significant during construction and operation, as the No Project Alternative would not result in greater water supply demands than the projected total water demand for the proposed Project site included in the CVWD and OMUC's 2020 UWMPs.

3.16.6.2.2 Proposed Project

3.16.6.2.2.1 Construction Impacts

Implementation of the proposed Project would not substantially increase water usage at the proposed Project site during construction.

Construction activities would likely require an increase in water use at the proposed Project site for activities such as dust control and equipment washing during construction. However, the water use would be temporary and minimal compared to the overall projected water supply in the CVWD's and OMUC's services areas. The proposed Project would have a less than significant impact to water supply, as the proposed Project would not result in greater water supply demands than the projected total water demand for the proposed Project site included in the CVWD's and OMUC's 2020 UWMPs.

3.16.6.2.2.2 Operational Impacts

Implementation of the proposed Project would not substantially increase water usage at the proposed Project site. The 2020 UWMPs for both CVWD and OMUC take into consideration the population growth within their service area to project future water use demands within their service areas. The proposed Project would not result in the creation of housing or infrastructure that would create or accelerate population or household growth. The proposed Project would be utilized by the existing population in the region.

The proposed Project would construct a tunnel between the Cucamonga Metrolink Station and ONT with three passenger stations, ventilation shaft (vent shaft) and one MSF. The MSF would be approximately 11,000 square feet, with an additional 5,000 square feet second story and includes employee restrooms, landscaping, equipment and autonomous vehicle washing, and fire sprinkler systems. The restrooms would be small and would serve only the employees at the MSF. The increase in water use at the proposed Project site would not significantly contribute to the overall projected increase in water use in the CVWD's and OMUC's service areas compared to existing uses.

As CVWD and OMUC continue to explore new water conservation efforts, which include the use of recycled water, the proposed Project's water supply impacts would be even further reduced. Based on the local Water Management policies for the proposed Project area, existing data indicate that sufficient water entitlements and resources exist to adequately serve the proposed Project during operation. The proposed Project would have a less than significant impact to water supply, as the proposed Project would not result in greater water supply demands than the projected total water demand for the proposed Project site included in the CVWD's and OMUC's 2020 UWMPs.

3.16.6.3 R**esult 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**?

3.16.6.3.1 No Project Alternative

The No Project Alternative includes planned expansion, improvement projects, and routine maintenance activities for the existing roadway system and transit facilities. CVWD and IEUA provide wastewater conveyance and processing services for the City of Rancho Cucamonga and the City of Ontario. Currently, IEUA-operated wastewater treatment facilities in the City of Rancho Cucamonga (e.g., Regional Plant No. 4) have an average treatment volume of 10 million gallons per day. The treatment capacity of the Regional Plan No. 4 is 14 million gallons and it is expected to have adequate capacity through year 2030. Wastewater in the City of Ontario is directed mainly to Regional Water Plant No. 1. Regional Water Plant No. 1 currently is treating a daily average flow of 33 million gallons per day, leaving an additional 27.3 million gallons per day of excess capacity. Aforementioned facilities would serve the proposed Project area would be able to accept all construction and operational waste from the No Project Alternative and with sufficient current and future wastewater capacity. It is not anticipated that the No Project Alternative would generate wastewater at more than state or local standards, or more than the capacity of local infrastructure. With adherence and compliance with federal, states, and local regulations for wastewater, the No Project Alternative would have a less than significant impact to wastewater.

3.16.6.3.2 Proposed Project

3.16.6.3.2.1 Construction Impacts

Wastewater treatment would be required during construction for the construction workers use of restroom facilities during the construction activities for the proposed Project. For the temporary restrooms used by the construction workers, the regional wastewater treatment facilities are operating below capacity and have the additional capacity to provide wastewater treatment services for the proposed Project. Therefore, the proposed Project during construction would have a less than significant impact to wastewater services.

3.16.6.3.2.2 Operational Impacts

IEUA-operated wastewater treatment facilities are operating below capacity. Regional Plant No. 4, serving the City of Rancho Cucamonga, has an average treatment volume of 10 million gallons per day but a treatment capacity of 14 million gallons per day. Similarly, Regional Water Plants No. 1 and No. 5, currently serving the City of Ontario, have a daily flow of 44.8 million gallons per day and a combined capacity of 60.3 million gallons per day. In addition, IEUA has created a Capital Improvement Program to expand wastewater treatment capacity through new development fees. Operation of the proposed Project would generate wastewater (e.g., restroom for employees at the MSF), which is anticipated to be typical and not exceed any treatment requirements set by RWQCB. The regional wastewater treatment facilities are operating below capacity and have the additional capacity to provide wastewater treatment services for the proposed Project. Therefore, the proposed Project during operation would have a less than significant impact to wastewater services.

3.16.6.4 Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impai**r the attainment of solid waste reduction goals**?

3.16.6.4.1 No Build Alternative

The No Project Alternative includes planned expansion, improvement projects, and routine maintenance activities for the existing roadway system and transit facilities. Burrtec and IWD provide solid waste collection services for the City of Rancho Cucamonga and the City of Ontario, respectively. The West Valley Transfer Station/MRF and the three landfills that serve the proposed Project area would be able to accept all construction and operational waste from the No Project Alternative and with sufficient current and future landfill capacity. Mid-Valley Landfill, El Sobrante Landfill, and Badlands Landfill have sufficient current and future landfill capacity. It is not anticipated that the No Project Alternative would generate solid waste at more than state or local standards, or more than the capacity of local infrastructure. With adherence to the City of Ontario's and the City of Rancho Cucamonga's C&D waste diversion program and compliance with federal, states, and local regulations for solid waste, the No Project Alternative would not impair the attainment of solid waste reduction goals mandated by the state and local regulations. The No Project Alternative would have a less than significant impact to solid waste.

3.16.6.4.2 Proposed Project

3.16.6.4.2.1 Construction Impacts

The proposed Project includes various construction activities associated with the construction of the tunnel, MSF, three stations, and a vent shaft. Most of the solid waste produced for the proposed Project would result from construction activities. The proposed Project would include construction activities such as removal of existing parking spaces, tunnel boring, excavation and drilling for piles. In addition, construction of the tunnel would involve special construction, including placement of temporary structures that would be removed following completion of construction.

The City of Rancho Cucamonga and the City of Ontario both have a C&D waste diversion programs to divert materials generated during construction or demolition projects from landfill disposal to recycling or reuse. The C&D programs require diverting at least 65% of the total C&D debris generated by the proposed Project to reuse or recycling. Materials targeted for recycling include wood, rock, soil, green waste, asphalt, brick, concrete, cardboard, paper, ceiling tile, ceramic tile, gypsum drywall, metal, plastic, and carpet. In addition, the handling of debris and waste would be subject to federal, state, and local requirements regarding the reuse and recycling of materials.

Burrtec and IWD provide solid waste collection services for the City of Rancho Cucamonga and the City of Ontario, respectively. The West Valley Transfer Station/MRF and the three landfills that serve the proposed Project area would be able to accept all construction waste from the proposed Project site. As shown in Table 3.16-3, Mid-Valley Landfill, El Sobrante Landfill, and Badlands Landfill have sufficient current and future landfill capacity. The proposed Project would not generate solid waste at more than state or local standards, or more than the capacity of local infrastructure. In addition, with adherence to the City of Ontario's and the City of Rancho Cucamonga's C&D waste diversion program and compliance with federal, states, and local regulations for solid waste, the proposed Project would not impair the attainment of solid waste reduction goals mandated by the state and local regulations. The proposed Project during construction would have a less than significant impact to solid waste.

3.16.6.4.2.2 Operational Impacts

It is anticipated that during operation of the proposed Project, solid waste would be generated by the MSF and stations, including small volumes of solid waste: product packaging, broken equipment, and site litter. This volume would not place a substantial demand on solid waste collection services or landfill capacity or impair the attainment of solid waste reduction goals.

Solid waste collection services for the proposed Project area are provided by Burrtec which services the City of Rancho Cucamonga, and the City of Ontario's IWD. Solid waste generated within the proposed Project area would be transferred and processed at Burrtec's West Valley Transfer Station/MRF. The West Valley Transfer Station/MRF has a design capacity of 8,282 tons per day, with a maximum capacity to receive up to 7,500 tons per day. The West Valley Transfer Station/MRF sorts and separates all waste and recycles all appropriate materials, further reducing the waste generation going to the landfills.

As shown in Table 3.16-3, there are three landfills that would serve the proposed Project site. Mid-Valley Landfill has a design capacity of 7,500 tons per day with remaining capacity of 61,219,377 tons. El Sobrante Landfill has a design capacity of 16,054 tons per day with remaining capacity of 143,977,170 tons. Lastly, Badlands Landfill has a design capacity of 4,800 tons per day with remaining capacity of 7,800,000 tons. Based on landfill capacity, the solid waste contribution from the proposed Project to any of the three landfills that serve the proposed Project site would be far less than their allowed daily capacity.

Burrtec and IWD provide solid waste collection services for the City of Rancho Cucamonga and the City of Ontario, respectively. The West Valley MRF and the three landfills would be able to accept all operational waste from the proposed Project site and with sufficient current and future landfill capacity. The proposed Project would not impair the attainment of solid waste reduction goals mandated by the state and local regulations. The proposed Project during operation would have a less than significant impact to solid waste.

3.16.6.5 C**omply with federal, state, and local management and reduction statutes and regulations** related to solid waste?

3.16.6.5.1 No Project Alternative

The No Project Alternative would remain in compliance with local, state, and federal regulations, and the No Project Alternative would result in no impact related to solid waste regulations.

3.16.6.5.2 Proposed Project

3.16.6.5.2.1 Construction Impacts

The proposed Project would be required to comply with all federal, state, and local statutes and regulations related to solid waste handling, transport, and disposal during construction. C&D wastes account for approximately 22% of all materials going into landfill (City of Ontario 2018). As discussed previously, existing facilities have sufficient capacity to serve the estimated increase in waste disposal demand. Additionally, the City of Rancho Cucamonga and the City of Ontario both have a C&D waste diversion program to divert materials generated from a construction or demolition project from landfill disposal to recycling or reuse. The C&D programs require diverting at least 65% of the total C&D debris generated by the proposed Project to reuse or recycling. The City of Rancho Cucamonga and the City of Ontario remain committed to continuing their existing waste reduction and minimization efforts with recycling programs. Additionally, the provisions of the RCMC and OMC, which govern the procedures for collection, transfer, processing, disposal, and recycling of solid waste, would be observed. As the proposed Project construction would remain in compliance with local, state, and federal regulations, the proposed Project would result in no impact related to solid waste regulations.

3.16.6.5.2.2 Operational Impacts

California state law requires the cities to recycle at least 50% of all trash generated. As of 2006, which represents the most recent data available that have been approved by CalRecycle, the City of Rancho Cucamonga has a diversion rate of 57%, and the City of Ontario has a diversion rate of 64%. The City of Rancho Cucamonga and the City of Ontario currently exceed the required diversion rate, and the proposed Project would be required to participate in these efforts to minimize waste disposed of in landfills. As the proposed Project operation would remain in compliance with local, state, and federal regulations, the proposed Project would result in no impact related to solid waste regulations.

3.16.7 Mitigation Measures

No mitigation measures would be required for the utilities and service systems during construction and operation of the proposed Project.

3.16.8 Impacts After Mitigation

3.16.9 Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

No mitigation measures would be required, and the proposed Project would have a less than significant impact for water, wastewater treatment, storm water drainage, and telecommunications. The proposed Project would have no impact to natural gas.

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

No mitigation measures would be required, and the proposed Project would have a less than significant impact.

3.16.11 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?

No mitigation measures would be required, and the proposed Project would have a less than significant impact.

3.16.12 Would the project generate solid waste more than state or local standards, or more than the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

No mitigation measures would be required, and the proposed Project would have a less than significant impact.

3.16.13 Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

No mitigation measures would be required, and the proposed Project would have no impact.

3.17 GROWTH-INDUCING

3.17.1 Introduction

This section of the Draft Environmental Impact Report (EIR) analyzes the growth inducement potential of the proposed Project and the associated secondary effects of growth that the proposed Project might impact. As required by California Environmental Quality Act (CEQA) Guidelines Section 15126.2(d), an EIR must:

> *"Discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth (a major expansion of a recycled water plant might, for example, allow for more construction in service areas). Increases in the population may tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects. Also discuss the characteristic of some projects which may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment."*

The CEQA Guidelines do not distinguish between planned and unplanned growth for purposes of considering whether a project would foster additional growth. Therefore, for purposes of this Draft EIR, to reach the conclusion that the proposed Project is growth-inducing as defined by CEQA, this Draft EIR must find that it would foster (i.e., promote or encourage) additional growth in economic activity, population, or housing, regardless of whether the growth is consistent with local plans or is beyond the level of growth that is anticipated by local plans.

If the analysis contained in this section determines the proposed Project has growth-inducing effects, the next question is whether that growth may cause adverse effects on the environment. Environmental effects resulting from induced growth (i.e., growth-induced effects) fit the CEQA definition of "indirect" effects in CEQA Guidelines Section 15358(a)(2). These indirect or secondary effects of growth may result in significant environmental impacts.

While the CEQA Guidelines require an EIR to "discuss the ways" a project could induce growth, and to discuss project characteristics that may "encourage... activities that could significantly affect the environment," the CEQA Guidelines do not require an EIR to attempt to predict where, when, or in what form induced growth might occur. The answers to such questions require substantial speculation, which CEQA discourages (CEQA Guidelines Section 15145).

The conclusions set forth in this Draft EIR regarding growth inducement do not address or imply whether such induced growth is beneficial or detrimental, consistent with CEQA Guidelines Section 15126.2(d). This issue is presented to provide additional information on ways in which the proposed Project could

contribute to significant changes in the environment beyond the direct consequences of developing the proposed land uses as described in earlier sections of this Draft EIR.

3.17.2 Regulatory Framework

3.17.2.1 State

3.17.2.1.1 California Environmental Quality Act

As required by the CEQA Guidelines, an EIR must include a discussion of the ways in which the proposed Project could directly or indirectly foster economic development or population growth, or the construction of additional housing and how that growth would, in turn, affect the surrounding environment (CEQA Guidelines Section 15126.2[d]). Growth can be induced in a number of ways, including the elimination of obstacles to growth, or through the stimulation of economic activity within the region. The discussion of removal of obstacles to growth relates directly to the removal of infrastructure limitations or regulatory constraints that could result in growth unforeseen at the time of project approval.

In general, a project may foster spatial, economic, or population growth in a geographic area if it meets any one of the criteria identified as follows:

- The project removes an impediment to growth (e.g., the establishment of an essential public service, or the provision of new access to an area);
- The project results in the urbanization of land in a remote location (leapfrog development);
- The project establishes a precedent-setting action (e.g., a change in zoning or general plan amendment approval); and/or
- Economic expansion or growth occurs in an area in response to the project (e.g., changes in revenue base, employment expansion, etc.).

If a project meets any one of these criteria, it may be considered growth inducing. Generally, growth-inducing projects are either located in isolated, undeveloped, or underdeveloped areas, necessitating the extension of major infrastructure such as sewer and water facilities or roadways, or encourage premature or unplanned growth.

To comply with CEQA, an EIR must discuss the ways in which the proposed Project could promote economic or population growth in the vicinity of the project and how that growth will, in turn, affect the surrounding environment (CEQA Guidelines Section 15126.2[d]). Under CEQA, this growth is not to be considered necessarily detrimental, beneficial, or of significant consequence. Induced growth is considered a significant impact only if it affects (directly or indirectly) the ability of agencies to provide needed public services, or if it can be demonstrated that the potential growth, in some other way, significantly affects the environment.

Growth can be induced in a number of ways, including the direct construction of new homes and businesses, the elimination of obstacles to growth, or through the stimulation of economic activity within the region. The discussion of the removal of obstacles to growth relates directly to the removal of infrastructure limitations (typically through the provision of additional capacity or supply), or the reduction or elimination of regulatory constraints on growth that could result in growth unforeseen at the time of project approval.

The elimination of either physical or regulatory obstacles to growth is considered to be a growth-inducing effect. A physical obstacle to growth typically involves the lack of public service infrastructure. The extension of public service infrastructure, including roadways, water mains, and sewer lines, into areas that are not currently provided with these services would be expected to support new development. Similarly, the elimination or change to a regulatory obstacle, including existing growth and development policies, could result in new growth.

3.17.2.2 Regional and Local

The allocation of growth is devised at both the regional and local government level by a combination of policy incentives and local zoning. These regional and local entities include the Southern California Association of Governments (SCAG), San Bernardino County, Ontario International Airport – Inter Agency Collaborative (ONT-IAC), the City of Rancho Cucamonga, and the City of Ontario. A list of relevant regional and local goals and polices are discussed in the Growth-Inducing Technical Report (SBCTA 2024a; Appendix L). A brief summary of applicable regional and local goal and policies is provided.

SCAG is the Metropolitan Planning Organization that oversees regional planning efforts for the six-county region consisting of Los Angeles, Orange, Riverside, San Bernardino, Ventura, and Imperial counties. SCAG's planning efforts focus on strategies to minimize traffic congestion, protect environmental quality, and provide adequate housing throughout the region. Adopted on September 3, 2020, SCAG's Connect SoCal 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) is a long-range visioning plan that builds upon and expands land use and transportation strategies established over several planning cycles to increase mobility options and achieve a more sustainable growth pattern.

Connect SoCal projects growth in employment, population, and households at the regional, county, city, town, and neighborhood levels. These projections take into account economic and demographic trends, as well as feedback reflecting on-the-ground conditions from SCAG's jurisdictions.

The San Bernardino County General Plan Land Use (LU), and Economic Development (ED) Elements set forth goals and policies related to growth, including fiscally sustainable growth to build thriving communities, supports the growth of new businesses and improved profitability of existing businesses related to increasing the number of quality jobs in the county, and promotes the County as a regional, national, and international tourist destination. ONT-IAC implements the policies and criteria of the Ontario International Airport Land Use Compatibility Plan (ONT-IAC 2018). In terms of growth

management, the inter-agency partnership fulfills state requirements to protect the Ontario International Airport (ONT) from encroachment of incompatible land uses. ONT-IAC is administered by the City of Ontario, with San Bernardino County and the City of Rancho Cucamonga represented in its membership.

The City of Rancho Cucamonga's General Plan's growth policies support continuation of a fiscally sound community that manages growth and investments in the community to maximize the value of new development along with the availability of supporting infrastructure and services.

The City of Ontario's General Plan's growth policies acknowledges local growth by supporting a spectrum of housing types and price ranges to match jobs in the City, allowing people to maintain a quality of life by living and working in their communities. The City also supports the development of a variety of transit to maximize available and planned infrastructure.

3.17.3 Methodology

Data used to prepare this section were obtained from the Growth-Inducing Technical Report (SBCTA 2024a;Appendix L) and the Community Impact Assessment Technical Report (SBCTA 2024b; Appendix E).

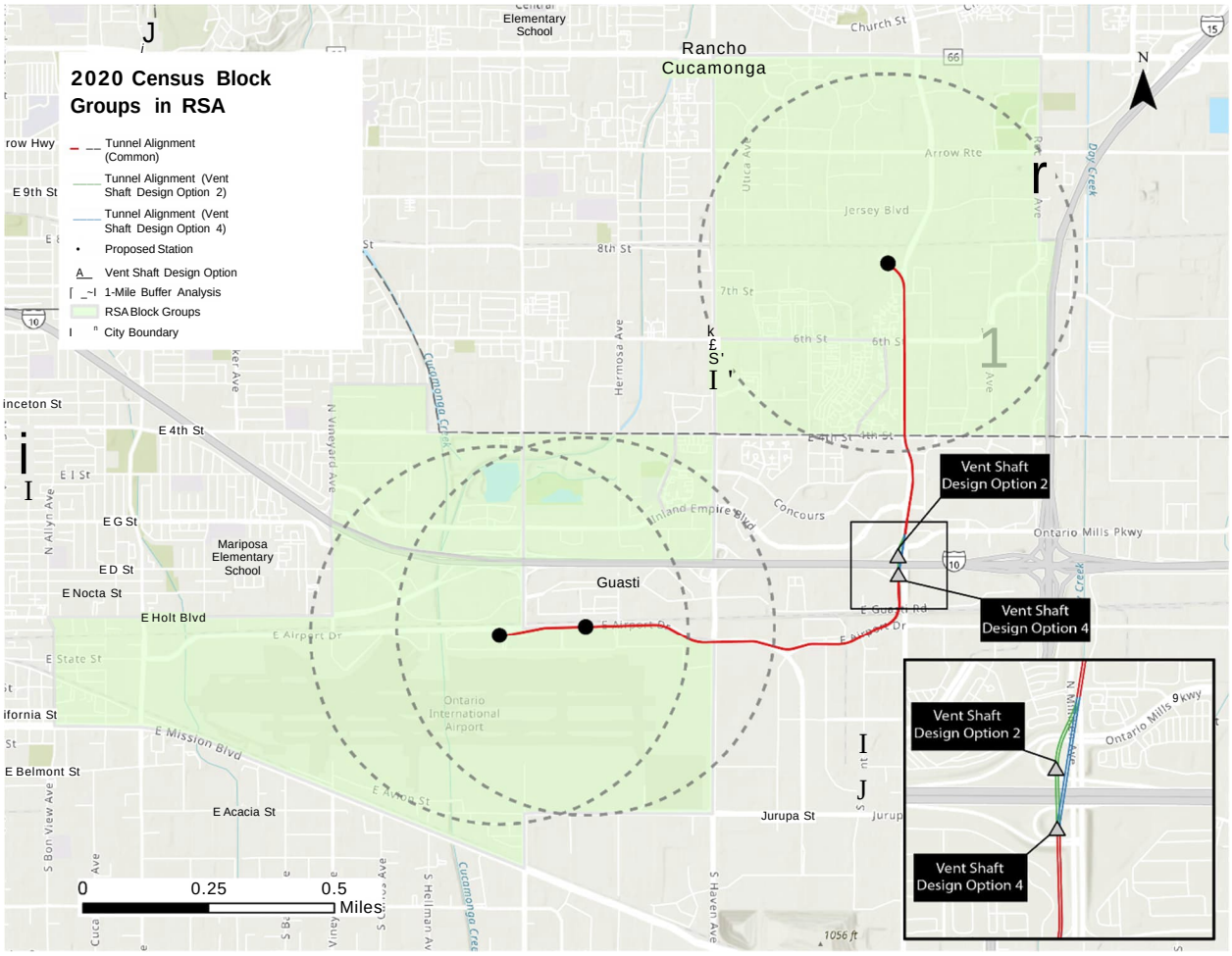
3.17.3.1 Resource Study Area

The proposed Project-specific resource study area (RSA) is defined as the Airport Station RSA Block Groups (Airport Station RSA) and the Rancho Cucamonga Station RSA Block Groups (RC Station RSA). The RSA includes a one-mile buffer-analysis radius from the Cucamonga Metrolink Station and the ONT. The RSA has been captured using 2020 census block groups, as depicted in Figure 3.17-1. The Airport Station RSA encompasses four total block groups, and the RC Station RSA encompasses two total block groups. The RSA captures the walking distance surrounding the three proposed stations at the Cucamonga Metrolink Station, ONT Terminal 2, and ONT Terminal 4. The study area for growth inducement is primarily the RSA, with some references to the anticipated growth in the region.

3.17.3.2 Related Resource Chapters

While SCAG does not have the ultimate ability to determine where growth would occur because it does not have land use authority, it does work with each of the local jurisdictions to develop a growth forecast and accompanying land use allocation that reflect each of their individual planning efforts and community priorities based on the General Plans from each jurisdiction (SCAG 2020). The growth-inducement analysis incorporates the findings of the Growth-Inducing Impacts Technical Report (SBCTA 2024a; Appendix L), Community Impacts Assessment Technical Report (SCBTA 2024b;Appendix E) and the Transportation and Traffic Technical Report (SBCTA 2024c; Appendix Q) to compare the job and population changes associated with the proposed Project with the SCAG growth projections.

Figure 3.17-1: Census Block Groups in Resource Study Area



Source: SBCTA 2024b

Generally, growth inducement may occur if a project fosters economic or population growth or the construction of additional housing either directly or indirectly beyond planned growth. If the job and population changes are greater than expected magnitude of job and/or population growth, the growth-inducement analysis evaluates whether the divergence is significant by assessing whether the location or magnitude of the growth would result in additional housing beyond planned growth, strain community and public service providers' ability to serve these locations or would otherwise degrade the environment in some manner.

As a transit infrastructure project, the proposed Project is not anticipated to directly foster growth because no housing would be constructed as part of the proposed Project. The growth inducement analysis focuses on whether the proposed Project would be consistent with SCAG and jurisdictional forecasted growth by providing improved transit service and reliability through the region. As an illustrative example, even if a particular jurisdiction were to experience greater than expected growth, the

impact would only be significant from a public services perspective if local schools, police, and fire stations did not have the capacity to absorb the growth.

3.17.3.3 Evaluation of Impacts Under CEQA

Growth inducement is not an environmental impact directly but may reasonably be anticipated to lead to environmental impacts. The CEQA Guidelines do not specify thresholds for what constitutes a significant impact. For the purpose of this analysis, impacts are considered significant if they directly or indirectly lead to actions which have unanticipated demand for housing, community and public services, or additional infrastructure. Such demands can arise if the induced growth occurs in locations for which it has not been planned, or is of a magnitude that exceeds planned capacities, or otherwise leads to a degradation of environmental quality such as increased noise, water, or air quality.

3.17.4 CEQA Thresholds of Significance

According to Appendix G of the 2024 CEQA Guidelines, implementation of the proposed Project may result in a potentially significant impact if it:

- Is expected to foster economic or population growth in the RSA that exceeds planned capacities, or
- Is reasonably foreseen to diminish environmental quality.

3.17.5 Existing Setting

3.17.5.1 Historic Growth Drivers

Economic growth in the RSA is driven by the proximity to economic centers such as the ONT; Toyota Area; Ontario Convention Center; or commercial, industrial, and retail businesses within the area. In addition, Chaffey College is located in the City of Rancho Cucamonga, and the Claremont Colleges are located in nearby Claremont, California. The RSA also has a comparative housing affordability relative to other parts of Southern California.

The logistics industry anchors the RSA economy. ONT is a growing hub for air freight. In addition, two major ports, the Port of Los Angeles and the Port of Long Beach, are located approximately 50 miles west of the RSA. These economic hubs create reliable demand for industrial and warehouse space within the RSA. In addition to the air freight service, ONT continues to add flights and destinations for air passengers. ONT is served by 12 airlines operating services to 33 non-stop destinations, including international services to Taipei in Taiwan, San Salvador in El Salvador, and Guadalajara and Mexico City in Mexico (Ontario International Airport 2022). The close proximity to the Ontario Convention Center makes the area attractive for fly-in/fly-out business meetings and trade shows.

The area's affordability to housing also plays a role in its growth. Housing in San Bernardino County is relatively affordable compared with the rest of Southern California. The median price in United States (U.S.) dollars ($) of $477,000 for a single-family home is significantly more affordable than in Los Angeles County ($895,000), Orange County ($1,164,000), Riverside County ($590,000), or San Diego County ($904,000) (SCAG 2020).

3.17.5.2 Population and Households

Since 1990, the City of Ontario has experienced an approximately 42 percent (%) growth in the population, and the City of Rancho Cucamonga has experienced an approximately 61% growth in the population, as shown in Table 3.17-1: Population Growth. The population growth indicates that the historically higher growth areas in the region are inside of the proposed Project area and San Bernardino County. The Airport RSA located in the City of Ontario had a total of 5,517 households (HH) in 2020, accounting for a diminutive portion of the City of Ontario as a whole, which had a total of 51,841 HH in 2020. The RC Station RSA located in the City of Rancho Cucamonga had a population of 1,604 HH in 2020. A total of 1,604 HH represents a small portion of the City of Rancho Cucamonga as a whole, which had a total of 58,096 HH in 2020 (U.S. Census Bureau 2020). Whereas population growth was once driven by fertility rates, it is now driven by net migration, resulting in a high foreign-born population. Migration into the SCAG region comes largely from outside of the U.S., primarily Asia, followed by Latin America. In San Bernardino County, the out-migrants have higher college education rates than in-migrants in comparison to the trends in Los Angeles County and Orange County.

Table 3.17-1: Population Growth

Jurisdiction	Population 1990	% Change	Population 2000	% Change	Population 2010	% Change	Population 2020
City of Ontario	133,179	18.6	158,007	3.7	163,924	20.5	197,600
City of Rancho Cucamonga	101,409	26.0	127,743	29.4	165,269	5.2	173,900

Source: U.S. Census Bureau (1990, 2000, 2010, 2020)

3.17.5.2.1 Employment

Businesses located in the RSA take advantage of the proximity to ONT. ONT is within a tourism cluster that includes the Toyota Area; Ontario Convention Center; as well as hotels, industrial, commercial, and retail businesses. Major employers in the City of Rancho Cucamonga include Amphastar Pharmaceutical Company, Southern California Edison, and Mercury Casualty Insurance. At ONT, FedEx and UPS operate regional freight hubs, and 12 airlines service air passengers. Among the domestic airline carriers, Southwest accounts for about 40% of the flights from ONT. In 2020, the Airport Station RSA maintained 4,584 employees in proximity to ONT, and the RC Station RSA maintained approximately 2,187 employees in proximity to the Cucamonga Metrolink Station (U.S. Census Bureau 2020). Overall, the RSA does not account for a significant portion of employment (EMP) within the City of Rancho Cucamonga and City of Ontario.

3.17.5.3 Future Growth

Regional growth projections from SCAG estimate population growth to be stronger in the City of Ontario than in the City of Rancho Cucamonga, with population projected to increase by approximately 15.5% in the City of Ontario, compared to a 4.0% increase in the City of Rancho Cucamonga between 2020 and 2030 (SCAG 2020). Household and EMP projections for 2030 follow similar patterns. Table 3.17-2 provides information on future population growth, Table 3.17-3 provides information on future household growth, and Table 3.17-4 provides information on future EMP growth for the City of Rancho Cucamonga and City of Ontario from the 2020-2045 Connect SoCal Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). The City of Rancho Cucamonga is approaching build-out, and further population growth is limited. Future growth would require efforts to provide more affordable housing, such as building at a higher density. These efforts to provide more affordable housing would reduce the cost of household growth in the City of Rancho Cucamonga and nearby locations within San Bernardino County.

3.17.6 Impact Evaluation

3.17.6.1 Would the Project have a significant impact related to growth inducement if it is expected to foster economic or population growth that exceeds planned capacities or is reasonably foreseen to diminish environmental quality?

3.17.6.1.1 No Project Alternative

The No Project Alternative includes planned expansion, improvement projects, and routine maintenance activities for the existing roadway system and transit facilities. Construction of these projects could result in impacts related to growth inducement that exceeds planned capacities or diminish environmental quality. Although a significant impact related to growth inducement is not anticipated, these planned projects would be subject to separate environmental review and would be required to comply with existing regulations. Therefore, impacts would be less than significant.

3.17.6.1.2 Proposed Project

As discussed in Section 3.17.3.2, growth inducement may occur if a project fosters economic or population growth, or the construction of additional housing either directly or indirectly beyond planned growth.

Promotion of Economic Growth

The promotion of economic growth is the extent to which a proposed Project could cause increased activity in the local or regional economy. A “multiplier effect” is an economic phrase, which pertains to the interrelationships between the various sectors of the economy. The multiplier effect is a quantitative description and can be described as how an increase in some economic activity starts a chain-reaction that generates more activity than the original increase.

Table 3.17-2: Future Growth, Population

RTP/SCS Final Growth Forecast by Jurisdiction									
City Name	Population 2016	% Change	Population 2020	% Change	Population 2030	% Change	Population 2035	% Change	Population 2045
City of Ontario	172,249	11.51	192,072	15.48	221,806	6.40	236,012	14.00	269,050
City of Rancho Cucamonga	176,503	1.43	179,028	3.96	186,120	2.71	191,165	5.28	201,255

Source: SCAG 2020

Table 3.17-3: Future Growth, Households (HH)

RTP/SCS Final Growth Forecast by Jurisdiction									
City Name	HH 2016	% Change	HH 2020	% Change	HH 2030	% Change	HH 2035	% Change	HH 2045
City of Ontario	46,001	12.70	51,841	16.90	60,602	6.91	64,787	15.02	74,521
City of Rancho Cucamonga	56,764	2.35	58,096	5.73	61,426	2.71	63,091	5.28	66,421

Source: SCAG 2020

Table 3.17-4: Future Growth, Employment (EMP)

RTP/SCS Final Growth Forecast by Jurisdiction									
City Name	EMP 2016	% Change	EMP 2020	% Change	EMP 2030	% Change	EMP 2035	% Change	EMP 2045
City of Ontario	113,859	9.41	124,571	15.36	143,699	5.86	152,116	11.32	169,331
City of Rancho Cucamonga	88,314	2.63	90,634	6.40	96,434	3.01	99,334	5.84	105,135

Source: SCAG 2020

Land Use

The opportunities for economic revitalization and growth are consistent with (not in addition to) the applicable land use plans, policies, and regulations of agencies with jurisdiction over the proposed Project area, including the City of Rancho Cucamonga and the City of Ontario within San Bernardino County. While the proposed Project would not create any new land uses, some parcels would require either temporary and/or permanent, surface and/or subsurface easements, as described in Section 2.0, Project Description and also discussed in Appendix E. These easements would not be inconsistent with current or future land use plans or incompatible with land uses in the surrounding area. The connection of the Cucamonga Station to ONT would encourage land uses that are not automobile-dependent and would not be as likely to induce automobile trips, which is also consistent with regional and local environmental goals.

Employment

Implementation of the proposed Project would create jobs and earnings as a result of ongoing operations and maintenance (O&M) expenditures. The expansion of transit service represents an expansion of economic activity in the State of California and, thus, generates recurring net economic impacts (long-term).

The estimate of full-time employees and associated earnings projected for the proposed Project are shown in Table 3.17-5 and Table 3.17-6, respectively. This analysis uses Direct Effect Multipliers specifically to generate estimates of the earnings and EMP impacts attributable to O&M activities. The Direct Effect Multipliers consist of the Direct Effect Earnings Multiplier (EEM) and the Direct Effect Employment Multiplier (EMP). The EEM represents the total dollar change in earnings of HH employed by all industries for each additional dollar of earnings paid directly to HH employed by the construction industry. The Direct Effect Employment Multiplier represents the total change in number of jobs in all industries for each additional job in the construction industry.

Table 3.17-5: Net EMP Impacts from Operations and Maintenance Activities

Industry	Direct Effect Multiplier	San Bernardino County	State of California
Transit and Ground Passenger Transportation	Multiplier	15.9872	27.2954
	Additional EMP	543	928
Retail	Multiplier	9.7424	14.9568
	Additional EMP	5	8
Utilities	Multiplier	2.1226	4.4011
	Additional EMP	3	6
Insurance	Multiplier	3.4816	7.6744
	Additional EMP	13	29

Source: SBCTA 2024a.

Table 3.17-6: Net Earnings Impacts from Operations and Maintenance Activities (Millions 2020 $)

Industry	Direct Effect Multiplier	San Bernardino County	State of California
Transit and Ground Passenger Transportation	Multiplier	0.3483	0.7204
	Additional Earnings	$12	$24
Retail	Multiplier	0.387	0.6466
	Additional Earnings	$1	$2
Utilities	Multiplier	0.1778	0.3452
	Additional Earnings	$0.23	$0.44
Insurance	Multiplier	0.2462	0.5193
	Additional Earnings	$1	$2

Source: SBCTA 2024a

The Direct Effect Multipliers were applied to the industries labeled transit and ground passenger transportation, retail, utilities, and insurance. The increased transit EMP would result in positive economic impacts within San Bernardino County and the State of California, both through direct hiring to fill transit jobs and indirectly as these transit workers would spend their earnings within San Bernardino County and the State of California, thus creating additional consumer demand and jobs to meet that demand.

For San Bernardino County, the proposed Project would generate an additional 564 employees, of which 543 of those employees would be employed in the Transit and Ground Passenger Transportation sector. Additional earnings generated from the proposed Project would amount to $14 million, of which $12 million would be derived from O&M activities in the Transit and Ground Passenger Transportation sector.

For the State of California, the proposed Project would generate an additional 971 employees, of which 928 of those employees would be employed in the Transit and Ground Passenger Transportation sector. Additional earnings generated from the proposed Project would amount to approximately $29 million, with $24 million of the earnings also from the Transit and Ground Passenger Transportation sector.

The jobs created from implementation of the proposed Project would not be substantial in the context of job growth in San Bernardino County and the region. Although some of the employees generated by the proposed Project may decide to live in San Bernardino County, the migration of these employees to San Bernardino County is not anticipated to reach a level that would encourage or facilitate economic effects that could result in other activities (such as demand for increased residential and commercial development) that could significantly affect the environment.

Promotion of Population Growth

Population

Implementation of the proposed Project would not result in direct population growth because it does not include the construction of housing units. Potential growth-inducing impacts have been analyzed based

on the proposed Project's consistency with adopted plans that have addressed growth management from a local and regional standpoint.

SCAG provides current and projected population levels in the 2020-2045 Connect SoCal RTP/SCS for the Southern California region, including San Bernardino County. The adopted 2020-2045 Connect SoCal RTP/SCS includes projected population levels in 2030 and 2045, which illustrate growth trends. Table 3.17-7 shows the 2010, 2020, 2022 population and projected 2045 population for the City of Rancho Cucamonga and the City of Ontario, as well as the 2010, 2020, and 2022 populations and the projected 2030 and 2045 populations for San Bernardino County, as depicted in the 2020-2045 Connect SoCal RTP/SCS.

Table 3.17-7: Existing (2022) and Projected Population

Jurisdiction	2010[1]	2020[1]	2022[2]	2030[3]	2045[3]	% Increase 2010–2045
County San Bernardino	2,035,210	2,122,579	2,187,665	2,474,000	3,252,000	59.8
City of Ontario	163,924	180,788	179,516	-	269,100	64.2
City of Rancho Cucamonga	165,269	175,052	174,476	-	201,300	21.8

Source: [1] DOF 2021; [2] DOF 2022; [3] SCAG 2020

As previously discussed, operation of the proposed Project would generate an additional 564 employees in San Bernardino County and an additional 971 employees in the State of California. When compared with the existing and projected population within San Bernardino County (as shown in Table 3.17-7), the potential population increase from the jobs created as a result of the proposed Project would not be substantial in the context of population growth in San Bernardino County and the region. Therefore, the proposed Project would not cause the projected population in the 2020–2045 RTP/SCS to be exceeded, and implementation of the proposed Project would be consistent with adopted plans that have addressed growth management from a local and regional standpoint.

Housing

Table 3.17-8 shows the number of existing and projected households (HH) based on the U.S. Census Bureau American Community Survey 5-Year Estimates and the 2020–2045 RTP/SCS, respectively. As seen in

Table 3.17-8, the number of HH in San Bernardino County is projected to increase by approximately 38.9% between 2020 and 2045. The number of HH in the City of Ontario and the City of Rancho Cucamonga is projected to increase by approximately 62% and 17%, respectively. The City of Ontario's forecasted growth can be partly attributed to the availability of areas for development, such as the Specific Plan areas.

Table 3.17-8: Existing and Projected Households (HH)

Jurisdiction	2016	2030	2035	2045	% Increase, 2020–2045
San Bernardino County	630,000	751,000	793,000	875,000	38.9
City of Ontario	46,000	-	-	74,500	62
City of Rancho Cucamonga	56,800	-	-	66,400	17

Source: SCAG 2020

Table 3.17-9 provides information regarding the types of housing, vacancy rate, and median home price/rent in San Bernardino County, the City of Rancho Cucamonga, and the City of Ontario.

Table 3.17-9: Housing Profile

Jurisdiction	Median Home Price	Median Rent	Vacancy Rate	1-Unit Detached (% of total)	1-Unit Attached (% of total)	2–4 Units (% of total)	5 or more units (% of total)	Mobile Homes (% of total)
San Bernardino County	$348,500	$1,338	1.6	88.4	3.2	92	95	6.6
City of Ontario	$408,000	$1,557	0.9	83.2	7.0	90	97	5.9
City of Rancho Cucamonga	$515,600	$1,855	0.8	84.3	7.1	91	99	4.0

Source: United States Census Bureau (2020), Table B25077 – Median Value (Dollars): Owner-Occupied Housing Units; Ibid. Table B25064 – Median Gross Rent (Dollars); Ibid. Table DP04 – Selected Housing Characteristics; Ibid. Table S2504 – Physical Housing Characteristics for Owner-Occupied Housing Units

As shown in Table 3.17-9, San Bernardino County has a vacancy rate of 1.6%, while the City of Rancho Cucamonga has a vacancy rate of 0.8%, and the City of Ontario has a vacancy rate of 0.9%. As such, available housing stock exists within San Bernardino County, as well as City of Rancho Cucamonga and the City of Ontario to accommodate the potential increase in population. Therefore, the proposed Project would not foster construction of additional housing.

3.17.6.1.2.1 Construction Impacts

As previously described, construction of the proposed Project would not result in any significant direct or indirect growth-inducing impacts. Construction employment generated by the proposed Project would not change population in the San Bernardino County region. According to the State of California Employment Development Department, unemployment for the Riverside-San Bernardino-Ontario Metropolitan Statistical Area is approximately 5.1 percent (March 2024); therefore, given the temporary nature of construction industry jobs, the relatively large regional construction industry, and the total number of construction workers needed during any construction phase, it is likely that the labor force from within the region would be sufficient to complete the majority of project construction without a substantial influx of new workers and their families. Any such relocation within the region would be minimal.

Because the proposed Project would not include any new housing, and because it is likely that the labor force from within the region would be sufficient to complete construction, it is not anticipated to cause a substantial demand for fire or police protection services such that it would require the provision of new or physical altered government facilities (i.e., fire and police stations). Further, construction of the proposed Project would not impact population in the San Bernardino County area that would result in additional demand for schools such that it would result in the need for new or physically altered schools, nor a demand for other public facilities such that it would require the provision of new or physically altered public facilities and services including, but not limited to, libraries, parks, senior centers, hospitals, and childcare services. The proposed Project would not foster economic or population growth that exceeds planned capacities or diminish environmental quality, and impacts related to induced population growth during construction of the proposed Project would be less than significant.

3.17.6.1.2.2 Operational Impacts

As previously described, operation of the proposed Project would not result in any significant direct or indirect growth-inducing impacts. Operational employment generated by the proposed Project would not change population in the San Bernardino County region. Employees for O&M are expected to be drawn from the local labor force and would not induce substantial unplanned population growth. As such, operation of the proposed Project would not impact existing population in the San Bernardino County area that would result in additional demand for new, additional, or physically altered fire and police services and stations, schools, libraries, parks, senior centers, hospitals, and childcare services. The proposed Project would not foster economic or population growth that exceeds planned capacities or diminish environmental quality, and impacts related to induced population growth for operation of the proposed Project would be less than significant.

3.17.7 Mitigation Measures

No mitigation measures are required for the proposed Project.

3.17.8 Impacts After Mitigation

No mitigation measures are required, and the proposed Project would have a less than significant impact.

3.18 Cumulative Impacts

3.18.1 Introduction

This section of this Draft Environmental Impact Report (EIR) provides a summary of the evaluation of the cumulative impacts from the implementation of the proposed Ontario International Airport (ONT) Connector Project (Project). Detailed information for cumulative impacts is included in the Cumulative Impacts Technical Report (SBCTA 2024a; Appendix H). A cumulative impact analysis looks at the collective impacts posed by individual land use plans and projects. Cumulative impacts can result from individually minor to collectively substantial impacts taking place over a period of time. The scale or geographic scope of related projects used for cumulative analysis varies for each impact category.

A cumulative impact analysis is provided only for those thresholds that result in a less than significant, potentially significant, or significant and unavoidable impacts. A cumulative impact analysis is not provided for those thresholds where no impact is identified.

3.18.2 Regulatory Setting

California Environmental Quality Act (CEQA) Guidelines Section 15130 mandates that an EIR discuss the cumulative impacts of a project when the project's incremental effect is cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects, as discussed in CEQA Guidelines Section 15064. When the project's incremental effect is not cumulatively considerable, the effect is not considered significant; however, the basis for concluding that the incremental effect is not cumulatively considerable must be briefly described.

CEQA Section 15126.2(e) also requires an assessment of the ways in which the project could promote economic or population growth in the vicinity of the project. Growth inducement may be said to occur if "the project fosters economic or population growth or the construction of additional housing either directly or indirectly." Projects that remove "obstacles to population growth," or that have characteristics that may "encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively" are included. It is further stated that it must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.

A list of applicable regional and local goals and policies for the cumulative analysis is provided in the following section.

3.18.2.1 Southern California Association of Governments

Southern California Association of Governments (SCAG) is the designated Metropolitan Planning Organization for the six-county region that includes the counties of Los Angeles, Orange, Riverside, San Bernardino, Ventura, and Imperial. The 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) presents the transportation and overall land use vision for the SCAG

six-county region (SCAG 2020). The 2020-2045 RTP/SCS provides a collective long-term vision for the region's future addressing regional issues including transportation, land use and housing, land conservation and habitat restoration, public health, air quality, resiliency and security, and the economy. It provides local agencies in the region with information to guide them in preparing local plans and addressing local issues of regional significance.

3.18.2.2 San Bernardino County

The San Bernardino County General Plan, Transportation and Mobility Element coordinates the transportation and mobility system with future land use patterns and emphasizes the importance of transportation infrastructure that supports mobility that safely connects neighborhoods and communities to key destination Plans (San Bernardino County 2020). The San Bernardino County's General Plan goals and polices may be accomplished by reducing vehicle miles traveled through the implementation of transportation demand management practices and first/last mile strategies to improve connectivity and enhance the viability of public transit throughout San Bernardino County.

3.18.2.3 City of Rancho Cucamonga

The City of Rancho Cucamonga General Plan outlines strategic goals and objectives for short and long-term investments and developments (City of Rancho Cucamonga 2021a). The City of Rancho Cucamonga General Plan, Mobility & Access Element contains the following policies related to cumulative development that is applicable to the proposed Project:

- Policy MA-1.2 addresses redevelopment in and around the Cucamonga Station to support transit-oriented development.
- Policy MA-5.2 prioritizes investments in critical infrastructure and pilot programs to leverage proven new transportation technology.

3.18.2.4 City of Ontario

The City of Ontario General Plan is made up of nine elements: Land Use, Housing, Mobility, Safety (including Noise), Environmental Resources (including Conservation), Parks and Recreation (including Open Space), Community Economics, Community Design, and Social Resources (City of Ontario 2022). The Mobility Element included in the General Plan outlines policies and actions that coordinate the City of Ontario's mobility system with future land use patterns and levels of buildout. Access and connectivity to mobility options shall be integrated into neighborhoods, center, corridors and districts. The placement of housing, jobs, and amenities in closer proximity to each other and design strategies focused on the pedestrian and a variety of multimodal options will make walking and other forms of active transportation a desirable alternative to driving.

3.18.3 Methodology and CEQA Requirements

CEQA Sections 15130(b)(1)(a) and (b) identify the following two methodologies for assessing cumulative impacts: (1) a list of past, present, and probable future projects producing related or cumulative impacts; or (2) a summary of projections contained in an adopted local, regional, or statewide plan, or related planning document that describes or evaluates conditions contributing to the cumulative effect. Such plans may include a general plan, regional transportation plan, or plans for reducing greenhouse gas (GHG) emissions.

There are several steps involved in analyzing cumulative impacts. The initial steps involve analyzing direct and indirect impacts followed by the application of those results to cumulative impacts.

Cumulative impacts refer to two or more individual impacts that, when considered together, are considerable or that compound or increase other environmental impacts. The cumulative impact of several projects is the change in the environment that results from the incremental impact of the project when added to other, closely related past, present, or reasonably foreseeable, probable future projects.

The tentative year of opening for the proposed Project is 2031. Due to the long-term nature of proposed Project implementation, the list of projects analyzed in assessing cumulative impacts is highly speculative. For purposes of this analysis, a good faith attempt has been made to identify relevant possible public works and private projects. However, it was necessary to rely considerably on long-term plans and to make planning-level assumptions about future development.

The approach to the cumulative impacts analysis varies by discipline. Analyses whose cumulative impacts would accrue on a regional basis, such as regional traffic and air quality, are based on applicable planning documents designed to evaluate regional and area-wide conditions and rely on regional projections prepared and adopted by SCAG. For those disciplines where cumulative impacts are more localized (e.g., visual and aesthetic impacts), the analysis also considers specific development projects, which may also have localized impacts, at or adjacent to the proposed Project, that may contribute to cumulative impacts.

In addition, pursuant to CEQA Guidelines Section 15130(a)(1), an EIR should not discuss cumulative impacts that do not result at least in part from the project being evaluated in the EIR. Thus, cumulative impact analysis is not provided for any environmental issue where a project would have no environmental impact, including agriculture and forestry resources, mineral resources, recreation, and wildfire. Analysis of cumulative impacts is, however, provided for all proposed Project impacts that are evaluated within Draft EIR.

3.18.3.1 Cumulative Scenario

For the cumulative scenario, the potential cumulative impacts of the proposed Project are based upon a list of projects identified by the City of Rancho Cucamonga and City of Ontario and neighboring jurisdictions, as well as build-out of the General Plans or other criteria, which is dependent upon the

specific impact being analyzed. To accomplish the evaluation, past, current, and probable future projects with the potential to produce related or cumulative impacts were identified within one mile of the proposed Project and presented in Table 3.18-1 and Figure 3.18-1. Local transportation and development projects along or near the proposed Project alignment were identified through a review of the existing General Plans and Specific Plans for the City of Rancho Cucamonga and the City of Ontario, as well as the California Department of Transportation (Caltrans) Transportation Improvement Program.

3.18.4 Existing Settings

As established in the CEQA Guidelines, related projects consist of "closely related past, present, and reasonably foreseeable probable future projects that would likely result in similar impacts and are located in the same geographic area" (California Code of Regulations [CCR], Title 14, Division 6, Chapter 3, Section 15355).

As discussed in the Cumulative Impacts Technical Report (SBCTA 2024a; Appendix H) prepared for the proposed Project, a cumulative project list was developed for the purposes of this analysis based on the regional plans previously discussed. Cumulative impacts identified for the proposed Project are those impacts that result from past, present, and reasonably foreseeable future actions within the City of Rancho Cucamonga, the City of Ontario, and the surrounding area.

Table 3.18-1 summarizes the related projects in the vicinity of the proposed Project that have the potential to create cumulatively considerable impacts in conjunction with the proposed Project. The approximate locations of the cumulative projects are shown in Figure 3.18-1 Several of the transportation projects listed in Table 3.18-1 are studies of potential projects that are anticipated in the foreseeable future; however, no specific construction periods or anticipated opening years for operations are available.

Table 3.18-1 Related Projects List

No.	Project Name	Project Type	Location (City/Cross Street)	Project Status	Summary
1	West Valley Connector (WVC - Phase 1/Milliken Alignment)	Transportation	Downtown Pomona Metrolink Station to Ontario International Airport and the Rancho Cucamonga Metrolink Station	Planned	Phase I of the project is 19 miles and will upgrade a portion of existing Route 61 which runs along Holt Boulevard, adding approximately 3.5 miles as center-running, dedicated bus-only lanes. There will be 21 stations in Phase 1 that will provide a much-improved transit connection to Ontario International Airport (ONT) and help build transit connectivity by linking ONT, two Metrolink lines (San Bernardino and Riverside), and multiple major activity centers along the route including Ontario Mills and Victoria Gardens. Headways will be 10 minutes in the peak commute period and 15 minutes off-peak, providing a high level of service to the community.
2	South Archibald Avenue Grade Separation (At Mission Boulevard)	Transportation	Ontario/Mission Boulevard and Archibald Avenue	Planned	Construction of grade separation at existing at-grade crossing south of Archibald Avenue and the upper-Los Angeles line. Widening of roadway from two to six lanes.
3	Airport Drive	Transportation	Ontario/Airport Drive from Rochester Avenue to Etiwanda Avenue	Planned	Widening of Airport Drive from two to four lanes from Rochester Avenue to Etiwanda Avenue.
4	Archibald Avenue	Transportation	Ontario/Archibald Avenue and Inland Empire Boulevard	Planned	Widening of Archibald Avenue from four to six lanes between Inland Empire Boulevard and 4th Street.
5	Guasti Road	Transportation	Ontario/Guasti Road and Archibald Avenue	Planned	Widening of Guasti Road from two to four lanes between Holt Boulevard and Archibald Avenue.
6	Turner Avenue	Transportation	Ontario/Turner Avenue and Inland Empire Boulevard	Planned	Spot widening of Turner Avenue from two to four lanes between Inland Empire Boulevard and 4th Street for the southbound lane only.

No.	Project Name	Project Type	Location (City/Cross Street)	Project Status	Summary
7	Holt Boulevard	Transportation	Ontario/Holt Boulevard and South Vineyard Avenue	Planned (2025)	Widening of Holt Boulevard from four to six lanes between Benson Avenue and Vineyard Avenue.
8	Jurupa Street	Transportation	Ontario/Jurupa Street and Turner Avenue	Planned (2025)	Widening of Jurupa Street from two to six lanes between Turner Avenue and Hofer Ranch Road.
9	Vineyard Avenue	Transportation	Ontario/Vineyard Avenue and Interstate 10 (I-10)	Complete (2019)	Widening of Vineyard Avenue from four to six lanes between 4th Street and I-10.
10	Archibald Avenue Bridge	Transportation	Ontario/Archibald Avenue and Upper Deer Creek	Planned (2025)	Widening of four-lane bridge to six lanes on Archibald Avenue that transverses upper Deer Creek.
11	Archibald Avenue Spillway	Transportation	Ontario/Archibald Avenue and Upper Deer Creek Spillway	Planned (2025)	Widening of four-lane bridge to six lanes on Archibald Avenue over upper Deer Creek Spillway.
12	Mission Boulevard Bridge	Transportation	Ontario/Mission Boulevard and Cucamonga Creek	Planned (2025)	Widening of bridge from four to six lanes on Mission Boulevard over Cucamonga Creek.
13	Holt Boulevard Bridge	Transportation	Ontario/Holt Boulevard and Cucamonga Creek	Planned (2025)	Widening of bridge from four to six lanes on Holt Boulevard over Cucamonga Creek.
14	North Vineyard Avenue Grade Separation	Transportation	Ontario/Vineyard Avenue and Airport Drive	Complete (2017)	Grade separated railroad bridge flyover between Holt Boulevard and Airport Drive near the upper railroad Alhambra Line.
15	Widen Arrow Route	Transportation	Arrow Route/Etiwanda	Planned	Widening of roadway from two to four lanes on Arrow Route near the Etiwanda ditch.
16	Meredith International Center	Land Use	Ontario/East 4th Street and Vineyard Avenue	Complete	Amendment to the original 1981 Specific Plan. Intended to reduce the planned development intensity, providing a mixture of industrial, urban commercial, and urban residential land uses to fit the evolving economic profile of the City of Ontario.
17	Guasti Plaza	Land Use	Ontario/Archibald Avenue and Airport Drive	Planned	Guasti Plaza would provide residential units within the residential overlay area in Planning Area 2. The project is a creative reuse of the historic structures of the old Guasti winery and surrounding properties in a location near ONT.

No.	Project Name	Project Type	Location (City/Cross Street)	Project Status	Summary
18	Piemonte Overlay At Ontario Center	Land Use	Ontario/Haven Avenue and 4th Street	Planned	A premier mixed-use neighborhood in the City of Ontario's primary business hub. This site will cater to the changing demographic of the region through quality housing, retail, restaurants, and entertainment. The recent amendment is intended to enhance cohesion, promote urban development, and allow for landscaping to reduce potable water usage.
19	Toyota Business Park	Land Use	Ontario/Jurupa Street and Milliken Avenue	Planned	The project includes the construction of a combination of warehouse and distribution uses with potential office building(s). The larger of the two will be Toyota's North American Parts and Logistics Division building, which will receive bulk auto parts from overseas and North American suppliers, sorted via manual and automated materials handling system, and then distributed to smaller, regional warehouse facilities throughout North America, Hawaii, and the South Pacific. Parts will arrive and be shipped via tractor-trailer trucks with no use of on-site rail transit anticipated. A second, smaller warehouse and distribution facility will be built on the site which will be a regional facility to supply retail Toyota dealers throughout the western United States (U.S.). The warehouse and distribution buildings will also contain related administrative offices.
20	Ontario Together Projects (TCC Grant)	Land Use	Ontario/Euclid Avenue and Mission Boulevard	Planning	The highly competitive Transformative Climate Communities (TCC) Grant was awarded to the City of Ontario in 2018 to support the City of Ontario's plans to create new economic opportunities and improve the health and well-being of residents. The development plan includes modern affordable housing, multimodal transportation, an urban greening program, an expansive rollout of solar energy, a small business incubator, and workforce and career training. The TCC funds are intended to support communities committed to reducing GHG and improving environmental, economic, and health outcomes for their residents.

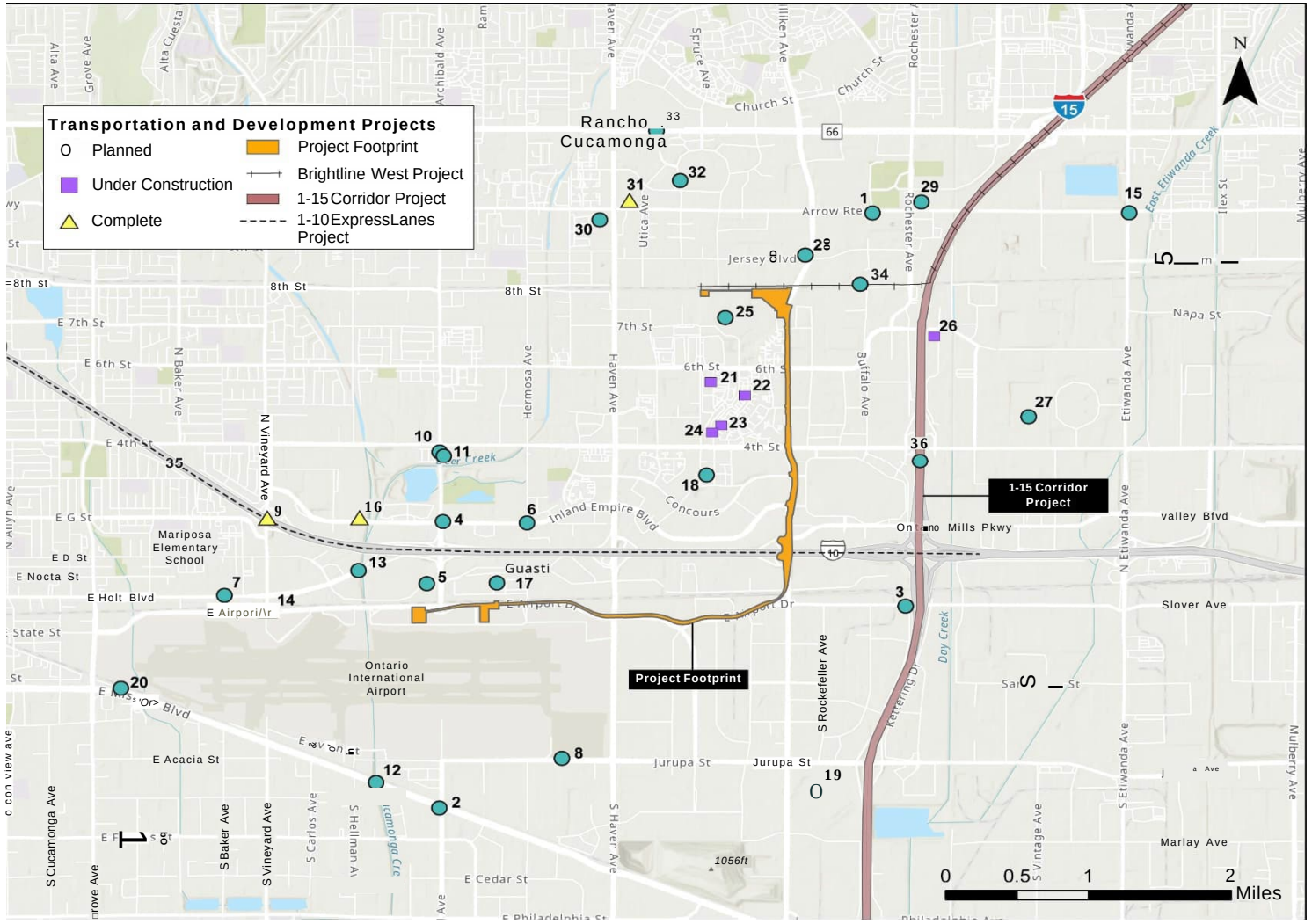
No.	Project Name	Project Type	Location (City/Cross Street)	Project Status	Summary
21	Homecoming At The Resort	Land Use	Rancho Cucamonga/Cleveland Avenue and Sixth Street	Under Construction	Approved development of 867 rental apartments and new home developments on 39.68 acres within the resort located west of Resort Parkway across from the Van Daele and Tempo at the resort.
22	Van Daele	Land Use	Rancho Cucamonga/Retreat Place and Essence Drive	Under Construction	Approved mixed use development consisting of 296 units including bungalows, townhomes, and flats on a property consisting of multiple parcels with a combined area of about 78 acres within the Empire Lakes Specific Plan and Planning Area 1 located north of 4th Street, south of 6th Street, west of Milliken avenue, and east of Utica/Cleveland Avenues. The specific location of the project site is south of 6th Street and east of the future alignment of the Vine.
23	Tempo At The Resort	Land Use	Rancho Cucamonga/The Resort Parkway and 4th Street	Under Construction	Approved development of an 80-unit detached residential condominium within the resort located south of 6th Street and east of Resort Parkway neighboring southwest of the Van Daele.
24	New Home	Land Use	Rancho Cucamonga/The Resort Parkway and 4th Street	Under Construction	Approved proposal of a 135-unit condominium on 5.25 acres within the resort, east of Resort Parkway and north of 4th Street, neighboring southwest of Tempo at the resort.
25	Empire Lakes Specific Plan	Land Use	Rancho Cucamonga/Cleveland Avenue and 8th Street	In Review	Proposed amendment to the current specific plan to address circulation changes and planning areas for the north portion of the resort.
26	Hyssop Drive Building 2	Land Use	Rancho Cucamonga/Hyssop Drive and 6th Street	Under Construction	Approved 23,380-square-foot commercial building on a 1.08-acre lot at 9150 Hyssop Avenue.
27	Bridge Development	Land Use	Rancho Cucamonga/Santa Anita Avenue and 4th Street	Approved Project	Approved redevelopment of an existing project site with two warehouse buildings (buildings 1 and 2) with a combined building area of approximately 2,200,444 square feet located at 12434 4th Street, northern side of 4th Street and west of Etiwanda Avenue.

No.	Project Name	Project Type	Location (City/Cross Street)	Project Status	Summary
28	Jersey And Milliken Warehouse	Land Use	Rancho Cucamonga/Jersey Boulevard and Milliken Avenue	In Review	A request to construct a 159,580-square-foot industrial/warehouse building on a vacant 7.39-acre parcel at the northwestern corner of the intersection of Jersey Boulevard and Milliken Avenue.
29	Arrow And Rochester Industrial	Land Use	Rancho Cucamonga/Arrow Route and Rochester Avenue	In Review	A request to construct a 49,745-square-foot warehouse with office space on a vacant 2.43-acre site, within the neo-industrial district, located at the northeastern corner of the intersection of Rochester Avenue and Arrow Route.
30	Haven + Arrow	Land Use	Rancho Cucamonga/Arrow Route and Haven Avenue	In Review	Proposed mixed-use project including 240 residential units with a commercial ground floor at the southwestern corner of the intersection of Haven Avenue and Arrow Route.
31	Haven City Market	Land Use	Rancho Cucamonga/Haven Avenue and Arrow Route	Complete (2019)	Finalized on March 5, 2019, Haven City Market is an 85,000-square-foot food hall, gourmet market, and retail space with a 20,325-square-foot outdoor patio area located at the northeastern corner of the intersection of Haven Avenue and Arrow Route at 8443 Haven Avenue.
32	Utica Office	Land Use	Rancho Cucamonga/Utica Avenue and Aspen Avenue	Approved Project	Approved proposal to construct a new 13,116-square-foot, two-story office building on vacant land on property addressed 8281 Utica Avenue.
33	33 North	Land Use	Rancho Cucamonga/Haven Avenue and Foothill Boulevard	In Review	A request for a 302-unit mixed-use development that includes 4,600 square feet of retail and 4,050 square feet of live/work retail area located at the southeastern corner of the intersection of Foothill Boulevard and Haven Avenue.

No.	Project Name	Project Type	Location (City/Cross Street)	Project Status	Summary
34	Brightline West	Transportation	Along Interstate 15 (I-15) between Apple Valley and Las Vegas	Proposed (Notice of Intent Period)	Brightline West is proposing to construct a privately funded electric passenger rail system primarily within the existing I-15 corridor right-of-way (ROW) from Apple Valley to the City of Rancho Cucamonga, where a station would be constructed adjacent or connected to the Rancho Cucamonga Metrolink train station (the Cajon Pass segment). This segment is the second of the 170-mile Brightline West electric passenger rail system between Apple Valley and Las Vegas; 135 miles of this project will be in California along I-15.
35	I-10 Corridor Project	Transportation	Along I-10 from the Los Angeles/San Bernardino County line to Ford Street in San Bernardino County	Planned	SBCTA is proposing to improve I-10 by constructing freeway lane(s) and other improvements through all or a portion of the 33-mile-long segment of I-10 from the Los Angeles/San Bernardino County line to Ford Street in San Bernardino County. The project limits, including transition areas, extend from approximately 0.4 miles west of White Avenue in the City of Pomona to Live Oak Canyon Road in the City of Yucaipa. The first phase of this project (County line to I-15) opened in summer of 2024 and the second phase (I-15 to Pepper Avenue in Colton) is expected to start construction in late 2024.
36	I-15 Corridor Project/Express Lanes	Transportation	I-15 between 0.3 miles south of Cantu-Galleano Ranch Road and 1.2 miles north of Duncan Canyon Road	Planned	The San Bernardino County Transportation Authority (SBCTA) and Caltrans propose to construct Express Lanes, including tolled facilities, in both directions of I-15. Construction of the I-15 Corridor Contract 1 Project is scheduled to begin in 2023 and will address the most congested portion of the I-15 corridor, spanning approximately 6 miles from the San Bernardino/Riverside County Line to Foothill Boulevard.

Notes: No. = Number

Figure 3.18-1 Location of Related Projects



Source: SCAG Connect SoCal Project List Technical Report 2020, City of Ontario Specific Plans, Rancho Cucamonga New Development Projects Map.

3.18.5 Impact Evaluation

The cumulative impact analysis below is guided by the requirements of the 2024 CEQA Guidelines Section 15130. As discussed above, cumulative impacts identified for the proposed Project are those impacts that result from past, present, and reasonably foreseeable future projects within San Bernardino County, the City of Rancho Cucamonga, the City of Ontario, and the surrounding area. This section discusses potential impacts to various resources that could occur as a result of implementation of the proposed Project, together with the related projects listed in Table 3.18-1, as applicable.

Though not currently anticipated, if multiple projects are built during the same general time frame, localized construction-related traffic congestion, construction air emissions, and noise impacts would likely increase. SBCTA would work with other lead agencies to ensure that construction from multiple projects in the same vicinity would be managed to avoid or lessen cumulative impacts.

3.18.5.1 Aesthetics

The geographic context for the analysis of cumulative aesthetic impacts is the viewshed from public areas that can view the proposed Project site and locations that can be viewed from the proposed Project site, as represented by the anticipated cumulative development listed in Table 3.18-1.

3.18.5.1.1 Have a substantial adverse effect on a scenic vista?

All future developments within both the City of Rancho Cucamonga and the City of Ontario would be subject to design review and the development guidelines in the City of Rancho Cucamonga's and the City of Ontario's General Plans and Municipal Codes to ensure no significant impact on scenic vistas. The proposed Project, in combination with other projects in the vicinity of the proposed Project, would have the net impact of continuing the development and urbanization of the proposed Project area and, therefore, is not anticipated to result in cumulative impacts significantly or substantially to scenic vistas. Although the San Gabriel Mountains provide an overall panoramic scenic background for the proposed Project area, the scenic mountain views are interrupted by features of typical urban development, and no other scenic resources are present in the proposed Project vicinity. The proposed Project's contribution would not be cumulatively considerable with respect to scenic vistas, and the cumulative impact would be less than significant.

3.18.5.1.2 Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

The proposed Project would have no contribution to cumulative impacts.

3.18.5.1.3 If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality

All development within the City of Rancho Cucamonga and the City of Ontario would be subject to design review and the development guidelines in the City of Rancho Cucamonga and the City of Ontario's General Plans and Municipal Codes to ensure aesthetically pleasing design and visual compatibility with adjacent

uses. Because of these requirements, it is not anticipated that cumulative development would substantially degrade the existing visual character of the City of Rancho Cucamonga and the City of Ontario. The proposed Project would not substantially degrade the existing visual character or quality of the site and its surroundings. Therefore, the proposed Project would not be cumulatively considerable, and the cumulative impact would be less than significant.

3.18.5.1.4 Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

As the City of Rancho Cucamonga and the City of Ontario are developed urban areas, existing light levels are moderate to high from existing structures' interior and exterior lighting, streetlights, and vehicle headlights. Existing glare from building surfaces is also moderate to high in most commercial areas. While residential uses also produce glare from building surfaces, generally these areas are more extensively landscaped, which helps reduce adverse glare impacts in residential neighborhoods. Development of cumulative projects in the City of Rancho Cucamonga and the City of Ontario, which would consist of infill development, would not contribute a substantial increase in light and glare in the City of Rancho Cucamonga and the City of Ontario, particularly because it is reasonably expected that an urban area is subject to moderate to high levels of nighttime lighting. All new developments are subject to the appropriate design review process of the City of Rancho Cucamonga or the City of Ontario and must conform to the requirements in the City of Rancho Cucamonga's and the City of Ontario's General Plans and Municipal Codes. These requirements would ensure that future development projects would not result in significant adverse impacts from light and glare. Compliance with existing policies and regulations would reduce the impacts to a less than significant level. Therefore, the proposed Project would not be cumulatively considerable, and the cumulative impact would be less than significant.

3.18.5.2 Air Quality

The geographic context for cumulative air quality impacts includes the following Source Receptor Areas (SRAs): SRA 23 (Riverside Valley), SRA 32 (Northwest San Bernardino Valley), and SRA 33 (Southwest San Bernardino Valley). The City of Rancho Cucamonga resides in SRA 32, The City of Ontario resides in SRA 33, and portions of the northwest SRA 23 is located within the proposed Project area at the SR-60 and I-215 interchange. Therefore, this analysis accounts for all anticipated cumulative growth within this geographic area. The significance of cumulative air quality impacts is determined according to the project-specific impact methodology recommended by South Coast Air Quality Management District (SCAQMD). With regard to impacts relating to the exposure of sensitive receptors to substantial toxic pollutant concentrations, because these impacts are site-specific and localized, the geographic context for this analysis is the City of Rancho Cucamonga and the City of Ontario. For the purposes of impacts relating to objectionable odors, the geographic context is also considered to be the City of Rancho Cucamonga and the City of Ontario due to the localized nature of odor impacts.

3.18.5.2.1 Conflict with or obstruct implementation of the applicable air quality plan?

The Air Quality Management Plan (AQMP) incorporates land use assumptions from local general plans and regional growth projections developed by SCAQMD to estimate regional stationary and mobile air emissions. If the cumulative projects are individually consistent with the general plan, or are consistent with the regional growth projections, then the cumulative impacts would be accounted for in the AQMP.

Cumulative development could result in a significant impact in terms of conflicting with, or obstructing implementation of, the AQMP. Growth that is considered to be inconsistent with the AQMP could interfere with attainment of federal or State ambient air quality standards because this growth, and programs and standards developed to address the Basin-wide effects of this growth, are not included in the projections used in the formulation of the AQMP. Consequently, as long as growth in the Basin is within the projections for growth identified in the Growth Management chapter of the Regional Comprehensive Plan, implementation of the AQMP would not be obstructed by such growth. Some cities allow projects that exceed their General Plan numbers, which would, therefore, exceed the projected growth in the AQMP and could result in a significant air quality impact.

The proposed Project would support anticipated employment and passenger growth at the ONT. The proposed Project would not result in substantial population growth and would not cause an exceedance of currently established population projections. The proposed Project does not include residential development and would not result in significant population growth. The proposed Project would better serve the growing community in and around the City of Rancho Cucamonga and City of Ontario. As the proposed Project would be consistent with these assumptions, it would also be consistent with the AQMP, and the contribution of the proposed Project to a possible cumulative impact due to conflict with the AQMP would not be cumulatively considerable. Therefore, the cumulative impact of the proposed Project would be considered less than significant.

3.18.5.2.2 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?

As summarized in Table 3.2-8 in Section 3.2 (Air Quality) of this Draft EIR, construction period emissions would have adverse but temporary air quality impacts. However, such impacts do not warrant a hot spot analysis and are not considered significant. As shown in Table 3.2-6, Table 3.2-7 and Table 3.2-8 in Section 3.2 (Air Quality) of this Draft EIR, the maximum construction daily emissions evaluated would not exceed any applicable SCAQMD Regional Thresholds of Significance (RTSs) on a regional level or Localized Significance Thresholds (LSTs) per construction site for each criteria pollutant. Therefore, the proposed Project would not result in significant air quality impacts during operation and construction. Although the proposed Project would not violate air quality standards or result in a cumulatively considerable net increase in ozone (oxides of nitrogen [NOx], as an ozone precursor), particulate matter (PM) sized 10 microns or less in diameter [PM_{10}], and PM sized 2.5 microns or less in diameter [$PM_{2.5}$], MM-AQ-1 would

be implemented during construction to address potential impacts for PM_{10} and $PM_{2.5}$ fugitive emissions and would implement dust control measures to reduce impacts.

Cumulative development would result in a significant impact in terms of violation of an air quality standard or a substantial contribution to an existing or projected air quality violation. SCAQMD recommends that individual projects that exceed the SCAQMD recommended daily thresholds for project-specific impacts be considered to cause a cumulatively considerable increase in emissions for those pollutants for which the Basin is in non-attainment. The construction of the proposed Project would include PM_{10} and $PM_{2.5}$ emissions, and development of the cumulative projects would, in combination with the proposed Project, exceed the same significance thresholds and result in a significant cumulative impact. Therefore, the proposed Project's contribution would be cumulatively considerable, and the cumulative impact would be significant and unavoidable.

3.18.5.2.3 Expose sensitive receptors to substantial pollutant concentrations?

As noted in Table 3.2-7 and Table 3.2-8 in Section 3.2 (Air Quality) of this Draft EIR, overall PM emissions are below RTS and LSTs. Construction equipment, in most cases, are mobile and would move around each construction site throughout the day and over the course of the construction period with less cumulative impact at any one receptor location as compared to stationary sources. In addition, equipment would not be operating all hours of the day or even each day of the construction period, resulting in unlikely substantial pollutant concentrations of any specific sensitive receptor. Due to the temporary and mobile nature of the main source of Toxic Air Contaminant (TAC) emissions, the insignificant PM emissions compared to RTSs and LSTs, it is expected that the proposed Project would not result in substantial cumulative TAC pollutant concentrations at sensitive receptors. Therefore, the proposed Project would not result in substantial cumulative pollutant concentrations at an existing or reasonably foreseeable sensitive receptor, and impacts would be less than significant.

3.18.5.2.4 Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

For this threshold, the relevant geographic area is the City of Rancho Cucamonga and the City of Ontario, as represented by full implementation of the General Plans, and related projects projected to be built including residential, commercial developments, industrial, and restaurants. Odors resulting from the construction of these projects are not likely to affect a substantial number of people, as construction activities do not usually emit offensive odors. Although construction activities occurring in association with the proposed Project could generate airborne odors associated with the operation of construction vehicles (e.g., diesel exhaust) and the application of interior and exterior architectural coatings, these emissions would only occur during daytime hours, would generally be restricted to the immediate vicinity of the construction site and activity, and would not affect a substantial number of people. The operational odor impacts resulting from projects including residential, commercial developments, industrial, and restaurants would not affect a substantial number of people, as activities typically associated with these uses do not emit offensive odors and solid waste from these projects would be stored in special areas and

in containers, as required by the City of Rancho Cucamonga and the City of Ontario, and there is no significant cumulative odor problem. As the proposed Project would not result in objectionable odors affecting a substantial number of people, the cumulative impact would be less than significant.

In addition, although construction activities could generate airborne odors associated with the operation of construction vehicles (i.e., diesel exhaust) and the application of interior and exterior architectural coatings, these emissions would only occur during daytime hours, would generally be restricted to the immediate vicinity of the construction site and activity, and would not affect a substantial number of people. Therefore, this cumulative impact would be less than significant.

3.18.5.3 Biological Resources

Unless otherwise identified, the geographic context for the analysis of cumulative biological impacts includes the "Region" as defined by the southeastern portion of San Bernardino County and northwestern portion of Riverside County. The analysis accounts for all anticipated cumulative growth within this geographic area as represented by full implementation of the San Bernardino County General Plan (2020), the City of Rancho Cucamonga General Plan (2021a), and the City of Ontario General Plan (2022).

The primary impact of the proposed Project, when considered with other projects in the region (as previously defined), would be the cumulative direct loss of open space, vegetation associations important to raptors, loss of sensitive or special-status wildlife species, and regional movement corridors. Specifically, present and probable future projects in the vicinity of the proposed Project are anticipated to permanently remove plant and wildlife resources, which could affect special-status species, nesting habitat for resident and migratory avian species, wildlife movement corridors, and/or local policies or ordinances protecting biological resources.

3.18.5.3.1 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 Wildlife or U.S. Fish and Wildlife Service?

As development in the City of Rancho Cucamonga, the City of Ontario, and the region continues, sensitive wildlife species native to the region and their habitat, including those species identified by state and federal resource agencies as Species of Concern, Fully Protected, or Sensitive, could be lost through conversion of existing open space to urban development. Although more mobile species might be able to survive these changes in their environment by moving to new areas, less mobile species could simply be locally extirpated. With continued conversion of natural habitat to human use, the availability and accessibility of remaining foraging and natural habitats in this ecosystem would dwindle, and those remaining natural areas may not be able to support additional plant or animal populations above their current carrying capacities. Thus, the conversion of plant and wildlife habitat on a regional level as a result of cumulative development would result in a regional significant cumulative impact on special-status species and their habitats.

The Migratory Bird Treaty Act (MBTA) fully protects migratory avian species, including sensitive species such as burrowing owls, during the breeding season by the establishment of a federal prohibition. Unless otherwise permitted by regulations, it is unlawful to "pursue, hunt, take, capture, kill, attempt to take, capture or kill, possess, offer for sale, sell, offer to purchase, purchase, deliver for shipment, ship, cause to be shipped, deliver for transportation, transport, cause to be transported, carry, or cause to be carried by any means whatever, receive for shipment, transportation or carriage, or export, at any time, or in any manner, any migratory bird, included in the terms of this Convention … for the protection of migratory birds … or any part, nest, or egg of any such bird" (16 U.S. Code 703). Therefore, assuming that other development complies with the law established by MBTA, cumulative impacts to nesting migratory birds, including burrowing owls and bats, would be considered less than significant. Further, compliance with the MBTA, including MM-BIO-1, MM-BIO-2, and MM-BIO-3 identified in Section 3.3 (Biological Resources), which requires surveys for nesting MBTA species and burrowing owls and a restriction on construction activities if nests are found during the breeding season, would ensure that the proposed Project's contribution to the cumulative impact would not be cumulatively considerable, and the cumulative impact would be less than significant.

3.18.5.3.2 Have a Substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Similar to the regulations and policies in place with respect to nesting birds, California Fish and Wildlife Code Section 1600 et seq. regulates activities involving watercourses within the State of California. Assuming that other development within the City of Rancho Cucamonga and the City of Ontario complies with Fish and Wildlife Code requirements, cumulative impacts to riparian habitat or vegetation would be considered less than significant. The proposed Project's contribution to cumulative conditions would not be cumulatively considerable by eliminating or minimizing the potential impact to riparian habitat and the cumulative impact would be less than significant.

3.18.5.3.3 Have a substantially 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?

There are no sensitive habitats, such as riparian habitat, wetlands, or other sensitive natural communities identified in local or regional plans, policies, or regulations, or by U.S. Fish and Wildlife Service in the proposed Project area. The proposed Project would not result in any discharge of fill or waste material within any delineated jurisdictional aquatic resources. Construction and operation of future projects may result in a substantial adverse effect on state or federally protected wetlands; however, these planned projects would be subject to separate environmental review and, in an effort to reduce project-related effects, would be required to comply with existing regulations related to biological resources. The proposed Project's contribution to cumulative conditions would not be cumulatively considerable and the cumulative impact would be less than significant.

3.18.5.3.4 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?

There are no major wildlife corridors in the general vicinity of the proposed Project area. However, common migratory bird species (e.g., rock dove, mourning dove) protected under MBTA may use trees in the proposed Project area for nesting and breeding. If construction activities associated with cumulative development projects avoid the breeding season (February through August), there would be no impact to these migratory birds. However, if construction occurs during the breeding season, MM-BIO-1 identified in Section 3.3 (Biological Resources) would reduce the proposed Project impact on migratory birds to a less than significant level. It is assumed that mitigation measures to avoid impacts to migratory birds would be implemented for all cumulative development to ensure consistency with MBTA. Even if construction of the proposed Project occurs during the breeding season, the proposed Project would not contribute cumulatively to impacts on species protected by MBTA with implementation of MM-BIO-1 identified in Section 3.3 (Biological Resources) of this Draft EIR and, as other projects would be required to comply with MBTA, the cumulative impact would also be less than significant.

3.18.5.3.5 Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

The proposed Project would have no contribution to cumulative impacts.

3.18.5.3.6 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 proposed Project would have no cumulative impact related to conflicts with a Habitat Conservation Plan, Natural Community Conservation Plan, or other approved plans.

3.18.5.4 Cultural Resources

The geographic context for the analysis of cumulative cultural impacts varies by threshold. Thus, the geographic context scenarios are presented individually for the various potential cumulative impacts identified in the following analysis. The analysis accounts for all anticipated cumulative development within these geographic areas, as represented by full implementation of the City of Rancho Cucamonga General Plan, the City of Ontario General Plan, and those development projects within these geographic areas listed in

Table .

3.18.5.4.1 Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?

The cumulative study area encompasses areas that contain built-environment historic architectural resources (built resources) that may be directly or indirectly affected by the cumulative condition. This study area is assumed to include built resources that are eligible, or could become eligible, for listing on national, state, and local registers of historic resources in the reasonably foreseeable future.

The cumulative study area has a long history of human occupation. Therefore, the potential exists that built resources are present. In a dense urban area, such as the cumulative study area, continued urbanization and development projected under the cumulative condition could result in removal of or damage to built resources. Impacts on built resources are typically individual in nature and specific to the context of the resource and to the aspects of integrity that contribute to a resource's eligibility for listing in the California Register of Historical Resources or the National Register of Historic Places (California Office of Historic Preservation 2022; United States Department of the Interior 1997). Nevertheless, because their individual significance is unknown until analyzed, potential impacts on cultural resources caused by cumulative projects can collectively contribute to loss of cultural resources. Indirect cumulative noise and vibration impacts on built resources could combine to result in cumulative impacts if the cumulative projects are close enough that noise and vibration generated during construction or operation overlap.

The proposed Project would include the construction of a tunnel, station facilities, ventilation shaft (vent shaft), and the MSF. No built resources that are eligible for listing in the California Register or the National Register have been identified in the Area of Potential Effect. Therefore, construction of the proposed Project would not be cumulatively considerable, and the proposed Project would not contribute to the loss of built resources within the cumulative study area. Proposed Project operations are not expected to impact built resources. Therefore, the proposed Project's contribution would not be cumulatively considerable, and the cumulative impact would be less than significant.

3.18.5.4.2 Cause substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?

Development of projects in the cumulative study area have the potential to result in cumulatively considerable impacts to archaeological resources. Construction of the proposed Project would not impact any known archaeological resources, and the likelihood of uncovering previously unknown archaeological resources during construction would be reduced with implementation of MM-CLT-1 as identified in Section 3.4 (Cultural Resources) of this Draft EIR. Future projects in the cumulative study area would be required to implement mitigation to reduce impacts to archaeological resources. With implementation of MM-CLT-1, construction of the proposed Project would not contribute to the loss of archaeological resources within the cumulative study area. Proposed Project operations are not expected to result in

impacts on archaeological resources. Therefore, the proposed Project would not contribute to cumulative archaeological resource impacts, and the cumulative impact would be less than significant.

3.18.5.4.3 Disturb any human remains, including those interred outside of formal cemeteries?

Projects in the cumulative study area would be required to comply with the provisions of California Health and Safety Code Section 7050.5, as well as California Public Resources Code Section 5097 et seq.; therefore, development projects within the cumulative study area would be required to treat human remains that may be discovered during construction in accordance with required practices. Given the proposed Project's implementation of MM-CLT-2 as identified in Section 3.4 (Cultural Resources) of this Draft EIR, and the other cumulative projects' compliance with required practices, the proposed Project would not contribute to cumulative impacts to unearthed human remains, and the cumulative impact would be less than significant.

3.18.5.5 Energy

The geographic context for evaluation of cumulative energy impacts is the City of Rancho Cucamonga and the City of Ontario. The cumulative context for the analysis of energy use is the service areas of the services providers.

3.18.5.5.1 Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

The geographic area for electricity service is Southern California Edisons's (SCE's) boundaries and for natural gas service is Southern California Gas Company's (SoCalGas's) boundaries. The proposed Project would result in increased services demand for electricity and natural gas. Although the proposed Project would result in a net increase in electricity usage, this increase would not require SCE to expand or construct infrastructure that could cause substantial environmental impacts. The proposed Project, in combination with cumulative development (see Table 3.18-1), is well within SCE's projected system-wide net increase in electricity supplies annually over the 2018 to 2030 period (see Tables 6-1 and 6-2 in the Energy Technical Report [SBCTA 2024b; Appendix I]), and there are sufficient planned electricity supplies in the region for estimated net increases in energy demands.

Similarly, additional natural gas infrastructure is not anticipated due to cumulative development. Total natural gas consumption in SoCalGas' service area in 2020 was 5,232 million therms. Total natural gas consumption in SoCalGas's service area is forecast to remain steady between 2018 and 2035 for the low- and mid-demand scenarios and to increase by approximately 650 million therms in the high-demand scenario due to intense energy-efficiency efforts. The proposed Project's percentage of cumulative consumption of natural gas in the SoCalGas service area would be less than 0.01 percent, assuming the high-demand scenario. It is anticipated that SoCalGas would be able to meet the natural gas demand of the related projects without additional facilities. In addition, both SCE's and SoCalGas' demand forecasts include the growth contemplated by the proposed Project and the related projects. SCE and SoCalGas

plan to continue to provide reliable service to their customers and upgrade their distribution systems as necessary to meet future demand.

As reported in the Transportation Technical Report (SBCTA 2024c; Appendix Q), the proposed Project would result in a reduction of the regional vehicle miles traveled (VMTs) of less than 0.01 percent. However, cumulative transportation energy use would increase due to cumulative area growth. This transportation energy use would not represent a major energy use when compared to the amount of existing development and the total number of vehicle trips and VMT throughout San Bernardino County and the region.

The proposed Project and related projects are required to comply with various federal and State government legislation to improve energy efficiency in buildings, equipment, and appliances and reduce VMT. Increased energy efficiency in compliance with current building energy-efficiency standards reduces energy consumption on a per-square-foot basis when compared to older buildings. In addition, utility companies are required to increase their renewable energy sources to meet the Renewable Portfolio Standards (RPS) mandate of 60 percent renewable supplies by 2030. Further, compliance with the existing regulatory requirements would ensure that the proposed Project would not result in an inefficient, wasteful, and unnecessary consumption of energy. Therefore, the proposed Project's contribution to impacts related to the inefficient, wasteful, and unnecessary consumption of energy would not be cumulatively considerable and the cumulative impact would be less than significant.

3.18.5.5.2 Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

The proposed Project would be required to adhere to, and would be consistent with, all federal, state, and local requirements for energy efficiency, including the Title 24 standards. The Title 24 building energy-efficiency standards establish minimum efficiency standards related to various building features, including appliances, water and space heating and cooling equipment, building insulation and roofing, and lighting, which would reduce energy usage. As such, fuel, electricity, and natural gas demand associated with proposed Project operations would not be considered inefficient, wasteful, or unnecessary in comparison to other similar developments in the region. The proposed Project would be consistent with all applicable plans and policies, and would not conflict with or obstruct a state of local plan for renewable energy or energy efficiency. Therefore, the proposed Project's contribution to impacts related to conflicting with or obstructing a state or local plan for renewable energy or energy efficiency would not be cumulatively considerable and the cumulative impact would be less than significant.

3.18.5.6 Geology and Soils

The geographic context for the analysis of cumulative impacts resulting from geologic hazards is generally site-specific, because each project site has a different set of geologic considerations that would be subject to specific site development and construction standards. Soil and geologic conditions are site-specific, and there is little, if any, cumulative relationship between the proposed Project and other areas in the City of Rancho Cucamonga and the City of Ontario. As such, the potential for cumulative impacts to occur is

geographically limited for many impact explanations; however, variations from a site-specific cumulative context have been identified.

3.18.5.6.1 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? Refer to Division of Mines and Geology Special Publication 42.

As discussed in Section 3.6 (Geology, Soils, Seismicity and Paleontology) of this Draft EIR, the proposed Project would have no contribution to cumulative impacts associated with Alquist-Priolo Earthquake Fault Zones.

3.18.5.6.2 Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking and/or seismic-related ground failure, including liquefaction?

Impacts associated with potential geologic hazards related to ground-shaking, seismic-related ground failure would occur at individual building sites. These impacts are site-specific, and impacts would not be compounded by additional development. The proposed Project and future developments would be required to be designed in accordance with appropriate geotechnical and seismic guidelines and recommendations, consistent with the requirements of the City of Rancho Cucamonga, the City of Ontario, and the State of California. With adherence to existing regulations and implementation of MM-GEO-1 identified in Section 3.6 (Geology, Soils, Seismicity and Paleontology) of this Draft EIR, the proposed Project's contribution would not be cumulatively considerable, and the cumulative impact would be less than significant.

3.18.5.6.3 Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?

Impacts associated with potential geologic hazards related to landslides and/or soil failure occur at individual sites. These impacts are site-specific, and impacts would not be compounded by additional development. Because development in the City of Rancho Cucamonga and the City of Ontario would be required to be sited and designed in accordance with appropriate geotechnical and seismic guidelines and recommendations consistent with the standards of the City of Rancho Cucamonga's and City of Ontario's building codes, the cumulative impact would be less than significant. Adherence to the existing regulations with respect to the proposed Project design and construction would provide adequate levels of safety. Therefore, the proposed Project would not be cumulatively considerable, and the cumulative impact would be less than significant.

3.18.5.6.4 Result in substantial soil erosion or the loss of topsoil?

The impacts from erosion and loss of topsoil from site development and operation can be cumulative in impact within a watershed. The Santa Ana Watershed forms the geographic context of cumulative erosion

impacts. Implementation of the proposed Project would modify soil and topographic conditions at the site to accommodate the construction of the 4.2-mile tunnel, three stations, maintenance facility, and vent shaft and to provide a stable and safe physical environment. The construction phase of the proposed Project could expose soil to erosion by wind or water. Development of other cumulative projects in the vicinity of the proposed Project site could also expose soil surfaces, and further alter soil conditions. To minimize the potential for cumulative impacts that could cause erosion, the proposed Project and cumulative projects in the adjacent area are required to be developed in conformance with the provisions of applicable federal, state, San Bernardino County, the City of Rancho Cucamonga, and the City of Ontario laws and ordinances. As a result, it is anticipated that cumulative impacts on the Santa Ana Watershed caused by runoff and erosion from cumulative development activity would not be significant. The proposed Project's contribution would not be cumulatively considerable, and the cumulative impact would be less than significant.

3.18.5.6.5 Be located on a 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?

The geographic context for analysis of impacts on development from unstable soil conditions including landslides, subsidence, or collapse generally is site-specific. All development located in Seismic Zone 4 and is required to undergo analysis of geological and soil conditions applicable to the proposed Project site (California Building Standards Commission 2019). In addition, restrictions on development would be applied in the event that geological or soil conditions posed a risk to safety. It is anticipated that cumulative impacts from development on soil subject to instability, subsidence, and/or collapse, would be less than significant. With implementation of MM-GEO-3, MM-GEO-4 and MM-GEO-5 identified in Section 3.6 (Geology, Soils, Seismicity and Paleontology) and because the proposed Project would be in compliance with applicable existing regulations, the proposed Project would not be cumulatively considerable. The cumulative impact would be less than significant.

3.18.5.6.6 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?

Impacts associated with potential geologic hazards related to expansive soil would occur at individual building sites. These impacts are site-specific, and impacts would not be compounded by additional development. The proposed Project would be designed in accordance with appropriate geotechnical and seismic guidelines and recommendations, consistent with the requirements of the City of Rancho Cucamonga, the City of Ontario, and the State of California. With adherence to existing regulations and implementation of MM-GEO-6 identified in Section 3.6 (Geology, Soils, Seismicity and Paleontology) of this Draft EIR, the proposed Project's contribution would not be cumulatively considerable, and the cumulative impact would be less than significant.

3.18.5.6.7 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 proposed Project would have no contribution to cumulative impacts associated with septic tanks or alternative wastewater disposal systems.

3.18.5.6.8 Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

As development occurs throughout the cumulative study area, it is possible that damage to paleontological resources could occur. However, as other projects in the cumulative study area are generally subject to environmental review under CEQA, these projects are required to incorporate appropriate mitigation measures to avoid or minimize impacts on paleontological resources. The proposed Project would implement MM-PAL-1 through MM-PAL-4 as identified in Section 3.6 (Geology, Soils, Seismicity and Paleontology) of this Draft EIR. These mitigation measures would reduce the impacts associated with construction of the stations, the cut-and-cover portions of the tunnel, the vent shaft, and the utility relocations on scientifically significant, nonrenewable paleontological resources to a less than significant level. Although mitigation would be implemented during boring activities, impacts to scientifically significant, nonrenewable paleontological resources would remain. MM-PAL-1 through MM-PAL-4 would be implemented to lessen the significant impacts; however, the impact associated with tunnel boring would remain significant and unavoidable. Considered cumulatively with other projects in the region, and even with implementation of MM-PAL-1 through MM-PAL-4, the proposed Project would result in a significant cumulative impact. The incremental impact would be cumulatively considerable, and the cumulative impact would be significant and unavoidable.

3.18.5.7 Greenhouse Gas Emissions

GHG emissions impacts are inherently cumulative, because no single project can cause a discernible change to climate. Climate change impacts are the result of incremental contributions from natural processes, and past and present human-related activities. Therefore, the area in which a project in combination with other past, present, or future projects, could contribute to a significant cumulative climate change impact would not be defined by a geographical boundary, such as a project site or combination of sites. GHG emissions have high atmospheric lifetimes and can travel across the globe over a period of 50 to 100 years or more. Even though the emissions of GHG cannot be defined by a geographic boundary and are effectively part of the global issue of climate change, CEQA places a boundary for the analysis of impacts at the State of California's borders. Thus, the geographic area for analysis of cumulative GHG emissions impacts is the State of California.

3.18.5.7.1 Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

As climate change impacts are cumulative in nature, no typical single project can result in GHG emissions of such a magnitude that it, in and by itself, would be significant on a project basis. As shown in Table 3.7-4, the Project's GHG emissions would not exceed SCAQMD's 3,000 metric tons of carbon dioxide equivalent (MT CO_2e) per year threshold of significance.

As such, the analysis took into account the potential for the proposed Project to contribute to the cumulative impact of global climate change, which includes consideration of the 36 related projects identified in Table 3.18-1. In addition, implementation of the proposed Project's regulatory requirements and project design features, including state mandates, would contribute to GHG reductions, as discussed in Section 3.07 (Greenhouse Gas Emissions) of this Draft EIR. These reductions would support the state's goals for GHG emissions reduction. Therefore, the proposed Project's contribution would not be cumulatively considerable, and the cumulative impact would be less than significant.

3.18.5.7.2 Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

The GHG plan consistency analysis for this proposed Project is based on the proposed Project's consistency with the City of Ontario's General Plan and Community Climate Action Plan, the City of Rancho Cucamonga's General Plan and Climate Action Plan, and SCAG's 2020–2045 RTP/SCS. The 2020–2045 RTP/SCS is a regional growth management strategy that targets per-capita GHG reduction from passenger vehicles and light-duty trucks in the Southern California region. The 2020–2045 RTP/SCS incorporates local land use projections and circulation networks in city and county general plans.

The analysis presented in in Section 3.07 (Greenhouse Gas Emissions) of this Draft EIR shows that the proposed Project is consistent with the City of Ontario's General Plan and Community Climate Action Plan, and the City of Rancho Cucamonga's General Plan and Climate Action Plan. The proposed Project is also consistent with SCAG's 2020–2045 RTP/SCS' regulatory requirements to reduce regional GHG emissions from the land use and transportation sectors by 2035. Given the proposed Project's consistency with statewide, regional, and local plans adopted for the reduction of GHG emissions, the proposed Project's incremental contribution to GHG emissions and their impacts on climate change would not be cumulatively considerable. Therefore, the proposed Project's contribution would not be cumulatively considerable, and the cumulative impact would be less than significant.

3.18.5.8 Hazards and Hazardous Materials

Risks associated with hazardous materials impacts are generally localized and site-specific, with the exception of those resulting from the transportation of hazardous materials. Because these risks are generally site-specific, the cumulative context for this analysis varies, depending on the threshold being analyzed. For example, cumulative impacts associated with the transportation of hazardous materials would be analyzed for projects along the transportation route, while the context for the use of hazardous materials would be limited to the area immediately surrounding the project site. Cumulative impacts associated with the accidental release of hazardous materials into the environment would also be likely limited to the proposed Project and the immediately surrounding properties. Cumulative impacts associated with emergency response would be limited to development in the vicinity of emergency access routes. Cumulative impacts associated with air quality are analyzed in Section 3.18.5.1 (Air Quality).

The geographic context for the analysis of cumulative impacts related to hazardous materials includes the City of Rancho Cucamonga and the City of Ontario. The analysis accounts for all anticipated cumulative growth within this geographic area, which includes the list of related projects within the City of Rancho Cucamonga and the City of Ontario provided in Table 3.18-1.

3.18.5.8.1 Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Cumulative development within the City of Rancho Cucamonga and the City of Ontario would include land uses that could involve the use of greater quantities and varieties of hazardous materials. Hazardous materials use, storage, disposal, and transport could result in spills and accidents. New development in the City of Rancho Cucamonga and the City of Ontario would be subject to hazardous materials regulations codified in CCR Titles 8, 22, and 26. Furthermore, all construction and demolition activities in the City of Rancho Cucamonga and the City of Ontario would be subject to California Occupational Safety and Health Administration, SCAQMD, and California Environmental Protection Agency regulations concerning the release of hazardous materials. Compliance with all state, federal, and local regulations during the construction and operation of new developments in the City of Rancho Cucamonga and the City of Ontario would ensure that cumulative impacts from the routine transportation, use, disposal, or release of hazardous materials would be less than significant. Additionally, because the proposed Project would also be required to comply with applicable statutes and regulations, to ensure that future development of the proposed Project would not result in significant public hazards through the routine transport, use, or disposal of hazardous materials, the proposed Project's contribution would not be cumulatively considerable, and the cumulative impact would be less than significant.

3.18.5.8.2 Create as significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Cumulative projects in the City of Rancho Cucamonga and the City of Ontario could result in construction and operational activities that could potentially involve the release of hazardous materials into the environment. In particular, cumulative development could occur on properties listed on hazardous materials sites or properties previously used for oil production activities, and/or the demolition of existing structures, which may contain hazardous materials. However, the individual workers potentially affected would vary from project to project. For example, if demolition of existing buildings is required, short-term increases in hazardous materials generation due to the potential presence of lead-based paints and asbestos-containing materials could occur. However, as with the proposed Project, related projects would be required to comply with applicable federal, state, and local regulations. Adherence to applicable regulations and guidelines pertaining to abatement of, and protection from, exposure to oil, pesticides, asbestos, lead, and other hazardous materials would ensure that cumulative impacts from those activities would be less than significant. Site-specific investigations would be conducted at sites where contaminated soil could occur to minimize the exposure of workers to hazardous substances.

Compliance with existing regulations and implementation of MM-HAZ-1 identified in Section 3.8 (Hazards and Hazardous Materials) of this Draft EIR would ensure that construction workers and the general public would not be exposed to any unusual or excessive risks related to hazardous materials. Site-specific investigations would be conducted at sites where contaminated soil could occur to minimize the exposure of workers to hazardous substances. Additionally, because the proposed Project would also be required to comply with applicable statutes and regulations, to ensure that the proposed Project would not result in significant public hazards as a result of the accidental release of hazardous materials, the proposed Project's contribution would not be cumulatively considerable, and the cumulative impact would be less than significant.

3.18.5.8.3 Emit hazardous materials or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

The proposed Project would have no contribution to cumulative impacts.

3.18.5.8.4 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?

Future development in the City of Rancho Cucamonga and the City of Ontario may be located on or near a site included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. It is anticipated that future development would comply with applicable laws and regulations pertaining to hazardous wastes, and that risks associated with identified hazardous materials sites would be eliminated or reduced through proper handling, disposal practices, and/or clean-up procedures. In many cases, development applications for projects affected by hazardous materials on identified sites would be denied by the City of Rancho Cucamonga and the City of Ontario if adequate cleanup or treatment is not completed or feasible. The proposed Project's contribution to cumulative impacts associated with development on or near hazardous material sites would not be cumulatively considerable; therefore, the cumulative impact would be less than significant.

3.18.5.8.5 Be 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, result in a safety hazard or excessive noise for people residing or working in the project area?

The proposed Project terminates at ONT, at parking lots for Terminal 2 and Terminal 4. Although all development would be subject to the risks associated with the exposure to safety hazards from aircraft overhead, these risks vary according to location and other various factors and are, therefore, unique. It is also likely that such risk, if sufficiently high, would be a factor in any decision to approve or deny future development proposals pursuant to the various federal, state, and local regulations governing airports. However, the proposed Project has been determined to be a compatible use within the ONT Airport Influence Area, Safety Zones, and Noise Impact Zones. The proposed Project's contribution would not be cumulatively considerable, and the cumulative impact with respect to exposure to safety risks from airport operations would be less than significant.

3.18.5.8.6 Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Construction and operation associated with the related projects and other future development in the City of Rancho Cucamonga, the City of Ontario, and the surrounding area would not interfere with adopted emergency response or evacuation plans. It is anticipated that future development projects would be required to implement measures necessary to mitigate potential impacts. The Local Hazard Mitigation Plan for the City of Rancho Cucamonga and the Hazard Mitigation Plan for the City of Ontario address procedures for large-scale emergency situations, such as natural disasters and technological incidents and not normal day-to-day emergencies (City of Rancho Cucamonga 2021b; City of Ontario 2018). These emergency preparedness documents are for large-scale emergency situations, such as an earthquake that would be applicable to the entire City of Rancho Cucamonga and the City of Ontario, including the proposed Project site. The City of Rancho Cucamonga and the City of Ontario have prepared for such emergencies; as part of standard development procedures, plans would be submitted as appropriate to the City of Rancho Cucamonga and the City of Ontario for review and approval to ensure that all new development has adequate emergency access, including turning radius, in compliance with existing regulations for the City of Rancho Cucamonga and the City of Ontario. Therefore, the cumulative impact would be less than significant.

Construction and operation activities under the proposed Project with respect to emergency response or evacuation plans due to temporary construction barricades or other obstructions that could impede emergency access would be subject to both the City of Rancho Cucamonga and the City of Ontario permitting process, which coordinates with the police and fire departments to ensure that emergency access is maintained at all times. Furthermore, the potential for any increased delays along evacuation routes from the incremental increase in new workers and patrons resulting from implementation of the proposed Project would be considered less than significant. As a result, the cumulative impact would be less than significant.

3.18.5.8.7 Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

The proposed Project would have no contribution to cumulative impacts associated with wildfire.

3.18.5.9 Hydrology and Water Quality

The geographic context for the hydrology and water quality cumulative impact analysis is the Middle Santa Ana River Watershed for water quality impacts, and the limits of the Chino Subbasin of the Santa Ana Valley Groundwater Basin with regard to groundwater quality and recharge impacts.

3.18.5.9.1 Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

During construction activities, all projects within the Middle Santa Ana River Watershed Management Areas would be subject to the requirements of a National Pollutant Discharge Elimination System (NPDES)

permit, the Construction General Permit and the Municipal Stormwater Permit. The Construction General Permit requires that a Stormwater Pollution Prevention Plan (SWPPP) be prepared for any construction project that would disturb more than one acre of land surface and for significant redevelopment projects. Municipal Stormwater Permit conditions are required to be codified in the local agency/municipality codes and ordinances. Potential construction dewatering would be subject to either a General Permit of discharge of low-threat waters or an individual Waste Discharge Requirements (WDR).

Compliance with the requirements of the NPDES permits would necessitate the use of erosion control measures and stormwater pollution prevention best management practices (BMPs) during both construction and operational phases of development projects. These BMPs include erosion and sediment control practices, waste management practices, spill containment and cleanup, water conservation, and other BMPs to reduce potential pollutants in stormwater runoff to the maximum extent practicable. Furthermore, for any pollutant identified as causing or contributing to impairment of the Santa Ana River Watershed, total maximum daily loads (TMDLs) are or would be developed, further restricting the potential for discharge of pollutants in such a manner that would cause or contribute to violation of water quality standards or WDR. Additionally, permittees included as part of the area-wide Municipal Stormwater Permit:

- Are required to conduct inspections of construction sites, industrial facilities, and commercial establishments for compliance with the NPDES Stormwater Permit.
- Shall conduct construction site inspections for compliance with their ordinances (grading, Water Quality Management Plans, etc.), local permits (construction, grading, etc.); inspections shall include a review of erosion control and BMP implementation plans and an evaluation of the effectiveness and maintenance of the BMPs identified.
- Shall enforce their ordinances and permits at all construction sites as necessary to maintain compliance with Water Quality Order Number (No.) 2014-0057-DWQ as amended in 2015 and 2018; and compliance with State Water Resources Control Board (SWRCB) Order No. 2009-009-DWQ, as amended by Order No. 2010-0014-DWQ and Order No. 2012-0006-DWQ; sanctions for noncompliance must include monetary penalties, bonding requirements and/or permit denial or revocation.
- Shall enforce their ordinances and permits at commercial facilities.

Monitoring and reporting programs explicitly required in the area-wide Municipal Stormwater Permit would ensure that the stormwater management program is adequately protecting water quality or would be adjusted to meet water quality protection goals.

With implementation of MM-HWQ-1 identified in Section 3.9 (Hydrology and Water Quality) of this Draft EIR; and compliance with federal, state, and local regulations, the proposed Project would not contribute

considerably to cumulative impacts, and cumulative impacts on water quality standards or WDRs would be less than significant.

3.18.5.9.2 Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

The analysis of cumulative impacts to groundwater includes all cumulative development within this geographic area as allowed by the applicable General Plans for San Bernardino County, the City of Rancho Cucamonga, and the City of Ontario. The proposed Project would not increase the demand for water supplies at the proposed Project site and would not require groundwater resources. In addition, General Plans for San Bernardino County, the City of Rancho Cucamonga, and the City of Ontario would require the adoption of various conservation and alternative supply strategies to ensure that future projects stay within the currently known safe yields of the underlying groundwater basins. Future construction activities would be required to comply with regulatory requirements. The amount of impervious area at the site with implementation of the proposed Project would be reduced, thereby increasing the potential for groundwater recharge. The water demand of the proposed Project would be met with existing supplies as already accounted for in the General Plans for San Bernardino County, the City of Rancho Cucamonga, and the City of Ontario, and would not contribute considerably to cumulative groundwater supply impacts. Therefore, the proposed Project's contribution to groundwater resource impacts would not be cumulatively considerable, and cumulative groundwater resources impacts would be less than significant.

3.18.5.9.3 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 result in substantial erosion or siltation on- or off- site; substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; 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; and/or impede or redirect flood flows?

The geographic context for the analysis of cumulative impacts related to storm drainage is the extensive storm drain system operated by San Bernardino County, City of Rancho Cucamonga, and City of Ontario. As undeveloped land has been converted to urban uses, this conversion has resulted in additional stormwater flows that have exceeded system capacity. In addition, aging infrastructure also reduces capacity and the ability of the system to convey flows without causing street flooding.

Cumulative development within San Bernardino County, the City of Rancho Cucamonga and the City of Ontario could potentially increase the amount of impervious surfaces that could cause or contribute to storm drain system capacity exceedance, alter the existing storm drain system, and require the construction of new or expanded facilities. New development within San Bernardino County, the City of Rancho Cucamonga and the City of Ontario would be subject to the environmental review process that would analyze potential impacts associated with stormwater runoff to the storm drain system, as well as

compliance with current state and local environmental regulations, such as the Construction General Permit and Clean Water Act Section 404 permit process. The proposed Project would be required to obtain necessary approvals from San Bernardino County, the City of Rancho Cucamonga, and the City of Ontario to ensure that allowable capacity flow to the affected storm drains is not exceeded.

Local Municipal Codes incorporate design review requirements that would likely prevent substantial on-site flood effects. However, increased impervious surfaces as a result of cumulative development within the watershed could increase the amount and rate of stormwater runoff that may cause or contribute to downstream flooding. All development within the Middle Santa Ana River Watershed Management Area (WMA) must comply with the requirements of the NPDES permit, and other pertinent local drainage and conveyance ordinances. Related projects are also required to adhere to Water Quality Management Plans that are aimed at increasing the retention of water on site and minimizing runoff. San Bernardino County Flood Control District (SBCFCD) is responsible for operating and maintaining San Bernardino County's major flood control channels and drainage system, including required improvements. Individual municipalities are often charged with maintaining local and tributary flood control systems. The principal functions of SBCFCD are flood protection on major streams, water conservation, and storm drain construction. The Flood Control Permit Section provides relevant permit information and processes encroachment permit applications for work within the SBCFCD's ROW. The section coordinates departmental reviews and issues permits for activities such as construction projects, land use permits, and general encroachment permits within the SBCFCD's ROW. This process allows SBCFCD oversight over drainage and flood control issues within San Bernardino County.

Cumulative growth within the Middle Santa Ana River WMA could cumulatively increase flood flows as more impervious surfaces are created within the watershed. Alterations in area drainage patterns could also alter flood conveyance capacity of existing drainages. This alteration could create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of contaminated runoff. All major development within the area would be subject to environmental review, the SBCFCD permits, the NPDES Program permits, as well as local Municipal Codes and plans.

Compliance with the requirements of the NPDES permits would necessitate the use of erosion control measures and stormwater pollution prevention BMPs during both construction and operational phases of development projects. These BMPs include erosion and sediment control practices, waste management practices, spill containment and cleanup, water conservation, and other BMPs to reduce potential pollutants in stormwater runoff to the maximum extent practicable. Furthermore, for any pollutant identified as causing or contributing to impairment of the Santa Ana River Watershed, TMDLs are or would be developed, further restricting the potential for discharge of pollutants in such a manner that would cause or contribute to violation of water quality standards or WDRs. Additionally, the project would be required to comply with areawide Municipal Stormwater Permit requirements. Monitoring and reporting programs explicitly required in the area-wide Municipal Stormwater Permit would ensure that the

stormwater management program is adequately protecting water quality or would be adjusted to meet water quality protection goals.

Growth within the area could result in addition of potentially polluting industry, new or expanded wastewater treatment facilities, and increased use of recycled water. Development of certain industries within the area could potentially contribute additional pollutants to ground or surface water that may cause or contribute to water quality impacts. However, the types of industries with the potential to cause or contribute to surface or groundwater pollution would have to comply with the Industrial General Permit, which includes preparation of an SWPPP and associated monitoring and reporting program, Spill Prevention and Control Plan, and effluent limitations for some industries. These regulatory requirements would minimize the potential for pollutant transport in stormwater or to groundwater. If monitoring indicates exceedance of effluent limitations or non-compliance with other permit conditions, SWRCB or Regional Water Quality Control Board (RWQCB) issues a cease-and-desist order to prevent potential water quality degradation. Development of industrial uses within the watershed would, therefore, not substantially degrade water quality. The proposed Project would adhere to the aforementioned requirements and would therefore not contribute considerably to waste discharge requirements or water quality standards.

With compliance with applicable federal, state, and local regulations, the proposed Project's contribution would not be cumulatively considerable, and the cumulative impact would be less than significant.

3.18.5.9.4 In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

Flood Hazards

Portions of San Bernardino County include Federal Emergency Management Agency (FEMA) designated 100-year flood hazard area (FEMA 2022). Cumulative growth and development could result in the introduction of new development within flood hazard areas. San Bernardino County, the City of Rancho Cucamonga, and the City of Ontario have regulations and requirements for potential development within flood hazard areas. It is anticipated that applicable state and local regulations would prevent the placement of housing and structures in 100-year flood hazard areas unless flood control improvements are made to reduce the risk from 100-year floods. In addition, it is anticipated that applicable policies related to flooding from the General Plans of each jurisdiction would ensure that development would be protected against potential flood hazards. The proposed Project's contribution would not be cumulatively considerable and the cumulative impact would be considered less than significant.

Dam

A portion of the City of Ontario is located within the dam failure inundation zone for failure of the San Antonio Dam (City of Ontario 2021a). United States Army Corps of Engineers (USACE) regularly inspects and maintains all their facilities, including the San Antonio Dam and Reservoir, as required by National

Dam Inspection Act (Public Law 92-367), which is intended to eliminate or reduce any risks caused by dam failure. If an unlikely event of a dam failure were to occur, including from potential seismic activity, the USACE adopted Emergency Action Plan, San Bernardino County's All Hazard Mitigation Plan, City of Rancho Cucamonga Hazard Mitigation Plan, and City of Ontario Hazard Mitigation Plan would provide adequate warning for evacuation. In addition, San Bernardino County, the City of Rancho Cucamonga, and the City of Ontario General Plan goals and policies set guidance and restrictions for development within a dam inundation zone. As a dam failure is remote, and with existing governing San Bernardino County, City of Rancho Cucamonga, and City of Ontario policies, the proposed Project would not contribute significantly to cumulative impacts, and the potential cumulative impacts associated with dam failure are less than significant.

Cumulative growth and development could result in the introduction of new structures and impervious surfaces that would increase stormwater runoff, which could subsequently lead to increased flood hazards. However, it is anticipated that applicable state and local regulations would prevent the placement of housing and structures in 100-year flood hazard areas unless flood control improvements are made to reduce the risk from 100-year floods. In addition, it is anticipated that applicable policies related to flooding from the General Plans of each jurisdiction would ensure that development would be protected against potential flood hazards. The proposed Project would not contribute considerably to cumulative impacts associated with flood hazards. This cumulative impact would be considered less than significant.

Seiche, Tsunami, or Mudflow

The proposed Project would have no contribution to cumulative impacts to people or structures at the proposed Project site due to a significant risk of loss, injury, or death involving inundation by a seiche, tsunami, or mudflow.

3.18.5.9.5 Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

The proposed Project would have no contribution to cumulative impacts.

3.18.5.10 Land Use and Planning

The cumulative analysis for division of an established community is site-specific and localized and would include the cumulative related projects identified in Table 3.18-1. With regard to conflict with adopted plans and policies, the geographic context for the analysis of cumulative land use and planning impacts includes the City of Rancho Cucamonga and the City of Ontario.

3.18.5.10.1 Physically divide an established community?

This cumulative impact analysis considers development of the proposed Project, in conjunction with other development within the vicinity of the proposed Project site in the City of Rancho Cucamonga and the City of Ontario. Development of cumulative projects would be required to conform to the requirements

of the City of Rancho Cucamonga and the City of Ontario regulations and would be subject to development review. As the proposed Project is mostly underground, generally following the public ROW, development of the proposed Project site in combination with other development in the immediately surrounding area does not have the potential to divide an established community. However, cumulative development would contribute to the creation of a complete neighborhood that would connect with existing residential neighborhoods via a network of pedestrian, bicycle, and vehicle connections. With compliance with the existing policies and MM-TRA-1 identified in Section 3.14 (Transportation and Traffic) and discussed in Section 3.10 (Land Use and Planning) of this Draft EIR, the proposed Project would not be cumulatively considerable and the cumulative impacts would be less than significant.

3.18.5.10.2 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 proposed Project would have no contribution to cumulative impacts.

3.18.5.11 Noise and Vibration

The geographic context for the analysis of cumulative noise impacts depends on the impact being analyzed. For construction impacts, only the immediate area around the proposed Project would be included in the cumulative noise analysis. For operational/roadway-related impacts, the cumulative noise analysis would include future build-out of the City of Rancho Cucamonga General Plan and the City of Ontario General Plan, including existing and future development of cumulative projects within the City of Rancho Cucamonga and the City of Ontario, as well as adjacent communities that would be potentially impacted. Noise is by definition a localized phenomenon, and significantly reduces in magnitude as distance from the source increases. Consequently, only projects and growth due to occur in the City of Rancho Cucamonga and the City of Ontario area would be likely to contribute to cumulative noise impacts.

3.18.5.11.1 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?

Cumulative noise assessment considers development of the proposed Project in combination with ambient growth and other development projects within the vicinity of the proposed Project area. As noise is a localized phenomenon, and drastically reduces in magnitude as distance from the source increases, only projects and ambient growth in the nearby area could combine with the proposed Project to result in cumulative noise impacts.

Development of the proposed Project in combination with future development would result in an increase in construction-related and traffic-related noise. However, all future development would be required to comply with the City of Ontario noise ordinance, which requires construction activities to not occur between the hours of 6:00 p.m. and 7:00 a.m. on weekdays, or between the hours of 8:00 p.m. and 9:00 a.m. on Saturday and Sunday. In addition, the City of Rancho Cucamonga noise ordinance requires construction activities to not occur between the hours of 8:00 p.m. and 7:00 a.m. on weekdays, including

Saturday, or at any time on Sunday or a national holiday. Consequently, in order to achieve a substantial cumulative increase in construction noise levels, more than one source emitting high levels of construction noise would need to be in close proximity to the proposed Project construction. Thus, construction noise levels from the proposed Project would not be cumulatively considerable, and the cumulative noise impacts associated with construction activities would be less than significant.

Cumulative off-site noise impacts would occur primarily as a result of increased traffic on local roadways due to the proposed Project and future development within the proposed Project area. Therefore, cumulative off-site noise impacts have been assessed based on the contribution of the proposed Project traffic volumes on the roadways in the proposed Project vicinity. As discussed in Section 3.11 (Noise and Vibration) of this Draft EIR, the proposed Project is not expected to significantly increase off-site noise levels. Thus, off-site noise impacts from the proposed Project would not combine with future development to become cumulatively considerable, and cumulative noise impacts would be less than significant.

3.18.5.11.2 Generation of excessive ground-borne vibration or ground-borne noise levels?

Cumulative vibration assessment considers development of the proposed Project in combination with ambient growth and other development projects within the vicinity of the proposed Project area. As vibration is a localized phenomenon, and drastically reduces in magnitude as distance from the source increases, only projects and ambient growth in the nearby area could combine with the proposed Project to result in cumulative vibration impacts.

Development of the proposed Project in combination with the related projects would result in an increase in construction-related and traffic-related vibration impacts. However, the City of Ontario Noise Ordinance requires construction activities to not occur between the hours of 6:00 p.m. and 7:00 a.m. on weekdays, or between the hours of 8:00 p.m. and 9:00 a.m. on Saturday and Sunday. In addition, the City of Rancho Cucamonga Noise Ordinance requires construction activities to not occur between the hours of 8:00 p.m. and 7:00 a.m. on weekdays, including Saturday, or at any time on Sunday or a national holiday. Construction vibration is localized in nature and decreases substantially with distance. Consequently, in order to achieve a substantial cumulative increase in construction vibration levels, more than one source emitting high levels of construction vibration would need to be in close proximity to the proposed Project construction. Thus, construction vibration levels and resulting ground-borne noise levels from the proposed Project would not be cumulatively considerable, and cumulative vibration impacts associated with construction activities would be less than significant.

Cumulative off-site vibration impacts would also occur primarily as a result of increased traffic on local roadways due to the proposed Project and future development within the proposed Project area. Therefore, cumulative off-site vibration impacts have been assessed based on the contribution of the proposed Project traffic volumes on the roadways in the proposed Project vicinity. As discussed in Section 3.11 (Noise and Vibration) of this Draft EIR, the proposed Project is not expected to significantly

increase off-site vibration levels and result in ground-borne noise levels. Thus, off-site vibration impacts from the proposed Project would not be cumulatively considerable, and cumulative vibration impacts would be less than significant.

3.18.5.11.3 For a project location within the vicinity of a private airstrip or an airport land use 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 proposed Project terminates at ONT, at parking lots for Terminal 2 and Terminal 4. Although all development would be subject to the risks associated with the exposure to noise from aircraft overhead and airport operations, these risks vary according to location and other various factors, and are, therefore, unique. It is also likely that such risk, if sufficiently high, would be a factor in any decision to approve or deny future development proposals pursuant to the various federal, state, and local regulations governing airports. However, the proposed Project has been determined to be a compatible use within the ONT Noise Impact Zones. The proposed Project's contribution would not be cumulatively considerable, and the cumulative impact with respect to excessive noise level exposure from ONT would be less than significant.

3.18.5.12 Population and Housing

The geographic context for the analysis of cumulative population and housing impacts is the future build out of the City of Rancho Cucamonga General Plan, the City of Ontario General Plan, and the development projects identified in Table 3.18-1. The cumulative impact analysis considers cumulative growth with respect to the population and housing projections.

3.18.5.12.1 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)?

The proposed Project, in combination with other projected growth in the City of Rancho Cucamonga and the City of Ontario, would increase population, employment, and housing in the City of Rancho Cucamonga and the City of Ontario. The cumulative development projects within the City of Rancho Cucamonga and the City of Ontario would include commercial, industrial, office, mixed-use, hotel, and residential developments. If cumulative projects were to induce substantial population growth in the City of Rancho Cucamonga and the City of Ontario that would exceed SCAG and both General Plans' projections, the impact would be significant. The proposed Project is not anticipated to induce substantial population growth in the area, either directly or indirectly. The increase in the number of employees is expected to be proportional to the increase in air passengers at ONT, which could potentially increase ridership during the operation of the proposed Project. However, the proposed Project would accommodate the potential growth that has been identified in the City of Rancho Cucamonga and City of Ontario General Plans, and San Bernardino County Transportation Authority's (formerly known as San Bernardino Associated Governments, or SANBAG) Ontario Airport Rail Access Study, and would not

exceed the planned growth. The proposed Project's contribution would not be cumulatively considerable, and the cumulative impact would be less than significant.

3.18.5.12.2 Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

The proposed Project would have no contribution to cumulative impacts.

3.18.5.13 Public Services and Recreation

The geographic context for the analysis of cumulative impacts to fire and police protection services, schools, libraries, parks, and recreational areas is the City of Rancho Cucamonga and the City of Ontario. The analysis accounts for all anticipated cumulative growth within this geographic area, as represented by full implementation of the City of Rancho Cucamonga General Plan, the City of Ontario General Plan, as well as the related projects identified in Table 3.18-1.

3.18.5.13.1 Result in substantial adverse physical impacts associated with the provision of, or need for, new or physically altered fire protection and emergency response facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for fire protection and emergency response?

As additional development occurs in the City of Rancho Cucamonga and the City of Ontario, there may be an overall increase in the demand for fire protection services, including personnel, equipment, and/or facilities. The provision of adequate fire protection services is of critical importance to both the City of Rancho Cucamonga and the City of Ontario, and funds are allocated to these services during annual monitoring and budgeting processes to ensure that fire protection services are responsive to changes. Staffing levels are evaluated by both Rancho Cucamonga Fire Protection District and City of Ontario Fire Department during the annual budgetary process, and personnel are hired, as needed, to ensure that adequate fire protection services are provided. The cumulative impact, therefore, on fire services in the City of Rancho Cucamonga and in the City of Ontario would be less than significant, as new developments in San Bernardino County, the City of Rancho Cucamonga, and the City of Ontario would result in increased tax revenues that are used, in part, to maintain existing service levels for fire protection services. The incremental impact of the proposed Project on this impact would not be cumulatively considerable, and the cumulative impact on fire protection services would be less than significant.

3.18.5.13.2 Result in substantial adverse physical impacts associated with the provision of, or need for, new or physically altered police protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for police protection?

As additional development occurs in the City of Rancho Cucamonga and the City of Ontario, there may be an overall increase in the demand for police protection services, including personnel, equipment, and/or facilities. The provision of adequate police protection services is of critical importance to both the City of

Rancho Cucamonga and the City of Ontario, and funds are allocated to these services during annual monitoring and budgeting processes to ensure that police protection services are responsive to changes. Funds collected in the form of increased ongoing tax revenues are allocated (in-part) to police protection services. In addition, staffing levels are evaluated by the police departments during the annual budgetary process, and personnel are hired, as needed, to ensure that adequate police protection services are provided. The cumulative impact, therefore, on police services would be less than significant, as new development results in increased tax revenues in San Bernardino County, the City of Rancho Cucamonga, and the City of Ontario that are used, in part, to maintain existing service levels for police protection services. The incremental impact of the proposed Project on this impact would not be cumulatively considerable, and the cumulative impact on police protection services would be less than significant.

3.18.5.13.3 Result in substantial adverse physical impacts associated with the provision of, or need for, new or physically altered school facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for schools and/or result in substantial adverse physical impacts associated with the provision of, or need for, new or physically altered other public facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for other public facilities?

As additional development occurs in the City of Rancho Cucamonga and the City of Ontario, there could be an overall increase in the number of students enrolled in the schools that serve both cities. A potential increase in enrollment resulting from additional development, combined with the existing at-capacity status of existing schools, could require the construction of new schools. Demand for other public facilities is not anticipated as a result of implementation of the proposed Project. Similar to the proposed Project, cumulative projects in the City of Rancho Cucamonga and the City of Ontario would not likely result in impacts to other public facilities opportunities. Development impact fees and land taxes are collected for necessary improvements to the school infrastructure and other public facilities for the City of Rancho Cucamonga and the City of Ontario. Both cities require that developers pay the school districts the prevailing school impact (or development) fees that are subject to such fees. State law has determined that the payment of the school fees reduces a project's impact to less than significant levels. The proposed Project would not be cumulatively considerable and the cumulative impact on educational services would be less than significant.

3.18.5.13.4 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?

Increased demand for recreational facilities is not anticipated as a result of implementation of the proposed Project. Similar to the proposed Project, cumulative projects in the City of Rancho Cucamonga and the City of Ontario would not likely result in impacts to recreational opportunities because new development projects are required to either provide adequate parkland onsite or pay applicable in-lieu

park fees. Because there are mechanisms in place (e.g., the Quimby Act through enforcement of the City's Zoning Ordinance) to ensure that new applicable development provides its fair share of park and recreational opportunities for future residents, the cumulative impact would be less than significant. The proposed Project's contribution would not be cumulatively considerable and would be a less than significant impact.

3.18.5.13.5 Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment and/or result in substantial adverse physical impacts associated with the provision of, or need for, new or physically altered recreational facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for parks?

Future development in the City of Rancho Cucamonga and the City of Ontario could result in construction of recreational facilities that might have an adverse effect on the environment, particularly with regard to air quality and noise during construction. Improvements to existing recreational facilities could also result in adverse environmental impacts. However, with implementation of best management practices and mitigation measures, as well as compliance with the noise ordinances for each City and limitation of construction hours, as contained in the Municipal Code, these impacts would not be considered significant on a cumulative basis. No significant adverse environmental impacts would be anticipated on a cumulative basis with respect to new recreational facilities within both cities and the cumulative impact would be less than significant. The proposed Project's contribution to these cumulative impacts would not be cumulatively considerable and would be less than significant.

3.18.5.14 Transportation and Traffic

This cumulative impact analysis considers development of the proposed Project, in conjunction with the other development in the City of Rancho Cucamonga, the City of Ontario, and neighboring jurisdictions, as listed in Table 3.18-1.

3.18.5.14.1 Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle and pedestrian facilities?

As shown in Table 3.18-1, a total of 36 related development projects have been identified in the vicinity of the proposed Project site for inclusion in the cumulative impact analysis. The related projects comprise a variety of uses, including residential, office, warehouse, and commercial uses.

Similar to the proposed Project, the related projects would be individually responsible for complying with relevant plan, programs, ordinances, and policies addressing the circulation system. Thus, implementation of the proposed Project, together with the related projects, would not create inconsistencies with related plans or policies regarding transit, bicycle, and pedestrian facilities, as the proposed Project would be subject to review by multiple agencies throughout its duration. The related projects primarily propose high-density residential, office, warehouse, and commercial uses in an area with good transit connectivity,

reducing dependence on automobiles and encouraging more active travel modes. Each of the related projects would be individually responsible for providing vehicle and bicycle parking based on City of Ontario and City of Rancho Cucamonga requirements or any applicable specific plan.

As such, the proposed Project's impacts with respect to conflicts with a program, plan, ordinance, or policy addressing the circulation system would not be cumulatively considerable, and the proposed Project's cumulative impacts would be less than significant.

3.18.5.14.2 Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?

A development project would have a cumulative VMT impact if it were deemed inconsistent with SCAG's RTP/SCS, the regional plan to reach state air quality and GHG reduction targets. However, based on the 2024 State CEQA Guidelines, transportation projects that reduce or have no impact on VMT would be in alignment with the RTP/SCS, and therefore would also have no cumulative VMT impact. As evaluated in Section 3.14 (Transportation), the proposed Project would result in a less than significant VMT impact.

The proposed Project would provide a new transportation mode to and from ONT from the Cucamonga Metrolink Station, which would provide a transportation improvement for the study area. This would result in a reduction of vehicle trips, VMT, and GHG emissions.

Improvements to first/last-mile access would encourage a shift from automobiles to other modes of transportation, such as transit and nonmotorized travel. As such, the proposed Project would encourage the use of transit for airport trips, thereby stimulating a mode shift from automobile to transit. In addition, consistent with RTP/SCS goals, the proposed Project encourages a variety of transportation options and is consistent with the RTP/SCS goal of maximizing mobility and accessibility in the region and, therefore, would not result in a cumulatively significant VMT impact. As the proposed Project would not result in a significant VMT impact, it also would not result in a cumulatively significant VMT impact. Therefore, the proposed Project's impacts with respect to VMT would not be cumulatively considerable, and the proposed Project's cumulative impacts would be less than significant.

3.18.5.14.3 Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

A project could contribute to a significant cumulative impact with respect to hazardous geometric design features if the project, in combination with related projects with access points proposed along the same block(s), would result in significant impacts. As discussed in Section 3.14 (Transportation), the proposed stations and maintenance and storage facility would be constructed within existing surface parking lots for the Cucamonga Metrolink Station and Terminals 2 and 4 at ONT and would not substantially increase hazards on the existing circulation network due to any design features or incompatible uses.

In addition, similar to the proposed Project, all of the related projects would be individually responsible for complying with local and regional design requirements addressing potential safety conflicts. Therefore,

the proposed Project's impacts with respect to hazardous geometric design features would not be cumulatively considerable, and the proposed Project's cumulative impacts would be less than significant.

3.18.5.14.4 Result in inadequate emergency access?

With regard to emergency access, the proposed Project would not result in a significant impact. The proposed Project site is located in an established urban area that is well-served by the surrounding roadway network, and multiple routes exist in the area for emergency vehicles and evacuation. Drivers of emergency vehicles normally have a variety of options for avoiding traffic, such as using sirens to clear a path of travel or driving in the lanes of opposing traffic. Similar to the proposed Project, related projects would implement Traffic Management Plans to ensure adequate emergency access is maintained in and around the related project sites throughout all construction activities. Coordination of these plans would ensure construction activities of the concurrent related projects and associated hauling activities are managed in collaboration with one another and the proposed Project.

No policy or procedural changes to an existing risk management plan, emergency response plan, or evacuation plan would be required due to proposed Project implementation. No street widening would be necessary with the proposed Project. As with the proposed Project, related projects would be reviewed by the City of Ontario and the City of Rancho Cucamonga to ensure compliance with applicable county design criteria pertaining to emergency vehicle access, as well as the California Fire Code standards. Furthermore, since modification to emergency access and circulation plans is largely confined to a project site and the immediate surrounding area, a combination of impacts with other related projects that could potentially lead to cumulative impacts is not expected. Therefore, the incremental impact of the proposed Project on this impact would not be cumulatively considerable, and the proposed Project's cumulative emergency access impacts would be less than significant.

3.18.5.15 Tribal Cultural Resources

The geographic context for the analysis of cumulative tribal cultural impacts varies by threshold. Thus, the geographic context scenarios are presented individually for the various potential cumulative impacts identified in the following analysis. The analysis accounts for all anticipated cumulative development within these geographic areas, as represented by full implementation of the City of Rancho Cucamonga General Plan, the City of Ontario General Plan, and the related projects listed in Table 3.18-1.

3.18.5.15.1 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 listed or eligible for listing in the California Register of Historical Resources, a in the local register of historical resources as defined in Public Resources Code Section 5020.1 (k).

The geographic context for the analysis of cumulative impacts to tribal cultural resources is the City of Rancho Cucamonga and the City of Ontario which includes all cumulative growth within the City of Rancho

Cucamonga and the City of Ontario, as represented by full implementation of the General Plans. Development in the City of Rancho Cucamonga and the City of Ontario would require grading and excavation that could potentially affect tribal cultural resources. The cumulative impact of these activities would contribute to the continued loss of subsurface cultural resources if these resources are not protected upon discovery. However, CEQA requirements, the City of Rancho Cucamonga General Plan, and the City of Ontario General Plan protect tribal cultural resources. If subsurface cultural resources are protected upon discovery as required by law, impacts to those resources would be less than significant. MM-TCR-1 identified in Section 3.15 (Tribal Cultural Resources) of this Draft EIR, would be implemented and enforced throughout construction, and the contribution of potential impacts from the proposed Project to the cumulative destruction of tribal cultural resources throughout the City of Rancho Cucamonga and the City of Ontario would be less than significant.

3.18.5.15.2 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 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 Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

The proposed Project would have a significant impact on the environment if it, in combination with other projects, would contribute to a significant cumulative impact related to tribal cultural resources. With implementation of MM-TCR-1 identified in Section 3.15 (Tribal Cultural Resources), the proposed Project would not significantly contribute to cumulative impacts related to tribal cultural resources. In general, the impacts related to tribal cultural resources that would result from the proposed Project would be confined to the proposed Project site; and other projects in the vicinity that could result in impacts related to tribal cultural resources would be subject to similar mitigation requirements. Therefore, the proposed Project, in combination with other past, present, and reasonably probable future projects, would not result in significant cumulative impact on tribal cultural resources and the cumulative impact would be less than significant.

3.18.5.16 Utilities and Service Systems

The geographic context for the City of Rancho Cucamonga and the City of Ontario analysis of cumulative water supply impacts is the area serviced by Cucamonga Valley Water District (CVWD) and area serviced by Ontario Municipal Utilities Company (OMUC), caused by full implementation of the City of Rancho Cucamonga General Plan, the City of Ontario General Plan, and the specific projects identified by Table 3.18-1.

The context for cumulative impacts related to wastewater is the service area of CVWD and the Inland Empire Utilities Agency (IEUA). This context also includes all anticipated cumulative growth represented by full implementation of the City of Rancho Cucamonga General Plan, the City of Ontario General Plan, and the specific projects identified in Table 3.18-1.

The geographic context for the analysis of cumulative solid waste impacts is the area serviced by the Burrtec Waste Industries (Burrtec) and City of Ontario Integrated Waste Department (IWD), the anticipated cumulative growth represented by full implementation of the City of Rancho Cucamonga General Plan, the City of Ontario General Plan, and the specific projects identified in Table 3.18-1.

SBCFCD built a flood control system that collects the City of Rancho Cucamonga and the City of Ontario's runoff and eventually discharges it to the Santa Ana River. Therefore, the areas served by the SBCFCD flood control system are the geographical context for the cumulative impacts to stormwater drainage.

For cumulative impacts related to electricity, is confined to the SCE service area. With regard to natural gas cumulative impacts, the geographic context is the service area of SoCalGas. With regards to telecommunication, the geographic context is the service area of the telecommunication providers. This analysis takes into account the anticipated cumulative growth represented by full implementation of general plans of cities within these geographic areas, full implementation of the City of Rancho Cucamonga General Plan, the City of Ontario General Plan, and the specific projects identified in Table 3.18-1.

3.18.5.16.1 Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

This analysis takes into account the anticipated cumulative growth represented by full implementation of the General Plans of the City of Rancho Cucamonga and the City of Ontario within the different geographic areas, and the specific projects identified in Table 3.18-1. Cumulative impacts for electricity is discussed in Section 3.18.5.5.

Currently, CVWD and OMUC provide water services to the proposed Project area. Development of cumulative projects within CVWD's and OMUC's service areas would demand additional quantities of water, depending on net increases in population, square footage, and intensity of uses. These future projects could contribute to the overall regional water demand. According to the CVWD's 2020 Urban Water Management Plan (UWMP), the CVWD service area future water demands are anticipated to be 73,504-acre feet per year (AFY) by 2045 (CVWD 2021). The OMUC's 2020 UWMP has projected supply of 57,609-AFY by 2045 for their water demand (City of Ontario 2021b). Implementation of the proposed Project would not substantially increase water usage at the proposed Project site. CVWD and OMUC, through their 2020 UWMPs, have indicated that existing facilities can accommodate the additional demand from the proposed Project in addition to future growth assumed in the UWMPs. In addition, the

implementation of conservation measures on a project-specific basis and water shortage contingency plans would further reduce additional water demand. Development of cumulative projects could require new water conveyance facilities and/or require relocation. Future development is required to adhere to the state and local water regulations and policies. Accordingly, the proposed Project would not result in a cumulatively considerable contribution to an impact on water supply. Therefore, the cumulative impact to water supply would be less than significant.

Development of cumulative projects could increase the need for wastewater treatment facilities and/or require relocation. This increase in wastewater treatment facilities would comply with wastewater-related federal, local, and state requirements. Implementation of the proposed Project would not substantially increase wastewater treatment needs at the proposed Project site. The cumulative impact related to relocation and/or the need for additional or expanded wastewater facilities is less than significant, and the proposed Project's contribution would not be cumulatively considerable. The cumulative impact would be less than significant to wastewater impacts.

Development of cumulative projects would comply with stormwater-related federal, local, and state regulations and policies. The existing stormwater drains are adequate to accommodate additional stormwater flows from the implementation of the proposed Project. If new stormwater drainage facilities and/or relocation are required, then they would be required to adhere to existing regulations. The cumulative impact related to the need for additional or expanded stormwater facilities is less than significant, and the proposed Project's contribution would not be cumulatively considerable.

Telecommunication facilities are present within the geographic area surrounding the proposed Project site and would be available to future developments. The cumulative impact related to the supply of telecommunication services and the need for additional or expanded facilities is less than significant, and the proposed Project's contribution would not be cumulatively considerable. This cumulative impact is considered to be less than significant.

With regard to natural gas, development in the geographic area surrounding the proposed Project site would result in continued use of this resource. The area surrounding the proposed Project site is currently served by existing infrastructure that the proposed Project would also use. SoCalGas is a "reactive" utility that would provide natural gas as customers request its services. The proposed Project's contribution would not be cumulatively considerable, and the cumulative impact related to the supply of natural gas and to the need for additional or expanded facilities would be less than significant.

3.18.5.16.2 Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

The geographic context for the City of Rancho Cucamonga and the City of Ontario analysis of cumulative water supply impacts is the area serviced by CVWD and the area serviced by OMUC, caused by full implementation of the City of Rancho Cucamonga General Plan, the City of Ontario General Plan, and the specific projects identified by Table 3.18-1.

Development of cumulative projects within San Bernardino County, the City of Rancho Cucamonga, and the City of Ontario would demand additional quantities of water, depending on net increases in population, square footage, and intensity of uses. Implementation of the proposed Project would not substantially increase water usage at the proposed Project site. The City of Rancho Cucamonga and the City of Ontario conservation programs, and statewide efforts, would increase water supply reliability. Therefore, the City of Rancho Cucamonga and the City of Ontario would have adequate water supply for the proposed Project, and the proposed Project would have a less than significant contribution to cumulative impacts.

3.18.5.16.3 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 context for cumulative impacts related to wastewater is the service areas of CVWD and IEUA. This context also includes all anticipated cumulative growth represented by full implementation of the City of Rancho Cucamonga General Plan, the City of Ontario General Plan, and the specific projects identified by Table 3.18-1.

Development of cumulative projects within San Bernardino County, the City of Rancho Cucamonga, and the City of Ontario service areas would generate additional quantities of wastewater, depending on net increases in population, square footage, and intensification of uses. These projects would contribute to the overall regional demand for wastewater treatment service. The proposed Project's wastewater quality is anticipated to be typical and not exceed any treatment requirements set by RWQCB. Due to the expected minimal wastewater creation during operation, the proposed Project would increase the amount of wastewater transported by the sewer systems by a very small fraction of the total current capacity of the plants. In addition, the City of Rancho Cucamonga and City of Ontario would continue to implement water conservation measures that would result in a decrease in wastewater generation. Therefore, as the plants retain excess capacity, this cumulative impact is considered to be less than significant.

3.18.5.16.4 Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impar the attainment of solid waste reduction goals?

The geographic context for the analysis of cumulative solid waste impacts is the area serviced by Burrtec and the City of Ontario IWD, the anticipated cumulative growth represented by full implementation of the City of Rancho Cucamonga General Plan, the City of Ontario General Plan, and the specific projects identified by Table 3.18-1. Burrtec and IWD provide solid waste collection services for the City of Rancho Cucamonga and the City of Ontario, respectively. West Valley Materials Recovery Facility and the three landfills that serve the proposed Project area would be able to accept all operational and construction waste from the proposed Project site. Section 3.16 (Utilities and Service System) of this Draft EIR, Table 3.16-3, shows that Mid-Valley Landfill, El Sobrante Landfill, and Badlands Landfill have sufficient current and future landfill capacity. The proposed Project would adhere to state and local regulations during

construction activities and the proposed Project would generate minimal solid waste during operation activities. Therefore, the proposed Project would not create demands for solid waste services that exceed the capabilities of the local waste management system. Consequently, cumulative impacts associated with solid waste would be considered less than significant.

3.18.5.16.5 Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

The proposed Project would have no cumulative impacts associated with compliance with federal, state, and local management and reduction statutes and regulations related to solid waste.

4.0 OTHER CEQA CONSIDERATIONS

4.1 EFFECTS DETERMINED NOT TO BE SIGNIFICANT

California Public Resources Code (PRC) Section 21003 (f) states: "...it is the policy of the state that...all persons and public agencies involved in the environmental review process be responsible for carrying out the process in the most efficient, expeditious manner in order to conserve the available financial, governmental, physical, and social resources with the objective that those resources may be better applied toward the mitigation of actual significant effects on the environment." This policy is reflected in the California Environmental Quality Act (CEQA) Guidelines Section 15162.2(a), which states that "a[n] EIR (Environmental Impact Report) shall focus on the significant environmental impacts of the proposed project," and CEQA Guidelines Section 15143 which states that "the EIR shall focus on the significant effects of the environment." CEQA Guidelines Section 15128 requires that an EIR contain a statement briefly indicating the reasons that various possible significant effects of a project were determined not to be significant and were, therefore, not discussed in detail in the EIR.

4.1.1 Agriculture and Forestry Resources

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by California Department of Forestry and Fire Protection (CAL FIRE) regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and forest carbon measurement methodology provided in Forest Protocols adopted by California Air Resources Board. In addition, the most recently adopted General Plans for the City of Rancho Cucamonga and the City of Ontario were reviewed to determine if agricultural resources and designated farmland are present within or adjacent to the proposed Project (City of Ontario 2022a; City of Rancho Cucamonga 2021).

4.1.1.1 Impact Evaluation

4.1.1.1.1 Would the project 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?

4.1.1.1.1.1 No Project Alternative

The No Project Alternative includes planned expansion, improvement projects, and routine maintenance activities for the existing roadway system and transit facilities. The No Project Alternative would not convert any Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural

use. The No Project Alternative would not convert any areas of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance; therefore, no impact would occur.

4.1.1.1.1.2 Proposed Project

With adoption of the recent City of Ontario General Plan, the City of Ontario no longer designates agricultural land uses within the City (City of Ontario 2022a). Therefore, the portion of the proposed Project site within the City of Ontario would not convert Prime Farmland, Unique Farmland, and Farmland of Statewide Importance to nonagricultural uses. As a result, the proposed Project would have no impact on land zones for agricultural uses within the City of Ontario.

The City of Rancho Cucamonga General Plan land use map designates the proposed Project area as Urban and Built-Up Land (City of Rancho Cucamonga 2021). In addition, the California Department of Conservation, Division of Land Resource Protection Farmland Mapping & Monitoring Program designates the proposed Project areas as Urban and Built-Up Land (California Department of Conservation 2018a).

As such, the proposed Project would not convert any Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use. The proposed Project would not convert any areas of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance; therefore, no impact would occur.

4.1.1.1.2 Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?

4.1.1.1.2.1 No Project Alternative

The Williamson Act, also known as California Land Conservation Act of 1965, enables local governments to enter into contracts with private landowners for the purpose of restricting specific parcels of land to agricultural or related open space use. In return, landowners receive property tax assessments which are much lower than normal because they are based upon farming and open space uses as opposed to full market value.

The No Project Alternative includes planned expansion, improvement projects, and routine maintenance activities for the existing roadway system and transit facilities. The No Project Alternative area does not contain any identified agricultural resources. Thus, no parcels within the No Project Alternative are under a Williamson Act contract. Therefore, the No Project Alternative would not conflict with existing zoning for agricultural use or a Williamson Act contract, and no impact would occur.

4.1.1.1.2.2 Proposed Project

As previously stated, the Williamson Act enables local governments to enter into contracts with private landowners for the purpose of restricting specific parcels of land to agricultural or related open space use. In return, landowners receive property tax assessments which are much lower than normal.

As discussed in Section 4.1.1.1.1, there are no identified agricultural resources in the proposed Project area, nor does the proposed Project site contain areas with land use designated for agricultural use. Thus, no parcels within the proposed Project area are under a Williamson Act contract. The proposed Project

would not conflict with existing zoning for agricultural use or a Williamson Act contract; therefore, no impact would occur.

4.1.1.1.3 Would the project 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))?

4.1.1.1.3.1 No Project Alternative

The No Project Alternative includes planned expansion, improvement projects, and routine maintenance activities for the existing roadway system and transit facilities. The No Project Alternative would not convert any forest land or timberland that would fall under the definition of forest land per PRC Section 12220(g) or timberland (as defined by PRC Section 4526) or timberland zoned Timberland Production (as defined by Government Code Section 51104[g]) Therefore, no impact would occur for the No Project Alternative.

4.1.1.1.3.2 Proposed Project

According to the City of Rancho Cucamonga General Plan and the City of Ontario General Plan, the proposed Project area is not zoned for forest land or timberland that would fall under the definition of forest land per PRC Section 12220(g) or timberland (as defined by PRC Section 4526) or timberland zoned Timberland Production (as defined by Government Code Section 51104[g]) (City of Rancho Cucamonga 2021; City of Ontario 2022a). In addition, none of the lands within the proposed Project area are used for timber harvesting. Therefore, the proposed Project would not conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production, and no impact would occur.

4.1.1.1.4 Would the project result in the loss of forest land or conversion of forest land to non-forest use?

4.1.1.1.4.1 No Project Alternative

The No Project Alternative includes planned expansion, improvement projects, and routine maintenance activities for the existing roadway system and transit facilities. The No Project Alternative would not convert any forest land to non-forest use. Moreover, no forest land is located in the No Project Alternative area. Therefore, no impact would occur for the No Project Alternative.

4.1.1.1.4.2 Proposed Project

As discussed in Section 4.1.1.1.3, no forest land is located in the proposed Project area. The proposed Project would not change the existing environment in a manner that would result in the conversion of forest land to other kinds of land uses. Therefore, no impact would occur for the proposed Project.

4.1.1.1.5 Would the project 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?

4.1.1.1.5.1 No Project Alternative

The No Project Alternative does not contain any forestland or farmland. The No Project Alternative would not cause changes in the environment that could result in conversion of farmland or forest land to different uses; therefore, no impact would occur.

4.1.1.1.5.2 Proposed Project

No forestland or farmland is located within the proposed Project area. The proposed Project would not cause changes in the environment that could result in conversion of farmland or forest land to different uses; therefore, no impact would occur.

4.1.2 Mineral Resources

Mineral resources are naturally occurring chemicals, elements, or compounds that are formed from inorganic and organic substances. These resources include bituminous rock, gold, sand, gravel, clay, crushed stone, limestone, diatomite, salt, borate, potash, geothermal, petroleum, and natural gas resources. Construction aggregate, another mineral resource, refers to sand and gravel (natural aggregates) and crushed stone (rock) that are used as Portland-cement-concrete aggregate, asphaltic-concrete aggregate, road base, railroad ballast, riprap, fill and the production of other construction materials. Mineral resources include, oil and natural gas, and commercially viable minerals and aggregate resources, including areas suitable for the drilling for and production of oil and natural gas, and surface mining activities. The Geology, Soils, and Seismicity Technical Report (SBCTA 2024; Appendix J) includes a complete mineral resources analysis within the proposed Project area's associated evaluation of impacts under CEQA.

California Division of Mines and Geology and California State Mining and Geology Board are responsible for administration of a mineral lands inventory process termed classification designation. Areas are classified on the basis of geologic factors without regard to existing land use and land ownership. The areas are categorized into four mineral resource zones (MRZs):

- MRZ-1: An area where adequate information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence;
- MRZ-2: An area where adequate information indicates that significant mineral deposits are present (deposits that are marketable under present technologic and economic conditions or which can be estimated to exist in the foreseeable future, and that contain in excess of 5 million United States dollars [$5 million] worth of aggregate material in 1978 – equivalent dollars), or where it is judged that a high likelihood exists for their presence;

- MRZ-3: An area containing mineral deposits, the significance of which cannot be evaluated; and
- MRZ-4: An area where available information is inadequate for assignment to any other MRZ zone.

Of the four categories, lands classified as MRZ-2 are of the greatest importance. Such areas are underlain by demonstrated mineral resources or are located where geologic data indicate that significant measured or indicated resources are present. MRZ-2 areas are designated by California State Mining and Geology Board as being "regionally significant." In many regions, large portions of the areas classified as MRZ-2 are already committed to various urban uses that limit or prohibit access to underlying resources. As an aid to local planning agencies, classification reports prepared for metropolitan areas also identify MRZ-2 areas that have not been urbanized. These non-urbanized areas, called resource sectors, are areas judged to contain a significant deposit of construction quality aggregate that is available, from a general land use perspective, to meet future needs (50 years) of the region. In other words, areas currently permitted for mining and areas found to have land uses compatible with possible mining are identified as sectors. A MRZ-2 resource sector underlies the proposed Project site.

4.1.2.1 Impact Evaluation

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

4.1.2.1.1.1 No Project Alternative

California State Mining and Geology Board has identified a MRZ-2 resource sector underlying the No Project Alternative area (R.V. and Busch, L.L. 1994). Geological data indicate that a significant amount of Portland cement concrete-grade aggregate is present in the City of Rancho Cucamonga and portions of the City of Ontario. Although areas with potential Portland cement concrete-grade aggregate resources are present, the No Project Alternative area is located in a developed area with urban uses where mining is no longer suitable for mineral resource extraction (City of Rancho Cucamonga 2021). Additionally, under Environmental Resource Policy-5.5 (City of Ontario 2022b), the City of Ontario has prohibited future mining operations where the resource extraction activities are incompatible with existing or proposed land uses. As such, the No Project Alternative would neither directly nor indirectly result in the loss of availability of a known mineral resource that would be of value to the region and residents of the state; therefore, no impact would occur.

4.1.2.1.1.2 Proposed Project

The California State Mining and Geology Board has identified a MRZ-2 resource sector underlying the proposed Project (R.V. and Busch, L.L. 1994). Although areas with potential Portland cement concrete-grade aggregate resources are present in the City of Rancho Cucamonga and portions of the City of Ontario, the proposed Project is located in a developed area with urban uses where mining is no longer suitable for mineral resource extraction (City of Rancho Cucamonga 2021). Additionally, under Environmental Resource Policy-5.5 (City of Ontario 2022b), the City of Ontario has prohibited future

mining operations where the resource extraction activities are incompatible with existing or proposed land uses. As such, the proposed Project would neither directly nor indirectly result in the loss of availability of a known mineral resource that would be of value to the region and residents of the state; therefore, no impact would occur.

4.1.2.1.2 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?

4.1.2.1.2.1 No Project Alternative

As previously discussed, the No Project Alternative overlies a significant amount of Portland cement concrete-grade aggregate. Although mineral resources exist, the City of Rancho Cucamonga and the City of Ontario do not delineate any locally important mineral resource recovery site in their General Plans, Specific Plans, or other land use plans (City of Ontario 2022a; City of Rancho Cucamonga 2021). The No Project Alternative would not result in the loss of availability of a locally important mineral resource recovery site delineated on land use plans; therefore, no impact would occur.

4.1.2.1.2.2 Proposed Project

As previously discussed, the proposed Project overlies a significant amount of Portland cement concrete-grade aggregate. Although mineral resources exist within the proposed Project site, the City of Rancho Cucamonga and the City of Ontario do not delineate any locally important mineral resource recovery site in their General Plans, Specific Plans, or other land use plans (City of Ontario 2022a; City of Rancho Cucamonga 2021). The proposed Project would not result in the loss of availability of a locally important mineral resource recovery site delineated on land use plans; therefore, no impact would occur.

4.1.3 Wildfire

Appendix G of the CEQA Guidelines determines wildfire impacts based on whether a proposed project would occur within or near a State Responsibility Area (SRA) or on land classified as a Very High Fire Hazard Severity Zone (VHFHSZ). Board of Forestry and Fire Protection is a Governor-appointed body within Department of Forestry and Fire Protection, with the mission to lead California in developing policies and programs that serve the public interest in environmentally, economically, and socially sustainable forest and rangeland management and with a fire protection system that protects and serves the people of the state. One of its statutory responsibilities is to provide direction and guidance to CAL FIRE.

CAL FIRE's mission emphasizes the management and protection of California's natural resources, a goal that is accomplished through ongoing assessment and study of the state's natural resources and an extensive CAL FIRE Natural Resource Management Program (CAL Fire 2024). CAL FIRE maintains a database of areas designated as a VHFHSZ. The CAL FIRE database also identifies areas designated as an SRA and a Local Responsibility Area (LRA). PRC Sections 4125 through 4127 define a SRA as lands in which the financial responsibility for preventing and suppressing wildland fire resides within California. A LRA is defined as areas under the jurisdiction of local entities (e.g., cities and counties). Cities and counties are

required by law to adopt a comprehensive General Plan with a safety element. Land use planning incorporates safety element requirements for SRAs and VHFHSZs.

4.1.3.1 Impact Evaluation

4.1.3.1.1 If located in or near SRAs or lands classified as very high fire hazard severity zones, would the Project substantially impair an adopted emergency response plan or emergency evacuation plan?

4.1.3.1.1.1 No Project Alternative

The No Project Alternative area does not include any areas designated as an SRA or land classified as VHFHSZ (CAL FIRE 2022). The No Project Alternative would not substantially impair an adopted emergency response plan or emergency evacuation plan, and no impact would occur.

4.1.3.1.1.2 Proposed Project

The proposed Project is located within a highly urbanized area. The proposed Project area does not include any areas designated as an SRA or land classified as a VHFHSZ (CAL FIRE 2022). While the City of Rancho Cucamonga borders the San Bernardino National Forest, the wildland-urban interface is approximately 2.2 miles north of the proposed Project site (City of Rancho Cucamonga 2021). The City of Ontario does not possess any VHFHSZ or SRAs within its City limits (City of Ontario 2022a). The proposed Project would not substantially impair an adopted emergency response plan or emergency evacuation plan; therefore, no impact would occur.

4.1.3.1.2 If located in or near SRAs or lands classified as very high fire hazard severity zones, 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 wildfire?

4.1.3.1.2.1 No Project Alternative

The No Project Alternative area does not include any areas designated as an SRA or land classified as VHFHSZ (CAL FIRE 2022). As such, the No Project Alternative would not be impacted by wildfire due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose the No Project Alternative area occupants to pollutant concentrations from a wildfire or the uncontrolled spread of wildfire. Therefore, no impact would occur.

4.1.3.1.2.2 Proposed Project

The proposed Project is located within a highly urbanized area. The proposed Project area does not include any areas designated as an SRA or land classified as VHFHSZ (CAL FIRE 2022). While the City of Rancho Cucamonga borders the San Bernardino National Forest, the wildland-urban interface is approximately 2.2 miles north of the proposed Project site (City of Rancho Cucamonga 2021). The proposed Project would not be impacted by wildfire due to slope, prevailing winds, and other factors,

exacerbate wildfire risks, and thereby expose the proposed Project area occupants to pollutant concentrations from a wildfire or the uncontrolled spread of wildfire. Therefore, no impact would occur for the proposed Project.

4.1.3.1.3 If located in or near SRAs or lands classified as very high fire hazard severity zones, 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?

4.1.3.1.3.1 No Project Alternative

The No Project Alternative area does not include any areas designated as an SRA or land classified as VHFHSZ (CAL FIRE 2022). As such, the No Project Alternative would not be impacted by wildfire related to required 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. Therefore, no impact would occur for the No Project Alternative.

4.1.3.1.3.2 Proposed Project

The proposed Project is located within a highly urbanized area. The proposed Project area does not include any areas designated as an SRA or land classified as VHFHSZ (CAL FIRE 2022). While the City of Rancho Cucamonga borders the San Bernardino National Forest, the wildland-urban interface is approximately 2.2 miles north of the proposed Project site (City of Rancho Cucamonga 2021). The City of Ontario does not have any VHFHSZ or SRAs within its city limits (City of Ontario 2022a). The proposed Project would not 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, therefore, no impact would occur.

4.1.3.1.4 If located in or near SRAs or lands classified as very high fire hazard severity zones, 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?

4.1.3.1.4.1 No Project Alternative

The No Project Alternative area does not include any areas designated as an SRA or land classified as VHFHSZ (CAL FIRE 2022). As such, the No Project Alternative would not be impacted by wildfire such that it would 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. Therefore, no impact would occur for the No Project Alternative.

4.1.3.1.4.2 Proposed Project

The proposed Project is located within a highly urbanized area. The area does not include any areas designated as an SRA or land classified as a VHFHSZ (CAL FIRE 2022). While the City of Rancho Cucamonga borders the San Bernardino National Forest, the wildland-urban interface is approximately 2.2 miles north

of the proposed Project site (City of Rancho Cucamonga 2021). The City of Ontario does not have any VHFHSZ or SRAs within its city limits (City of Ontario 2022a). The proposed Project would not expose people or structures to risks associated with post-fire landslides or flooding; therefore, no impact would occur.

4.2 SIGNIFICANT AND UNAVOIDABLE IMPACTS

This section is prepared in accordance with CEQA Guidelines Section 15126.2(b), which requires the discussion of any significant environmental effects that cannot be avoided if a project is implemented. These effects include impacts that can be mitigated but cannot be reduced to a less than significant level. An analysis of environmental impacts caused by the proposed Project has been conducted and is included in Chapter 3 (Environmental Analysis) of this Draft Environmental Impact Report (EIR). According to the environmental impact analysis, there are significant and unavoidable impacts that would remain with the implementation of mitigation measures.

4.2.1 Air Quality

MM-AQ-1 would be implemented during construction to address potential impacts for particulate matter with diameter of 10 microns or less (PM_{10}) and 2.5 microns or less ($PM_{2.5}$) fugitive emissions and would implement dust control measures to reduce impacts. However, the construction of the proposed Project would include PM_{10} and $PM_{2.5}$ emissions, and development of the cumulative projects would, in combination with the proposed Project, exceed the same significance thresholds. Therefore, the proposed Project's contribution would be cumulatively considerable, and the cumulative impact would be significant and unavoidable.

4.2.2 Paleontological Resources

Implementation of MM-PAL-1, MM-PAL-2, MM-PAL-3 and MM-PAL-4 may allow for some recovery of small fossils and some fossil material, if safe access to spoils is available. However, the tunnel boring machine (TBM) used to excavate the tunnel prevents access to the rock face, and produces fragmented material, which precludes the recovery of larger fossils, and limits the amount of contextual information that may be collected for scientific purposes. Additionally, because the locations of potential paleontological resources are unknown, movement of the proposed Project to avoid paleontologically sensitive geologic units, and thus avoid impacts on paleontological resources, is not a viable approach for mitigation. Because mitigation or avoidance is not feasible, impacts to scientifically significant, non-renewable paleontological resources during boring of the tunnel would remain significant and unavoidable.

4.3 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

PRC Section 21100(b)(2)(B) and CEQA Guidelines Section 15126.2(c) require that an EIR analyzes the extent to which the proposed Project's primary and secondary effects would impact the environment and

commit nonrenewable resources to uses that future generations would not be able to reverse. Generally, the proposed Project would result in significant irreversible environmental changes if any of the following would occur:

- The primary and secondary impacts would generally commit future generations to similar uses;
- The proposed Project would involve a large commitment of nonrenewable resources;
- The proposed Project involves uses in which irreversible damage could result from any potential environmental accidents associated with the proposed Project; or
- The proposed consumption of resources is not justified (e.g., the proposed Project involves the wasteful use of energy).

Construction and operation of the proposed Project would result in the use of nonrenewable resources, including fossil fuels; natural gas; water; and building materials, such as concrete. Construction activities would result in the irretrievable commitment of nonrenewable energy resources, primarily in the form of fossil fuels. However, the use of energy for construction activities would be consistent with other construction projects and would not substantially affect the availability of such resources. Operation of the proposed Project would also consume natural resources. However, the consumption of resources for operation would be consistent with other San Bernardino County Transportation Authority public transit operations, would provide a regional transportation benefit, and would not represent a wasteful or unnecessary use of energy.

The proposed Project would result in irreversible environmental changes to existing natural resources, such as the commitment of energy and water resources as a result of operation and maintenance. However, as discussed in Section 3.5 (Energy) and Section 3.16 (Utilities and Service Systems) of this Draft EIR, the amount and rate of consumption of these resources would not result in significant environmental impacts or result in the unnecessary, inefficient, or wasteful use of resources. The proposed Project is not anticipated to consume substantial amounts of energy or use other resources in a wasteful manner; therefore, impacts related to significant and irreversible environmental changes would be less than significant.

4.4 POTENTIAL SECONDARY EFFECTS

CEQA Guidelines Section 15126.4(a)(1)(D) states that, "[i]f a mitigation measure would cause one or more significant effects in addition to those that would be caused by the project as proposed, the effects of the mitigation measures shall be discussed but in less detail than the significant effects of the project as proposed." As identified in Chapter 3 (Environmental Analysis) of this Draft EIR, mitigation measures would be implemented to reduce construction and/or operational impacts of the proposed Project to biological resources, cultural resources, geology, soils, seismicity and paleontological resources, hazards and hazardous materials, hydrology and water quality, noise and vibration, transportation and traffic, and

tribal cultural resources. The following presents an evaluation of the potential secondary effects that could occur as a result of implementation of the required mitigation measures. For the reasons stated in the following subsections, it is concluded that the required mitigation measures would not result in significant secondary impacts.

4.4.1 Air Quality

MM-AQ-1 would implement basic construction emission control practices which includes the use of water trucks to water all exposed surfaces two times daily. Exposed surfaces include, but are not limited to, soil piles, graded areas, unpaved parking areas, staging areas, and access roads. Additionally, wet-power vacuum street sweepers would be used to remove any visible trackout mud or dirt onto adjacent public roads at least once per day. Such practices may result in temporary air quality impacts due to the increase emissions related to vehicular traffic. Additionally watering of exposed surfaces may result in a temporary increase of runoff into the storm drain system and, therefore, increase the likelihood of water quality impacts. However, air quality and water quality impacts would be temporary, therefore; no secondary impacts would occur.

4.4.2 Biological Resources

MM-BIO-1 and MM-BIO-2 would ensure that surveys for Migratory Bird Treaty Act species and other special-status species such as the burrowing owl are performed during the appropriate time of year and, if necessary, buffer zones are established to protect nesting species. Conducting surveys requires vehicle use to transport personnel to the proposed Project site. This use is anticipated to consist of one or two round-trip vehicle trips per survey. The vehicles would use existing roadways and staging locations to access the proposed Project site and perform work. Thus, there would be no impact to transportation, and no other secondary impacts would occur.

MM BIO-3 would require night work lighting to be directed away from any roost in the event construction activities are anticipated within 100 feet of where bat roosting is confirmed. Because construction lighting is temporary, secondary impacts related to aesthetics and visual quality would be less than significant. MM BIO-3 also requires an exclusionary buffer to be established by a qualified biologist should nesting birds be found during the pre-construction bird survey. Per MM BIO-3, this buffer shall be clearly marked in the field by construction personnel under the guidance of the biologist, and construction shall not be conducted in this zone until the biologist determines that the young have fledged or the nest is no longer active. This procedural action would not result in any secondary impacts.

4.4.3 Cultural Resources

MM-CLT-1 would require limited archaeological monitoring (periodic spot-checks) of excavation activities to be conducted by a Registered Archaeologist/Registered Professional Archaeologist. Per MM-CLT-1, in the event previously undocumented archaeological resources are identified during earth-moving

activities, further work in the area shall be halted until the nature and significance of the find can be assessed by the consulting tribes and/or by a Registered Archaeologist/Registered Professional Archaeologist. MM-CLT-2 reflects provisional measures if human remains are discovered on the proposed Project site. Human burials, in addition to being potential archaeological resources, have specific provisions for treatment in PRC Section 5097. Disturbing human remains could violate the Health Code and City of Rancho Cucamonga and City of Ontario policies, as well as destroy the resource. This mitigation measure is a procedural action that would not result in physical changes in the environment that could result in secondary impacts.

4.4.4 Geology, Soils, Seismicity, and Paleontology

MM-GEO-1 and MM-GEO-6 would require the proposed Project design to abide by California Building Code seismic requirements and create a site-specific evaluation of unstable soil conditions. MM-GEO-4 would require the evaluations to be prepared by a registered soil professional. These requirements would be demonstrated to the City of Rancho Cucamonga and the City of Ontario. MM-GEO-1 and MM-GEO-6 would consist of plans and design that would reduce the risk of seismic hazards and would not result in secondary impacts on the environment.

MM-GEO-2 would require shorings for excavations. Because shoring would be temporary in nature during construction of the permanent structure, it would not result in secondary impacts on the environment.

MM-GEO-3 would require a California-licensed Civil Engineer (Geotechnical) to prepare and submit to the San Bernardino County Transportation Authority a detailed soils and geotechnical analysis. This evaluation may require subsurface exploration.

MM-GEO-5 would require that the proposed Project comply with the recommendations of the final soils and geotechnical report. These recommendations shall be implemented in the design of the proposed Project, including but not limited to measures associated with site preparation, fill placement, temporary shoring and permanent dewatering, groundwater seismic design features, excavation stability, foundations, soil stabilization, establishment of deep foundations, concrete slabs and pavements, surface drainage, cement type and corrosion measures, erosion control, shoring and internal bracing, and plan review. Implementation of these recommendations would not result in secondary impacts on the environment.

MM-PAL-1 would require that a qualified paleontologist first determine whether a paleontological resource uncovered during construction meets the definition of a “unique archaeological resource” under PRC Section 21083.2(g). MM-PAL-2 would require the preparation and implementation of a Paleontological Resources Impact Mitigation Plan. MM-PAL-3 and MM-PAL-4 would require construction personnel to be informed of the potential for encountering paleontological resources and the legal framework of cultural resources protection. MM-PAL-1 through MM-PAL-4 would ensure that these procedural actions would not result in secondary impacts on the environment.

4.4.5 Hazards and Hazardous Materials

MM-HAZ-1 would require that a Risk Management Plan be prepared in the event of previously unknown or unidentified soil and/or groundwater contamination. Additional measures would require a site Health and Safety Plan in the event hazardous materials presenting a threat to human health or to the environment are encountered. MM-HAZ-2 would require consultation with the City of Rancho Cucamonga and City of Ontario police departments and fire departments to disclose temporary lane or roadway closures and alternative travel routes. MM-HAZ-1 and MM-HAZ-2 are procedural actions that would not result in physical changes in the environment that could result in secondary impacts.

4.4.6 Hydrology and Water Quality

MM-HWQ-1 would require a dewatering permit to ensure any discharge as a result of the construction of the proposed Project would not violate water quality standards set forth by Santa Ana Regional Water Quality Board. MM-HWQ-2 would require proposed Project design approval from reviewing agencies to account for any Federal Emergency Management Agency-designated 100-year floodplain. MM-HWQ-3 would require the proposed Project to establish an Emergency Operations Plan in response to the unlikely failure of the San Antonio Dam. MM-HWQ-1, MM-HWQ-2, and MM-HWQ-3 consist of plans and design approvals that would ensure the risk of impact to hydrology and water quality would not result in secondary impacts on the environment.

4.4.7 Transportation and Traffic

MM-TRA-1 ensures a Traffic Management Plan would be prepared by SBCTA to facilitate the flow of traffic in and around construction zones and would address any construction-related impacts to transit facilities. Implementation of this plan may result in temporary air quality and noise effects, as well as traffic impacts along the associated roadways during the construction phase of the proposed Project. However, these impacts would be temporary and localized in nature; therefore, no secondary impacts would occur.

4.4.8 Tribal Cultural Resources

In the event that a tribal cultural resource is encountered during construction and excavation activities, MM-TCR-1 would require coordination with the appropriate Native American tribal groups. MM-TCR-1 would also require a qualified archeologist or historian to examine the resource for appropriate protection and preservation. This mitigation measure is a procedural action that would not result in physical changes in the environment that could result in secondary impacts.

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5 ALTERNATIVES CONSIDERED

5.1 INTRODUCTION

This section describes the evaluation process used to identify and compare the proposed Ontario International Airport (ONT) Connector Project (Project) and Project Alternatives assessed in this document. The intent of this evaluation is to demonstrate the relative effectiveness of the proposed Project compared with the No Project Alternative in meeting the proposed Project's stated purpose, need, goals, and objectives, and other evaluation measures.

Section 15126.6 (a) of the California Environmental Quality Act (CEQA) Guidelines states that an Environmental Impact Report (EIR) shall describe a range of reasonable alternatives, which may include alternatives to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project and evaluate comparative merits of the alternatives. The CEQA Guidelines state that an EIR need not consider every conceivable alternative or consider alternatives that are infeasible. The alternatives analysis must include an evaluation of the No Project Alternative in accordance with Section 15126.6 (e) of the CEQA Guidelines to determine the consequences of not implementing the project. Through the identification, evaluation, and comparison of alternatives, the relative advantages and disadvantages of each alternative can be determined.

5.1.1 Project Objectives

As discussed in Chapter 2 (Project Description), the purpose of the proposed Project is to expand access options to ONT by providing a direct transportation connection from Cucamonga Metrolink Station to ONT. This new connection would increase mobility and connectivity for transit patrons, improve access to existing transportation services, provide a connection to future Brightline West service to/from ONT, and the use of clean, emerging technology for transit opportunities between Cucamonga Metrolink Station and ONT. The proposed Project would reduce roadway congestion by encouraging a mode shift to transit from single-occupancy vehicles, provide reliable trips to and from ONT, and support autonomous electric vehicle technology usage for transit projects.

5.1.2 Alternatives Development Process

Based on technical analysis, cost considerations, and public input, San Bernardino County Transportation Authority (SBCTA) has identified and refined the proposed Project based on review and consideration of the four planning studies that were initially prepared to explore possible transit connections to ONT, as shown in Table 5-1. Of the four planning studies, two primary studies evaluated potential transit connections to ONT, the Strategic Planning Report for Los Angeles County Metropolitan Transportation Authority (Metro) Gold Line Foothill Extension (Metro Gold Line Foothill Extension Construction Authority, 2008) and the Ontario Airport Rail Access Study (San Bernardino Associated Governments, 2014).

Table 5-1. Overview of Previous Studies

Study	# of Initial Alternatives	# of Alternatives Evaluated	Description of Recommended Alternatives
Strategic Planning Report for Metro Gold Line Foothill Extension (Metro Gold Line Foothill Extension Construction Authority, 2008)	13	3	Light rail transit extensions from LACMTA Montclair Station via Cucamonga Creek and Vineyard Avenue.
Ontario Airport Rail Access Study (San Bernardino Associated Governments, 2014)	32	2	Light rail transit extension via Cucamonga Creek and Diesel Multiple Unit shuttle from Cucamonga Station via Deer Creek.
Inter-County Transit and Rail Connectivity Study (Southern California Association of Governments, 2018)	38	8	Light rail transit extensions or bus shuttle from LACMTA Montclair Station, Diesel Multiple Unit shuttle or commuter hybrid rail extension from Cucamonga Station.
Hybrid Rail Service Planning Study (San Bernardino County Transportation Authority, 2018)	N/A	N/A	Precluded the possibility of hybrid rail service from Cucamonga Station, opting for shuttle-style service instead.

Note: A chronological summary of the planning studies and its findings is provided in the Project Background and History Report (2023).

The Strategic Planning Report for Metro Gold Line Foothill Extension first studied a direct connection to ONT via a light rail transit (LRT) extension of the Metro Gold Line Foothill Extension to Ontario International Airport system (Metro Gold Line Foothill Extension Construction Authority 2008). Then, as described in Chapter 2, Project Description, the Ontario Airport Rail Access Study (SANBAG 2014) built on the recommendations of the 2008 study and evaluated the feasibility of connecting nearby Metrolink stations to ONT. The need for a public transit connection to ONT had first been expressed by San Gabriel Valley residents and businesses during the public comment period of the Metro Gold Line Foothill Extension to Montclair project (Final EIR released in 2007). Comments received during the scoping meetings in four cities along the corridor, as well as via email, fax, and US mail revealed a desire of the public to extend the Gold Line service to ONT, as well as local entertainment/shopping destinations, and to Cucamonga Metrolink Station. After screening the alternatives and receiving public input, the technical advisory committee consisting of city agencies and regulatory agencies potentially affected by the extension identified 13 alternatives. Ten of the 13 alternatives were eliminated due to a variety of factors such as environmental constraints, right-of-way (ROW) acquisition, local traffic impacts, low-density corridors, limited local travel demand, minimal accessibility, and long travel times. The three remaining alternatives, recommending alignments and desired connections, were carried forward to the 2014 Ontario Airport Rail Access Study.

In addition to the three alternatives from the 2008 report, the 2014 study considered a wider range of modal options for the connection to ONT, including a variety of termini, and options for connecting several nearby Metrolink stations to ONT. Ultimately, the 2014 study considered and evaluated 32 initial alternatives to provide a balanced consideration of public interest; safe and efficient transportation; social

economic and environmental impacts; and national, state, and local environmental protection goals. In support of the initial screening of the proposed alternatives, a purpose and need statement was developed, taking into consideration transportation and mobility problems, environmental, and socio-economic conditions along the corridor. The initial alternatives were then screened to determine whether they met the project purpose and need to "provide a convenient, reliable, and cost-effective transit service connecting ONT with the regional rail system for air travelers and airport employees." These alternatives involved a combination of modes/technologies and alignments, such as commuter rail, light rail, and shuttle bus connections, with the objective of connecting the regional rail system in the airport vicinity to ONT.

The 32 alternatives were divided into four groups based on mode and alignment: stand-alone rail modes, either diesel multiple unit (DMU), or LRT, from nearby Metrolink stations; bus services from nearby Metrolink stations; commuter rail modal options, either DMU or commuter rail service on existing Metrolink tracks and extending DMU or commuter rail guideway to ONT; or LRT extension of the Metro Gold Line from the planned terminus station at Montclair to ONT along various alignments, an alternative retained from the 2008 study. Nine screening criteria were developed based on the defined Purpose and Need and included: walk time to terminals, improving transit travel time to ONT, number of mode transfers, service for peak flight times, ridership potential, capital and operating cost, impact on Metrolink operations, potential for serving immediate activity centers, and potential impact on regional transit. In compliance with 40 Code of Federal Regulations Section 1501.2(b)(3), SBCTA studied and developed courses of action for each of the initial 32 alternatives screened. Six alternatives were identified for further evaluation, including at least one from each modal group. The refined set of alternatives included:

- Alternative A-3: Stand-alone DMU or LRT from Cucamonga Metrolink Station to ONT via Hermosa Avenue (4.6 miles);
- Alternative A-4: Stand-alone DMU or LRT from Cucamonga Metrolink Station to ONT via Deer Creek and Cucamonga Creek (4.8 miles);
- Alternative A-7: Stand-alone DMU or LRT from Upland Station to ONT via Cucamonga Creek (6.7 miles);
- Alternative B-2: Bus shuttle from Cucamonga Metrolink Station to ONT by way of the Ontario Center and Ontario Mills (5.7 miles);
- Alternative C-5: DMU or commuter rail from Redlands Metrolink Station to Cucamonga Metrolink Station and continuing to ONT via Cleveland Avenue (18.4 miles); and
- Alternative D-1: Extension of Metro Gold Line LRT to ONT via Cucamonga Creek (7.7 miles).

After a detailed evaluation of these alternatives considering factors such as system capacity, cost, ridership, cost-effectiveness, travel time, service availability, environmental constraints, impacts on

existing rail, and impacts on planned regional transit, SBCTA concluded that the stand-alone rail mode was the appropriate mode for the connection to ONT.

SBCTA's conclusion that the stand-alone rail mode, represented by Alternative A-3, Alternative A-4, and Alternative A-7, was superior to the other modes considered, based on its determination that a rail connection from Cucamonga Metrolink Station would yield the most substantial improvements in service and convenience for ONT users. Shorter travel time due to an exclusive ROW and the potential for a no-transfer trip to ONT, or at least one from a nearby platform, would best serve passenger needs and attract the most riders according to the long-term future scenario analyzed in the study. The other modes were either deemed inadequate, would not provide any benefit to passengers coming from other directions, be cost prohibitive, not provide enough reliability, or would not encourage a mode shift from single-occupancy vehicles.

The study specifically recommended that Alternative A-4, a stand-alone rail connection from Cucamonga Metrolink Station along Deer Creek and Cucamonga Creek, should be carried forward as the preferred alignment for connecting the regional rail system to ONT.

In 2018, Southern California Association of Governments (SCAG) completed its own Inter-County Transit and Rail Connectivity Study to evaluate transit and rail service connecting the eastern San Gabriel Valley to the western San Bernardino Valley, including connections to ONT (SCAG 2018). Based on alternatives considered, SCAG noted that the previously studied DMU shuttle between Cucamonga Metrolink Station and ONT, and a new conversion of Metrolink service on the San Bernardino Line to hybrid rail service with an additional spur to ONT, would result in the fastest travel times to the airport.

However, a follow-up Hybrid Rail Planning Study by SBCTA found that consistent bidirectional service along the San Bernardino Line was not feasible due to inconsistent Metrolink clock scheduling, and existing infrastructure that includes large segments of a single-track corridor, both of which would reduce reliable service to ONT (SBCTA 2018). The 2018 SCAG and SBCTA studies reaffirmed that service to ONT would need to be provided via a connecting shuttle-style rail service with a transfer at Cucamonga Metrolink Station, as represented by Alternative A-3, Alternative A-4, and Alternative A-7.

Despite identifying stand-alone rail as the appropriate mode for connection to ONT, the 2014 Ontario Airport Rail Access Study also concluded that the cost of rail could not be justified, given expected near-term air passenger growth at the airport, with alternatives estimated to cost between (in United States dollars [$]) $620 million (M) to $1 billion (B) in capital costs. Following the release of a Request for Proposal (RFP) for the preparation of an alternatives analysis to assess a range of alternatives connecting regional rail service to ONT, an unsolicited proposal for delivery of a high-speed, underground (tunnel), public transportation system using electric vehicles to meet the project objectives was received by SBCTA in 2020 (SBCTA 2020). SBCTA considered this alternative as viable because of the reduced cost and timeline. Alternatives recommendations from the planning studies resulted in further evaluation by SBCTA of Alternatives A-3, A-4, B--2, and the tunnel alternative.

After review of the tunnel proposal, SBCTA concluded that a tunnel option connecting Cucamonga Metrolink Station and ONT represents a superior mode to the previously preferred stand-alone rail mode, and that a tunnel connection would provide the best fixed-guideway solution to meet long-term project objectives at significantly reduced costs and reduced environmental impacts. Reduced environmental impacts include eliminating potential conflicts with vehicular and pedestrian crossings, eliminating the need to use bells and horns, eliminating potential ROW needs where grade separations would be required, and reducing congestion around regionally important destinations such as Ontario Mills shopping mall. A tunnel system utilizing an on-demand, autonomous transit network of vehicles maximizes air traveler convenience and meets current capacity requirements with ability to accommodate higher peak-hour capacities in the future. Further, while the Metrolink DMU or LRT alternatives from the City of Rancho Cucamonga were considered plausible alternatives, the capacity of such a rail system would exceed projected ridership to the extent that such a service would no longer be feasible, and the cost of constructing it would not be justified.

After internal analysis and discussion regarding the viability of the tunnel alternative as a turnkey project, along with input from Ontario International Airport Authority (OIAA) and industry stakeholders, the SBCTA board voted on September 20, 2020, to cancel the RFP for the AA (RFP Number 20-1002369) and proceed with the tunnel alternative. In early 2021, a series of station design charrettes were conducted with the proposed Project stakeholders to gather input on conceptual station footprints and locations in consideration of existing utilities and other structures, access constraints and plans for future developments (SBCTA 2021). The meetings garnered consensus among local stakeholders, agencies, and partners regarding the scope of the proposed Project. In addition, SBCTA along with the City of Rancho Cucamonga, the City of Ontario, OIAA, Federal Aviation Administration, and California Department of Transportation conducted community outreach activities and held a virtual public meeting regarding the tunnel alternative during the summer of 2022.

The proposed Project reflects the latest design refinements as of February 2024, while the plans included in the appendix show designs from an earlier planning phase concept. The updated plans required additional analysis, which revealed the need for relocating the ventilation shaft (vent shaft) to avoid impacts to City of Ontario water reservoirs, as well as updates to the ONT Terminal stations.

5.2 ALTERNATIVES CONSIDERED BUT WITHDRAWN FROM FURTHER CONSIDERATION

CEQA Guidelines Section 15126.6(f)(2) requires examination of an alternative location for a project if such locations would result in the avoidance of or lessening of significant impacts. Under CEQA, an alternative may be eliminated for any of the following reasons:

- The alternative fails to meet most of the basic project objectives;
- The alternative is infeasible;
- The alternative does not avoid significant environmental impacts; and/or

- The alternative's implementation is remote and speculative, and its effects cannot be reasonably ascertained.

Further, CEQA Section 15126.6(f)(1) allows other factors to be taken into account when addressing the feasibility of alternatives such as site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, and jurisdictional boundaries.

As mentioned previously, several transit alternatives that could connect to ONT have been evaluated, screened, and refined since 2008 (SBCTA, 2023a). The screening process evaluated the project alternatives based on their capacity to achieve the project objectives. No weighting was applied to the results of the screening evaluation as each objective was given equal consideration. SBCTA evaluated the four alternatives in equal detail (albeit more detail compared to the 32 alternatives in the Rail Access Study (SANBAG 2014), which were eliminated due to fatal flaws) to determine fatal flaws of all four alternatives. The additional details for these alternatives resulted in a more focused evaluation of alternatives. The resulting evaluation demonstrated how each project alternative compares to the project objectives with an overall high, medium, or low rating.

Based on technical analysis, cost considerations, and public input, previous alternatives have been considered but eliminated from further consideration as part of this Project (see Table 5-2).

As previously described, the 2014 Ontario Airport Rail Access Study determined that the stand-alone rail mode, as represented by Alternative A-3, Alternative A-4, and Alternative A-7 which provided stand-alone DMU or LRT from either Cucamonga Metrolink Station or Upland Station, would yield the most substantial improvements in service and convenience for ONT users. Shorter travel time due to an exclusive ROW and the potential for a no-transfer trip to ONT, or at least one from a nearby platform, would best serve passenger needs and attract the most riders according to the long-term future scenarios. The 2018 SCAG Inter-County Transit and Rail Connectivity Study and follow-up SBCTA Hybrid Rail Planning Study supported that service to ONT would need to be provided via a connecting shuttle-style rail service with a transfer at Cucamonga Metrolink Station. Table 5-2 provides a comparison of the alternatives considered. A discussion of the environmental constraints of alternatives considered is provided in Section 5.3.2.

Table 5-2. Alternatives Previously Considered

Alternative	Meets Purpose and Need? [1]	Meets Screening Criteria?[2]	Feasibility/Prudence	Environmental Concerns	Estimated Capital Cost (Millions)
Alternative A-3: Stand-alone Diesel Multiple Unit or Zero-Emission Multiple Unit from the Cucamonga Station to ONT via Hermosa Avenue	Yes	Yes	Capacity of rail system exceeds projected ridership	Potential at-grade conflicts including reductions in roadway capacity and impacts to intersection(s) with poor level of service (LOS)	$618-$727[3] $976 - $1,017[6]
Alternative A-4: Stand-alone Diesel Multiple Unit or Zero-Emission Multiple Unit service from the Cucamonga Station to ONT via Deer Creek and Cucamonga Creek	Yes	Yes	Capacity of rail system exceeds projected ridership	ROW acquisition in Environmental Justice (EJ) communities, impacts to flood control facilities	$663-$776 [3] $989-$1,019[6]
Alternative A-7: Stand-alone Diesel Multiple Unit or Zero-Emission Multiple Unit from the Upland Station to ONT via Cucamonga Creek	No	Yes	Capacity of rail system exceeds projected ridership	Conflicts with active freight service along rail spur, and potential at-grade conflicts at Fourth Street	$629-$735[3]
Alternative B-2: Bus shuttle from the Cucamonga Station to ONT by way of the Ontario Center and Ontario Mills	Does not provide sufficient reliability or convenience	Low ridership potential, minimally improves transit travel time to ONT	Short-term solution that does not meet long-term ridership projections or project objectives	Potential impacts to intersection(s) with poor LOS, increased greenhouse gas emissions	$2M-$4[3] $6.1[6]
Alternative C-5 Diesel Multiple Unit or commuter rail from Redlands Metrolink Station to Cucamonga Station and continuing to ONT via Cleveland Avenue	Yes	High capital and Operation and Maintenance costs	Higher cost of construction and operations for similar level of service as Rancho Cucamonga connections (A-3, A-4, A-7)	ROW acquisition in EJ communities	$854-1,004[3]

Alternative	Meets Purpose and Need? [1]	Meets Screening Criteria?[2]	Feasibility/Prudence	Environmental Concerns	Estimated Capital Cost (Millions)
Alternative D-1: Extension of LA Metro Gold Line light rail transit to ONT via Cucamonga Creek	No	High Operation and Maintenance cost, potential impact to Metrolink operations	Higher cost than local ONT service while only serving passengers traveling from the west	ROW acquisition in EJ communities, impacts to flood control facilities	$636-741[3]
2008 Gold Line Extension of LA Metro Gold Line light rail transit to ONT via Vineyard and Holt Avenues	No	High Operation and Maintenance cost, potential impact to Metrolink operations	Higher cost than local ONT service while only serving passengers traveling from the west	Potential impacts to intersection(s) with poor LOS, ROW acquisition in EJ communities	N/A
2008 Gold Line Extension of LA Metro Gold Line light rail transit to ONT via Baldwin Branch	No	High Operation and Maintenance cost, potential impact to Metrolink operations	Higher cost than local ONT service while only serving passengers traveling from the west	Conflict with new Baldwin Park Branch bike trail and potential noise and vibration impacts in EJ communities	$400[4]
Southern California Association of Governments 2018 Metrolink service along San Bernardino Line with additional spur to ONT	Yes	High Operation and Maintenance cost, potential impact to Metrolink operations	Existing single-track infrastructure prevents reliable service to ONT without significant siding or double-track improvements	ROW acquisition in EJ communities, impacts to flood control facilities with additional spur to ONT	$881[5]
Metrolink Zero-Emission Multiple Unit service from LA Union Station via the Alhambra Subdivision	No	High Operation and Maintenance cost, potential impact to Metrolink operations	Higher cost than local ONT service while only serving passengers traveling from the west	Potential impacts to intersection(s) with poor LOS, visual impacts to designated historic districts	>$776

Notes:

1 Reflects updated Purpose and Need which includes providing a direct connection from the Cucamonga Metrolink Station to ONT.

2 Screening criteria as defined in the 2014 Ontario Airport Rail Access Study.

3 Cost estimates prepared by HDR as part of the 2014 Ontario Airport Rail Access Study.

4 Cost estimate prepared by KOA Corporation as part of the 2008 Gold Line Foothill Extension Study.

5 Cost estimate prepared by Mott MacDonald as part of the 2018 Hybrid Rail Planning Study.

6 Estimated capital costs were derived from the 2014 Ontario Airport Rail Access Study.

System Capacity

System capacity is the capacity in transit operation. System capacity is measured as the maximum number of passengers that can be carried past a single point on a fixed route. The operating capacity for a double-track DMU or LRT is between 2,808 passengers to 4,860 passengers per hour (Metro 2022). SBCTA estimates that a peak passenger throughput of 300 people per hour is required for the proposed Project (SBCTA 2022a). The capacity of the rail systems greatly exceeds the required specifications of the proposed Project. Therefore, investment in a high-capacity rail system is not justified.

Capital, Operations, and Maintenance Costs

Rail alternatives are estimated to have high capital and operations costs. Capital costs include the total costs of all capital improvements which typically include construction of guideways, stations, maintenance facilities, control centers, utility relocations, ROW acquisitions, vehicles, and street improvements. The 2014 Ontario Airport Rail Access Study assumed no new maintenance facilities would be required for implementation of Alternative A-3, Alternative A-4, and Alternative A-7. In addition to capital costs, annual operation costs for these alternatives presented in the 2014 Ontario Airport Rail Access Study would be upwards of $7M.

Travel Time

Total travel time to ONT is a combination of vehicle travel time on the connecting service to ONT, transfer/wait times for change of travel modes, e.g., from Metrolink, and walk time to ONT terminals (Terminal 2 and Terminal 4). While in-vehicle travel time is a consideration for service users, increased walking and transfer/wait times are especially deterrent to transit ridership. Vehicle travel time and service reliability are comparable for Alternative A-3, Alternative A-4, and Alternative A-7; however, it is unclear how both ONT terminals would be served.

5.3 ALTERNATIVES CARRIED FORWARD FOR FURTHER CONSIDERATION

5.3.1 No Project Alternative

CEQA Section 15126.6 (e) requires that the specific alternative of “no project” be evaluated along with its impact in an EIR. The purpose of describing and analyzing a no project alternative is to allow decision makers to compare the impacts of approving the proposed project with the impacts of not approving the proposed project. The No Project Alternative helps define mobility challenges in the areas adjacent to the proposed Project and identifies the consequences of extending existing policies and plans without committing to larger capital improvements.

The current site conditions are described in Chapter 2 (Project Description), and in Chapter 3 (Environmental Analysis). The No Project Alternative represents the proposed Project area if the proposed Project is not constructed, and additional municipal projects would still be developed in the area. A detailed list of related projects is in Section 3.18 (Cumulative Impacts). The No Project Alternative is

used for comparison purposes in order to assess the relative benefits and impacts of constructing a new transit project versus only constructing projects which are already funded and planned for in local plans. The No Project Alternative would meet none of the proposed Project objectives.

5.3.2 Proposed Project

The proposed Project would construct an underground 4.2-mile, single tunnel (24-foot-inner-diameter bidirectional tunnel) to provide a direct airport connection between the Cucamonga Metrolink Station and ONT. The northern segment of the proposed Project site is located within the Cucamonga Metrolink Station and its parking lots. From the Cucamonga Metrolink Station parking lots, the tunnel alignment will connect to Milliken Avenue and travel south under the existing roadway. At Ontario Mills Parkway, the tunnel alignment will shift to the western side of Milliken Avenue to avoid the Interstate 10 (I-10) overcrossing. The alignment will continue west of the I-10 overcrossing structure and travel south under I-10. The tunnel alignment will continue to run south; at Guasti Road, the alignment will curve southwest to connect to East Airport Drive. At East Airport Drive, the tunnel alignment will continue to travel west and terminate at the proposed stations at ONT Terminal 4 located at 900 East Airport Drive, and Terminal 2 located at 2500 East Airport Drive.

Two vent shafts with different design options and access points are being considered for the proposed Project. Only one vent shaft would be constructed to provide a means of emergency passenger egress and first responder access to and from the tunnel. Vent shaft design option 2 would be located west of Milliken Avenue on the westbound off-ramp of the I-10. Surface ground access to the vent shaft would be provided from the Milliken Avenue intersection, or from the westbound off ramp right lane near the ramp termini or directly from Milliken Avenue. Vent shaft design option 4 would be located west of Milliken Avenue on the eastbound on-ramp of the I-10. Surface ground access to the vent shaft would be provided from Milliken Avenue near the northbound and eastbound off-ramp.

The proposed Project includes three passenger stations. One station would be located in the northwestern corner of the existing Cucamonga Metrolink Station parking lot, which is owned and maintained by the City of Rancho Cucamonga. The other two proposed stations would be located within two of the existing parking lots at ONT, specifically Parking Lot 2 and Parking Lot 4, which are located across from Terminals 2 and 4. These proposed stations would be located at-grade and would connect to their associated tunnel portals along Terminal Way at ONT.

An approximately 8,000-square-foot, at-grade station would be located at the northwest corner of the existing Cucamonga Metrolink Station parking lot. The existing Cucamonga Metrolink Station parking lot is owned and maintained by the City of Rancho Cucamonga. Approximately 180 parking spaces would be permanently removed from the existing Cucamonga Metrolink Station parking lot to accommodate the proposed Cucamonga Station.

Two other stations, each approximately 10,000 square-feet, would be located at-grade within two of the existing parking lots at ONT Terminal 2 and Terminal 4. The two airport-serving stations would connect to their associated tunnel portals along Terminal Way via an at-grade connection. The proposed stations would be entirely located within the ONT ROW. Approximately 80 parking spaces would be permanently removed to accommodate the ONT Terminal 2 station, and approximately 115 spaces would be permanently removed to accommodate the ONT Terminal 4 station.

Adjacent to the Cucamonga Metrolink Station would include an adjacent maintenance and storage facility (MSF) with enclosed bays to store, clean, and maintain vehicles. The MSF would be approximately 11,000 square feet, with an additional 5,000 square feet second story and would contain an operations control center with lockers, breakrooms, and restrooms. The overall footprint of the station and maintenance facility is approximately 19,000 square feet. Employee parking for the facility would be provided at the existing parking lot owned by SBCTA, in the southeastern quadrant of the Milliken Avenue/Azusa Court intersection.

5.4 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

The focus of the alternatives analysis is on reducing potentially significant impacts of the proposed Project. This section identifies the environmentally superior alternative from among the alternatives considered. CEQA defines the environmentally superior alternative as the alternative that would result in the fewest or least significant environmental impacts while still achieving the project objectives. The CEQA guidelines Section 15126.6(e)(2) state that if the environmentally superior alternative is the No Project Alternative, then the EIR must also identify an environmentally superior alternative among the other alternatives.

A project objective from the 2014 Rail Access Study was to “implement service improvements that are physically and financially feasible, while considering environmental constraints”. In addition to providing an appropriate level of system capacity, lower construction, and operation and maintenance costs, providing a direct connection to ONT, and encouraging a shift of multi-modal transit, the tunnel option avoids many of the environmental issues, permitting requirements, and ROW acquisition needs while providing similar service improvements. While EJ was not discussed explicitly in previous studies, surrounding disadvantaged communities to ONT warrant additional consideration for potential noise/vibration and ROW acquisition impacts. Federal transportation policy is committed to developing programs and activities that address disproportionately high and adverse human health, environmental, climate-related, and other cumulative impacts on disadvantaged communities (United States Department of Transportation 2021).

The No Project Alternative represents the Project area if the proposed Project is not constructed, and additional municipal projects would still be developed in the area. The No Project Alternative is used for comparison purposes to assess the relative benefits and impacts of constructing a new transit project versus only constructing projects which are already funded and planned for in local and regional plans.

Table 5-3 (Potential Environmental Impacts by Alternative) summarizes the environmental impacts for the No Project Alternative (which includes planned expansion, improvement projects, and routine maintenance activities for the existing roadway system and transit facilities), and the proposed Project.

Table 5-3. Potential Environmental Impacts by Alternative

Issue Areas	No Project Alternative	Proposed Project
Biological Resources	Potential impacts to Delhi sands flower-loving fly (DSF), California burrowing owl, and water crossings	• No DSF species were observed during field surveys and are not anticipated to occur within the proposed Project limits due to absence of suitable habitat and ongoing ground disturbances. • No burrowing owls were observed during focused field surveys; the species has potential to nest and occur in the proposed Project area at the time of construction. • Other special status species were either absent during field surveys and/or not expected to be present due to lack of suitable habitat. • No areas identified that would be considered jurisdictional waters of the United States according to Clean Water Act Section 404, or streams subject to California Department of Fish and Wildlife 1601 or 1603.
Cultural Resources	No cultural or historical resources identified on federal or state registers within the proposed Project area. No archaeological resources identified during field surveys. No known tribal cultural resources identified.	• No cultural or historical resources identified on federal or state registers were identified in the proposed Project area. • Construction: No archaeological resources were identified during field surveys, but construction could impact previously unrecorded resources. No historical resources have been identified to be located within the proposed Project area. Native American consultation was conducted in compliance with Assembly Bill 52 (AB 52); no information provided regarding specific known tribal cultural resources within the proposed Project area. No tribal cultural resources listed or eligible for listing exist within the proposed Project area.
Noise/Vibration	Potential impact to EJ communities given proximity of operations to sensitive receptors.	• Operational impacts: No significant increase in noise levels above existing conditions at nearby sensitive receptors. Passenger vehicles and tunnel structures will be electrically powered and have rubber tires; maintenance activities at Cucamonga Station will occur within enclosed bays. • Construction impacts: Aboveground construction, including haul routes, would not exceed noise impact thresholds; underground construction at boring locations would not exceed noise impact thresholds.

Issue Areas	No Project Alternative	Proposed Project
		• Existing local noise regulations apply during the proposed Project construction and operation.
Hazards	Proximity to Underground Storage Tanks.	• One leaking underground storage tank (LUST) site is within the proposed Project area, and 20 are within 0.5 miles. All LUST sites have case closed status, e.g., remedial action is completed or deemed unnecessary by local regulatory agency.
Criteria for Air Pollutants and Greenhouse Gases	Potential construction-related emissions	• Operations: Vehicles would be electric powered, as would ventilation fans within the tunnel and vent shaft. Single-occupancy vehicles being replaced by proposed electric-powered vehicles would result in a net reduction in localized emissions from reduced vehicle miles traveled through the corridor. • Construction: Maximum daily regional emissions during construction would be less than the South Coast Air Quality Management District significance thresholds for all criteria pollutants. The proposed Project would not violate air quality standards or result in a net increase in criterial pollutants with mitigation measures incorporated.
Recreational Resources	Potential impact to recreational facilities due to increased congestion from planned construction activities.	• There are no recreational resources within the proposed Project area.
Traffic/Circulation	Proximity to intersection(s) with poor LOS	• Operations: The intersection of Archibald Avenue – Terminal Way/Airport Drive would operate at LOSs E and F during a.m. and p.m. peak-hours. • Construction: The intersections of Archibald Avenue – Terminal Way/Airport Drive (p.m. peak hour only); and Milliken Avenue/4th Street (p.m. peak hour only) would operate at LOSs F and E.
Hydrology/ Water Quality	Minimal impacts; construction and operation of planned projects in the Project area would not alter the dam or dam facilities. All emergency action plans and hazard mitigation plans would apply to future projects.	• United States Army Corps of Engineers (USACE) operates and maintains the San Antonio Dam; the proposed Project is within the dam failure inundation zone. Construction and operation of the proposed Project would not alter the dam or dam facilities. The USACE Emergency Action Plan as well as hazard mitigation plans for San Bernardino County, the City of Rancho Cucamonga, and the City of Ontario provide systems for evacuation to prevent loss, injury, or death involving flooding due to dam failure.

Issue Areas	No Project Alternative	Proposed Project
Visual Resources	Minimal impacts due to low visual quality and lack of visual resources in the proposed Project area	• No historic districts were identified in the preparation of this report. Visual quality in the proposed Project area is low to moderately low even with the San Gabriel Mountains as a backdrop, due to the surrounding built-out environment. • Construction: Construction activities would result in a temporary change in the visual character of the proposed Project area due to views of construction activities. Construction staging fencing would block the majority of the construction activities. • Operations: Permanent features of the proposed Project are the stations, one at Cucamonga Metrolink Station and two at ONT, and the MSF, also at Cucamonga Metrolink Station. Station design would be low profile, no taller than surrounding structures, and exteriors would comply with all local design standards and guidelines.
Property Acquisition	Potential ROW acquisition due to future planned projects.	• The proposed Project will not require any temporary or permanent residential, recreation, or business ROW acquisitions. • The proposed Project would require permanent or temporary easements. • Construction of the tunnel shaft in the southwestern quadrant of the I-10/Milliken Avenue interchange will require easements to construct the tunnel shaft and provide parking for maintenance and emergency vehicles. • The station and MSF at Cucamonga Metrolink Station requires permanent removal of 180 parking spots, entirely within the City of Rancho Cucamonga ROW. • The passenger station at ONT Terminal 2 parking lot requires permanent acquisition of 80 parking spots, entirely within ONT ROW. • The passenger station at ONT Terminal 4 parking lot requires permanent acquisition of 115 parking spots, entirely within ONT ROW. • For the vent shaft design option 2 tunnel alignment would shift west of Milliken Avenue on the westbound I-10/Milliken Avenue on- and off-ramps continuing south to Guasti Road and below the Union Pacific Railroad (UPRR) ROW to connect to East Airport Drive. Avoids UPRR structures. Vent shaft design option 2 would require temporary and permanent surface and subsurface easements for some parcels west of Milliken Avenue and along Guasti Road. • For vent shaft design option 4 tunnel alignment would shift west of Milliken Avenue, but slightly east of the vent shaft design option 2 alignment on the eastbound I-10/Milliken Avenue on-and off-ramps; continuing south to Guasti Road and below the UPRR ROW to connect to East Airport Drive. Milliken Avenue near the

Issue Areas	No Project Alternative	Proposed Project
		I-10 interchange south below the UPRR ROW to connect to East Airport Drive. Avoids UPRR structures. Vent shaft design option 4 would require temporary and permanent surface and subsurface easements for some parcels west of Milliken Avenue and along East Airport Drive.
Disproportionate Impact to EJ Communities	Potential disparate impacts for noise/vibration and property acquisition	• No significant or disproportionate impacts to EJ populations. Construction: Construction activities would result in a temporary change in the visual character of the proposed Project area due to views of construction activities. Construction staging fencing would block the majority of the construction activities. • Construction activities may result in roadway impacts that would slow travel time within the proposed Project area but would not divide a community, nor impact access to any community features such as schools, public parks, or hospitals. Construction would not require temporary acquisition or easements of residential parcels. • Operation: Would provide a net benefit to EJ communities by reducing congestion, reducing greenhouse gas emissions, and improving air quality, and providing direct connector access to a regional employment hub. No permanent acquisition or easement of residential parcels would occur.

Source: SANBAG 2014

As discussed in Section 5.4, while the No Project Alternative includes planned expansion, improvement projects, and routine maintenance activities for the existing roadway system and transit facilities, the No Project Alternative would not meet the purpose and objectives of the proposed Project.

The No Project Alternative would not support future growth in the region, or future travel and employment growth at ONT, nor would it lessen congestion, or improve transit options, which would contribute to worsening greenhouse gas emissions and air quality in the region. For these reasons, the environmentally superior alternative is not the No Project Alternative because the No Project Alternative does not meet any of the objectives established for the proposed Project.

The proposed Project provides an economically viable way to support future population, travel, and employment growth by providing more transit options to ONT. The proposed Project supports the innovative use of autonomous vehicle technology for transit projects and demonstrates cost-effective construction tunneling techniques. The proposed Project encourages a mode shift away from single-occupancy vehicles to transit, which reduces travel times, congestion on the surrounding road network, and improves air quality by reducing criteria pollutants and greenhouse gas emissions. The proposed Project would result in short-term construction impacts related to localized vibrations, noise, and visual resources, as well as permanent ROW impacts due to acquisition of parking spaces for passenger station and MSF construction. However, because the proposed Project is mainly a belowground facility, with a limited footprint for the three proposed passenger stations and the MSF, permanent

impacts related to biological resources, cultural resources, water quality, hydrologic facilities, recreational facilities, and EJ populations would be minimal.

Near vent shaft design option 2 and vent shaft design option 4, the tunnel alignment shifts slightly west of Milliken Avenue near the I-10 interchange, south to Guasti Road to avoid UPRR ROW impacts and conflicts. Both of the vent shaft design options would require permanent and temporary surface and subsurface easements for the parcels located west of Milliken Avenue and along Guasti Road and East Airport Drive. Both short-term construction impacts and permanent ROW acquisitions, as well as the potential minimal permanent impacts as described under the proposed Project, would be the same across the proposed Project with either vent shaft design option 2 or vent shaft design option 4.

The proposed Project would provide benefits such as reducing vehicle trips on freeways and surround roadways by encouraging a mode shift to transit from single-occupancy vehicles, support autonomous electric vehicle technology usage for transit projects and contributing to a reduction in GHG emissions, and expand access options to ONT by providing a direct connection from the Metrolink network and other transportation services at the Cucamonga Station. Based on this Draft EIR and comments received during the public comment period, SBCTA intends to identify an environmentally superior alternative in the Final EIR.

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7 ACRONYMS AND ABBREVIATIONS

#	number
%	percent
α	Damping factor due to distance
β	Constant for TBM and soil type
µPa	Sound pressure amplitude
µg/m3	Micrograms per cubic meter
A	Airspace
AB	Assembly Bill
ADA	Americans with Disabilities Act
ADL	Aerially-deposited lead
AFV	alternative fuel vehicle
AFY	acre-feet per year
AIA	Airport Influence Area
AIRS	Aerometric Information Retrieval System
ALUCP	Ontario International Airport Land Use Compatibility Plan
a.m.	ante meridiem
AN	Anno Domini
AOB	Airport Operations Bureau
APE	Area of Potential Effects
API	Area of Potential Impact
AQMP	Air Quality Management Plan
AQS	Air Quality System
AST	aboveground storage tank
AUF	Acoustic usage factor
B	billion
BAC	Best Available Technology
BART	Bay Area Rapid Transit
BC	Before Christ
bgs	below ground surface
BMP	best management practice
BRT	Bus rapid transit
BSA	Biological Survey Area
BTU	British thermal unit
Burrtec	Burrtec Waste Industries
C	Sensitive (California Native Plant Society)
C&D	construction and demolition
CAA	Clean Air Act

CAAQS	California Ambient Air Quality Standards
CAFÉ	Corporate Average Fuel Economy
Cal EPA	California Environmental Protection Agency
CAL FIRE	California Department of Forestry and Fire Protection
CAL/EPA	California Environmental Protection Agency
Cal/OSHA	California Division of Occupational Safety and Health
CalARP	California Accidental Release Prevention Program
CalEEMod	California Emissions Estimator Model
CalGreen Code	California Green Building Standards Code (Title 24)
CalRecycle	California Department of Resources Recycling and Recovery
Caltrans	California Department of Transportation
CAP	Climate Action Plan
CARB	California Air Resources Board
CBC	California Building Code
CBSC	California Building Standards Commission
CCAA	California Clean Air Act
CCAP	Community Climate Action Plan
CCR	California Code of Regulations
CD	Community Design
CDFW	California Department of Fish and Wildlife
CDHS	California Department of Health Services
CDRP	Construction & Demolition Recycling Plan
CE	State Listed as Endangered
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CERS	California Environmental Reporting System
CESA	California Endangered Species Act
CF4	carbon tetrafluoride
CFC	chlorofluorocarbon
CFP	California Fully Protected Species
CFR	Code of Federal Regulations
CaGS	California Geological Survey
CGS	California Government Code Section
CH4	methane
CHMIRS	California Hazardous Material Incident Report System
CHP	California Highway Patrol
CHSC	California Health and Safety Code

CIWQS	California Integrated Water Quality System
CJUHSD	Chaffey Joint Union High School District
CMP	Congestion management program
CN	Volume adjustment calculated as: 10*log(NA/1000 + NB/24)
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNG	Compressed natural gas
CNPS	California Native Plant Society
CO	Carbon Monoxide
CO2	Carbon Dioxide
CO2e	carbon dioxide equivalent
CPRC	California Public Resources Code
CPS	Cleanup Program Sites
CR	Cultural Resources
CSD	Cucamonga School District
CSS	coastal sage scrub
CTP	Countywide Transportation Plan
CUPA	Certified Unified Program Agency
CVWD	Cucamonga Valley Water District
CWA	Clean Water Act
CWC	California Water Code
D	distance
dB	decibel
dBA	A-weighted decibels
Development Code	City of Rancho Cucamonga Development Code
DMU	Diesel multiple unit
DPS	distinct population segment
Dref	reference distance for the Lmax(ref), typically 50 feet
DSF	Delhi Sands Flower-Loving Fly
DTSC	Department of Toxic Substances Control
E85	Ethanol, 85%
ECHO	Enforcement & Compliance History Information
ED	Economic Development
EDD	California Employment Development Department
EDR	Environmental Data Resources
EEM	Effect Earnings Multiplier
EHRA	Earthquake Hazards Reduction Act
EIA	U.S. Energy Information Administration
EIR	Environmental Impact Report

EJ	Environmental Justice
EMFAC	Emission FACtors Model
EMI	Emissions Inventory Data
EMP	Effect Employment Multiplier
Energy Code	Building Energy Efficiency Standards
EO	Executive Order
EOP	Emergency Operations Plan
EPA	United States Environmental Protection Agency
EPCA	Energy Policy and Conservation Act of 1975
ER	Environmental Resources
ES	Executive Summary
EV	electric vehicle
F	Fahrenheit
FAA	Federal Aviation Administration
FAST	Fixing America's Surface Transportation
FC	Federal Candidate for Listing State
FE	Federally Endangered
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FID	Facility Inventory Database
FIRM	Federal Insurance Rate Map
FMV	fair market value
FPP	Fire Protection Plan
ft	feet/foot
FT	Federally Threatened
FTA	Federal Transit Administration
FTIP	Federal Transportation Improvement Program
FURS	Federal Underground Injection Control
g	gravity
GBN	Ground-Borne Noise
GBV	Ground-Borne Vibration
General Plan	San Bernardino County Countywide Plan
GHG	Greenhouse gas
GWP	global warming potential
H	Housing
HA	Habitat Absent
HAP	Hazardous Air Pollutant
HCM	Highway Capacity Manual

HFC	hydrofluorocarbon
HH	households
HP	Habitat Present
hr	hour
HSWA	Hazardous and Solid Waste Amendments
HWCL	Hazardous Waste Control Law
HWTS	Hazardous Waste Tracking System:
HZ	Hazards
I-10	Interstate 10
I-15	Interstate 15
IASP	Industrial Area Specific Plan
IEPR	Integrated Energy Policy Report
IEUA	Inland Empire Utilities Agency
IIJA	Infrastructure Investment and Jobs Act
in/sec	inches per second
IPaC	Information for Planning and Consultation
IPCC	Intergovernmental Panel on Climate Change
ISTEA	Intermodal Surface Transportation Efficiency Act
IU	Infrastructure and Utilities
IWD	Integrated Waste Department
IWMP	Integrated Waste Management Plan
kBTU	thousand British thermal units
kHz	Kilohertz
KOP	Key Observation Points
KVA	Kilovolt-Ampere
kWh	kilowatt-hours
LACM	Natural History Museum of Los Angeles County
LACMTA	Los Angeles County Metropolitan Transportation Authority
LADWP	Los Angeles Department of Water and Power
LAeq(h)	1-hour A-weighted equivalent sound level
LAUS	Local Area Unemployment Statistics
LC	Land Use & Community Character
LCFS	low carbon fuel standard
Ldn	Day-Night Noise Level
LED	Light-emitting diode
LEED	Leadership in Energy and Environmental Design
Leq	Equivalent Sound Level
Leq(day)	Daytime Equivalent Sound Level
Leq(night)	Nighttime Equivalent Sound Level

Leq-equip	Equivalent sound level for equipment
LHMP	Local Hazard Mitigation Plan
Lmax	Maximum Sound Level
LNG	liquefied natural gas
LOS	Level of service
LPG	Liquefied petroleum gas
LRA	Local Responsibility Area
LRT	Light rail transit
LRTP	Long-range transit plan
LST	Localized Significance Thresholds
LT	Long-term
LU	Land Use
LUST	Leaking underground storage tank
Lv	Vibration Level
Lw	Sound Power Level
m	meter(s)
M	million
M	Mobility
MA	Mobility and Access
MBTA	Migratory Bird Treaty Act
MEP	mechanical, electrical, and plumbing
Metro	Los Angeles County Metropolitan Transit Authority
ML	sandy silt
MM	mitigation measure
mm	millimeters
MMI	Modified Mercalli Intensity
MMTCO2e	million metric tons of carbon dioxide equivalent
mpg	miles per gallon
MPH	Miles per hour
MPO	Metropolitan Planning Organization
MRF	Materials Recovery Facility
MRZ	Mineral Resource Zone
MSAT	Mobile Source Air Toxins
MSF	Maintenance and storage facility
MTCO2e	metric tons of carbon dioxide equivalent
MW	maximum moment magnitude
MWD	Metropolitan Water District of Southern California
N	number of similar pieces of equipment operating in the same area

N/A	Not applicable
N2O	nitrous oxide
NA	Average number of automobiles per hour
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NALs	Numeric Action Levels
NB	Average number of buses per hour
NEHRP	National Earthquake Hazards Reduction Program
NELs	Numeric Effluent Limitations
NEPA	National Environmental Policy Act
NFIP	National Flood Insurance Program
NHMLAC	National History Museum of Los Angeles County
NHPA	National Historic Preservation Act
NHTSA	National Highway Traffic Safety Administration
NMTP	Non-motorized Transportation Plan
NO	Nitrogen Oxide
No.	Number
NO2	Nitrogen Dioxide
NOAA	National Oceanic and Atmospheric Administration
NOP	Notice of Preparation
NOx	Oxides of Nitrogen
NPDES	National Pollutant Discharge Elimination System
NPL	National Priorities List
NR	Natural Resources
O&M	operations and maintenance
O3	Ozone
OES	Office of Emergency Services
OFD	The City of Ontario Fire Department
OHP	Office of Historic Preservation
OIAA	Ontario International Airport Authority
OMC	Ontario Municipal Code
OMSD	Ontario-Montclair School District
OMUC	Ontario Municipal Utilities Company
ONT	Ontario International Airport
ONT-IAC	Ontario International Airport – Inter Agency Collaborative
OPD	The City of Ontario Police Department
OPR	Office of Planning and Research
OS	Open Space
OSHA	Occupational Safety and Health Administration

OSP	Operating System Provider
PACE	property assessed clean energy
Pb	Lead
PCE	Passenger car equivalent
PCS	Permit Compliance System
PE	Proposed Endangered
PF	Public Facilities
p.m.	post meridiem
PM	post mile
PM10	Particulate Matter sized 10 microns or less in diameter
PM2.5	Particulate Matter sized 2.5 microns or less in diameter
PMT	Passenger miles travelled
PP	Personal and Property Protection
PPB	Parts per billion
PPM	Parts per million
PPV	Peak particle velocity
PPVref	Reference PPV value for a piece of equipment at reference distance of 25 feet
PR	Parks & Recreation
PRC	Public Resources Code
PRIMP	Paleontological Resources Impact Mitigation Plan
PRMs	Paleontological resources monitors
Project	Ontario International Airport Connector Project
PRS	paleontological resources specialist
PV	photovoltaic
QA	Quality assurance
QC	Quality control
RA	Registered Archaeologist
RC	Resource Conservation
RC	Rancho Cucamonga
RCFPD	Rancho Cucamonga Fire Protection District
RCMC	Rancho Cucamonga Municipal Code
RCNM	Roadway Construction Noise Model
RCRA	Resource Conservation and Recovery Act
RE	Renewable Energy
RFP	Request for proposal
RHNA	Regional Housing Needs Assessment
RMP	Risk Management Plan

RM	Richter Magnitude
RMS	Root mean square
ROW	Right-of-way
RPA	Registered Professional Archaeologist
RPS	Renewable Portfolio Standards
RSA	Resource Study Area
RTP	Regional Transportation Plan
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
RTS	Regional Threshold of Significance
RWQCB	Regional Water Quality Control Board
RWQCBs	Regional Water Quality Control Boards
S	Safety
SA	California Special Animal
SANBAG	San Bernardino Associated Governments
SARA	Superfund Amendments and Reauthorization Act
SARWQCB	Santa Ana Regional Water Quality Control Board
SB	Senate Bill
SB	Senate Board
SBCFCD	San Bernardino County Flood Control District
SBCM	San Bernardino County Museum
SBCOG	San Bernardino Council of Governments
SBCSD	San Bernardino County Sheriff's Department
SBCTA	San Bernardino County Transportation Authority
SBTAM	San Bernardino Transportation Analysis Model
SC	Site Cleanups
SCAB	South Coast Air Basin
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCCIC	South-Central Coastal Information Center
SCE	Southern California Edison
SCEDC	Caltech Southern California Earthquake Data Center
SCRRA	Southern California Regional Rail Authority
SCS	Sustainable Communities Strategy
SDWA	Safe Drinking Water Act
SE	State Endangered
SELref	101 dBA for Transit Center or Park and Ride Lot
SEMS	Superfund Enterprise Management System
SF6	sulfur hexafluoride
SGMA	Sustainable Groundwater Management Act

SIP	State Implementation Plan
SLF	Sacred Lands File
SLIC	Spills, Leaks, Investigations, and Cleanups
SM	silty sand
SMBRP	Site Mitigation and Brownfields Reuse Program
SO2	Sulfur Dioxide
SoCalGas	Southern California Gas Company
SOE	support of excavation
SOX	Sulfur Oxides
SP	sand with gravel
SPL	Sound Pressure Level
SPT	Standard Penetration Test
SR	State Route
SRA	State Responsibility Area
SRA	Source receptor area
SRRE	Source Reduction and Recycling Element
SSC	California Species of Special Concern
SSMP	Safety and Security Management Plan
ST	State Threatened
ST	Short-term
STIP	State Transportation Improvement Program
STOPS	Simplified Trips-on-Project Software
SUSMP	Standard Urban Storm Water Mitigation Plan
Sustainable	Green
SVP	Society of Vertebrate Paleontology
SWIS	Solid Waste Information System
SWP	State Water Project
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	Toxic Air Contaminant
TBM	Tunnel boring machine
TCC	Transformative Climate Communities
TCPs	traditional cultural places/properties
TCR	Transportation Conformity Rule
TCR	Tribal Cultural Resources
TDM	Transportation Demand Management
TDS	total dissolved solids
TEA-21	Transportation Equity Act for the 21st Century

TISG	Transportation Impact Study Guide
TMDL	Total Maximum Daily Load
TMP	Traffic Management Plan
TNM	Traffic Noise Model
TOA	Traffic operations analysis
U.S.	United States
UPRR	Union Pacific Railroad
USACE	United States Army Corps of Engineers
USC	United States Code
USDOT	United States Department of Transportation
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Services
USGS	United States Geological Survey
UST	underground storage tank
UWMP	Urban Water Management Plan
UWMP Act	Urban Water Management Planning Act
UWMPs	Urban Water Management Plans
V/C	volume-to-capacity
VAUs	Visual Assessment Units
VdB	vibration velocity level
Vent shaft	Ventilation shaft
VHFHSZ	Very High Fire Hazard Severity Zone
VMT	Vehicle Miles Travelled
VOC	Volatile Organic Compound
VP	vertebrate paleontology
VSQG	Very small quantity generator
WB	westbound
WDR	Waste Discharge Requirements
WDS	Waste Discharge System
WEAP	Worker Environmental Awareness Program
WMA	Watershed Management Area
WQOs	water quality objectives
WUIFA	Wildland-Urban Interface Fire Area
WVC	West Valley Connector
YSMN	Yuhaaviatam of San Manuel Nation Cultural Resources Department
ZE	zero-emission

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