

Meridian Storm Drain Pipeline Extension Project

Initial Study

Prepared For

March Joint Powers Authority

14205 Meridian Parkway, Suite 140
Riverside, CA 92518

Prepared By

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DRAFT INITIAL STUDY

1. **Project Title:** Meridian Storm Drain Pipeline Extension Project

2. **Lead Agency Name and Address:**

March Joint Powers Authority
14205 Meridian Parkway, Suite 140
Riverside, CA 92518

3. **Contact Person and Phone Number:** JPA: Lauren Sotelo (951) 656-7000

4. **Project Location:** The proposed alignment of the Meridian Storm Drain Pipeline Extension is located within the unincorporated area of Riverside County on the west side of the Interstate 215 (I-215) and south of the Van Buren Boulevard interchange. The northernmost point of the alignment begins at an existing 6-foot by 3-foot reinforced concrete box (RCB) immediately south of Van Buren Boulevard between I-215 and Opportunity Way and extends south for approximately 2,350 feet (0.45 miles) connecting to an existing dual 48-inch reinforced concrete pipe (RCP) at the Riverside County Transportation Commission (RCTC) railroad right-of-way. The alignment traverses the eastern edge of the Riverside National Cemetery located at 22495 Van Buren Boulevard, Riverside, California, 92518. Please see **Figure 1: Regional Location Map, Figure 2: Vicinity Map, and Figure 3: March JPA Zoning.**

5. **Project Sponsor's Name and Address:**

March Joint Powers Authority
14205 Meridian Parkway, Suite 140
Riverside, CA 92518

6. **General Plan Designation:**

United States Department of Veterans Affairs
Property: Public Lands/Property of the United States

7. **Zoning:**

United States Department of Veterans Affairs
Property: Public Lands/Property of the United States

8. **Description of Project:**

Purpose and Need

March Air Force Base (AFB) was initially established as a military training field in February of 1918. March AFB was chosen for realignment in 1993, which resulted in a reduction of forces and re-designation of the base as an Air Reserve Base (ARB). The change in use required less acreage by the ARB and the March Joint Powers Authority (March JPA) was formed by the Cities of Moreno Valley, Perris, Riverside, and the County of Riverside to jointly oversee the management of the remaining land. The March Business Center Specific Plan area is located west of I-215 and south of Alessandro Boulevard, within the March JPA planning area and is composed of three main developments: South Campus, West Campus, and North Campus. The North Campus and South Campus, located immediately to the north and south of Van Buren Boulevard west of I-215, consist largely of existing and planned industrial business park development. A significant portion of the West Campus is intended to be undeveloped for conservation purposes with the remaining portion planned for industrial development.

The environmental impacts of the March Business Center Specific Plan were evaluated in the 2003 Final Focused Environmental Impact Report for the March Business Center (SCH# 2002071089) (2003 Focused EIR). An amendment to the North Campus portion of the March Business Center Specific Plan (Meridian SP-5) provided land use guidelines for the North Campus Specific Plan area and was adopted in July 2010. A corresponding Subsequent Environmental Impact Report (2010 SEIR) was prepared and certified in July 2010. The 2010 SEIR evaluated the environmental impacts associated with implementation of the Meridian SP-5 Specific Plan, also referred to as the Meridian Specific Plan area.

The March Air Force Base Reuse Drainage Plan was prepared for the Riverside County Flood Control and Water Conservation District (RCFC & WCD) for the entire area. This plan identifies the drainage facilities required to accommodate the runoff resulting from the additional impervious area created by all developments. The March Business Center Drainage Master Plan (Drainage Master Plan) presented a phased plan for constructing the various elements of the ultimate drainage system for the March Business Center Specific Plan. The Master Plan was based on the development phasing identified in Figure I-3 of the March Business Center Specific Plan. As units have developed within the March Business Center Specific Plan area, drainage infrastructure designed to capture and convey runoff has necessitated the construction of infrastructure identified within that Specific Plan Phase and specified in the Master Plan.

The proposed storm drain line is identified in the March Business Center 2003 Focused EIR, certified by the March Joint Powers Commission in February 2003, as a future new storm drain extension and a needed improvement to convey stormwater in the North Campus of the March Business Center (Meridian Specific Plan area). Mitigation Measure IV.F-1, adopted as part of a Mitigation Monitoring and Reporting Program when March JPA certified the 2003 Focused EIR, required detention basins and improvements to the storm drain system to be constructed to reduce peak flows to less than those associated with existing conditions in accordance with the approved Drainage Master Plan. The Meridian Specific Plan 2010 SEIR identified that, in accordance with Mitigation Measure IV.F-1 of the 2003 Focused EIR, the desired draw down time for detention basins in the Meridian Specific Plan area would be reduced to 12 hours once the box culvert and channel south of Van Buren Boulevard and associated stormwater infrastructure have been constructed.

The proposed project is located on property owned by the federal government, specifically the United States Department of Veterans Affairs (VA), which manages the Riverside National Cemetery. The project is within a 40-foot sanitary sewer and storm sewer utility easement granted to the March JPA by the VA, which is working in cooperation with the March JPA on these improvements.

Project Components

Storm Drain Extension

The project consists of a master planned storm drain improvement project along the west side of I-215, south of Van Buren Boulevard, and adjacent to the Riverside National Cemetery to the west and south, and the Riverside County Transportation Commission (RCTC) railroad right-of-way to the east. The existing project site consists of a drainage ditch with disturbed vegetation and developed land cover. The ditch conveys flows south to an existing culvert at the RCTC Railroad right-of-way. Flows are then conveyed east underneath the railroad and into an earthen median where an existing Caltrans culvert picks up the flow and conveys it directly into Line B. Once constructed, the proposed project would provide a direct connection of Line B from the Van Buren culvert to the RCTC culvert at the termination of the project site.

The project would construct an underground 6-foot by 4-foot RCB from an existing 6-foot by 3-foot RCB at Van Buren Boulevard, extending approximately 2,350 linear feet south and connecting to existing dual 48-inch RCP's at the RCTC railroad right-of-way. The project would also include the removal and replacement of portions of Avenue A, and the removal and replacement of an existing retaining wall. Approximately 2.02 acres would be disturbed by the proposed project including the construction staging area. The depth of the pipeline would be a minimum of 6 inches and a maximum depth of 9 feet below the existing surface.

The limits of construction along the proposed storm drain alignment would be within an approximately 36-foot-wide area along the 2,350-foot alignment. Construction activities along the alignment would include building the storm drain line, staging of material, replacement of a retaining wall, and replacement of portions of Avenue A. The 36-foot area is within an existing 40-foot sanitary sewer and storm sewer easement.

Staging Area

An approximately 0.11-acre construction staging area would be located on the south side of Van Buren Boulevard between the sewer line and storm drain alignments. This area is where construction equipment and materials would be temporarily stored during the construction process, which is estimated to take six months. Once construction activities are complete, this area would be restored to existing conditions and would remain undeveloped. With the staging area, the total project footprint is approximately 2.02 acres.

Operations

Operational activities associated with the proposed project would occur within the existing 40-foot sanitary sewer and storm drain easement and would include maintenance and inspections as determined by the Riverside County Flood Control and Water Conservation District (RCFD). Once constructed, the subsurface storm drain

would operate as an unstaffed facility. As described above, the storm drain is a planned infrastructure improvement intended to remedy an existing deficiency within the Meridian Specific Plan area. The capacity of the storm drain has been sized to serve the existing and planned development within the March Business Center Specific Plan area.

Surrounding Land Uses and Setting: (Briefly describe the project's surroundings.)

The project is located within a 40-foot sanitary sewer and storm sewer easement at the eastern boundary of the Riverside National Cemetery. The overall terrain is relatively level on the north and east sides of the project site, and gently rolling as it slopes to a higher elevation to the west. Immediately to the east of the project site, the graded terrain slopes down to the RCTC Atchison, Topeka and Santa Fe (AT & SF) railroad line and adjacent I-215; a bridge spans the railroad and interstate cut at Van Buren Boulevard. The Riverside National Cemetery lies west and south of the of the project site. March ARB is located on the east side of I-215.

9. **Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement):**

California Department of Fish and Wildlife – Required permitting under Section 1600 of California Fish and Game Code.

California Department of Transportation (Caltrans) – Encroachment Permit

March Joint Powers Authority – Approval of a Stormwater Pollution Prevention Plan

RCTC and SCRRRA – Authorization for construction on County property and regional rail authority

Regional Water Quality Control Board – Required permitting under Section 401 or 404 of the federal Clean Water Act

Riverside County Flood Control and Water Conservation District – Cooperative Agreement for Maintenance and Operation, Encroachment Permit, Storm Drain Plan Check and Permit approvals

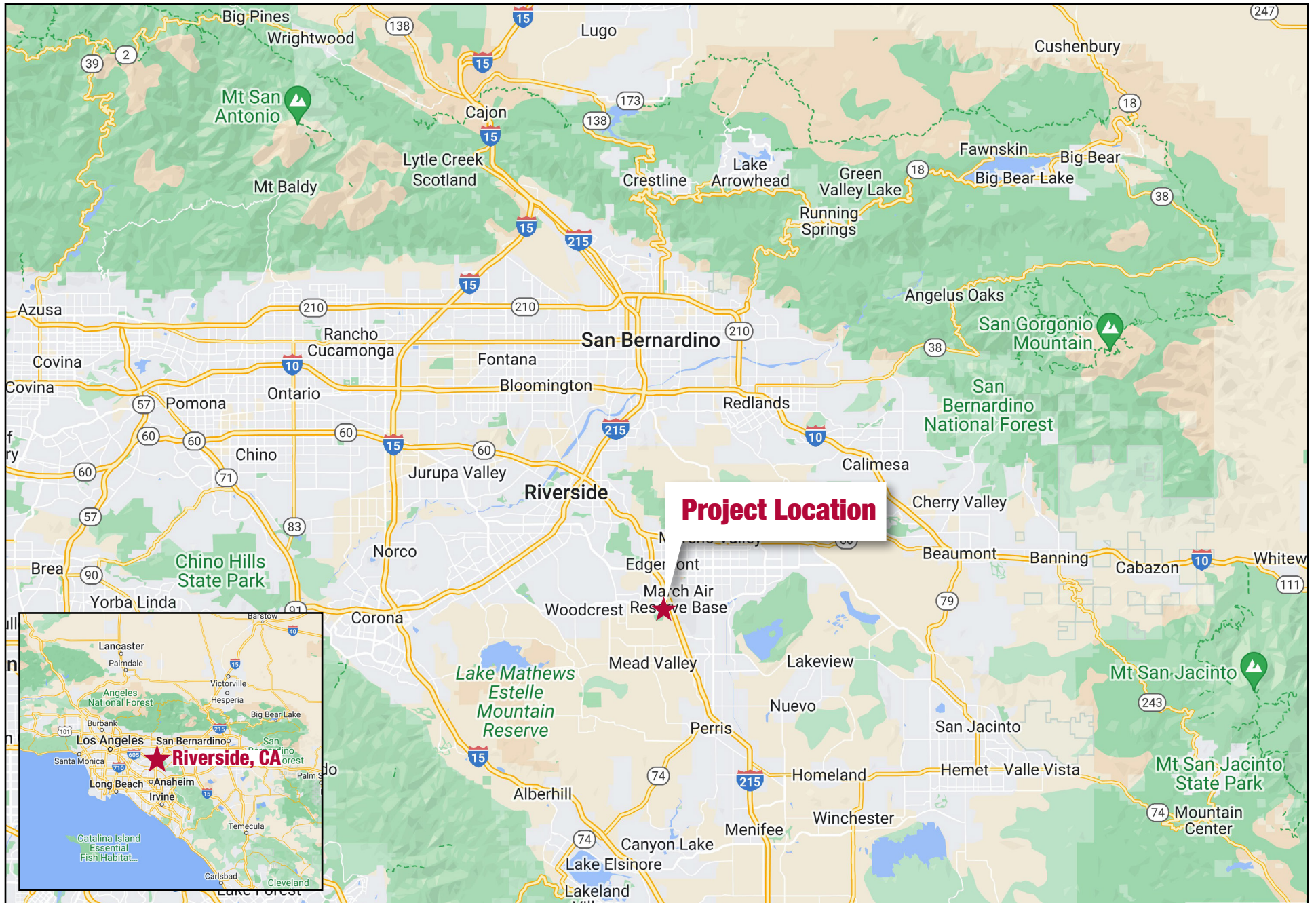
United States Department of Veterans Affairs – Authorization for construction on federal property

10. **Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, has consultation begun?**

Per the March JPA's standard practice and in accordance with Assembly Bill 52 (AB 52), codified at Public Resources Code including Section 21080.3.1(d), March JPA circulated letters on August 25, 2022, to the Agua Caliente Band of Cahuilla Indians, the Pechanga Band of Luiseno Indians, and the Soboba Band of Luiseno Indians to request comments and input on the proposed project and the potential to affect tribal and cultural resources.

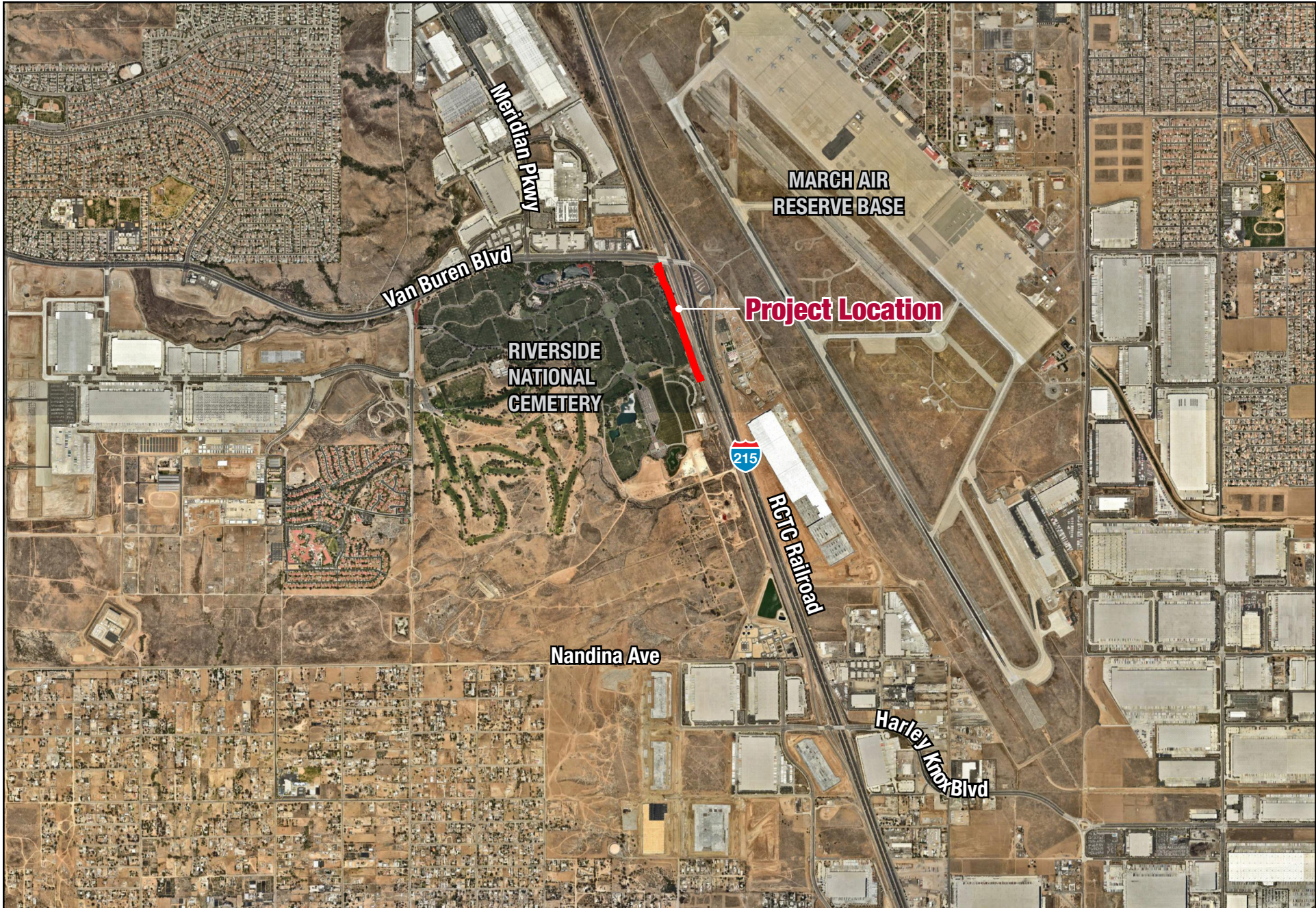
The City received two response letters; one dated September 28, 2022, from the Agua Caliente Band of Cahuilla Indians (ACBCI), and one dated September 26, 2022, from the Soboba Band of Luiseno Indians (SBLI). The ACBCI identified that the project site is not located within the boundaries of the ACBCI Reservation. However, the project site is within the Tribe's Traditional Use Area. For this reason, the ACBCI requested a copy of the records search with associated survey reports and site records from the information center, updates or a status report of the project as it progresses, and to be informed if there are changes to the scope of the proposed project. The March JPA has provided the ACBCI with the requested information and will continue to update the ACBCI as the project progresses. The SBLI identified that the project site is not located within the boundaries of the SBLI Reservation. However, it is within the Tribe's Traditional Use Area. For this reason, the SBLI requested formal consultation with the March Joint Powers Authority and consultation is ongoing.

Note: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code section 21083.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code section 21082.3(c) contains provisions specific to confidentiality.



Source: Google Maps, 2022

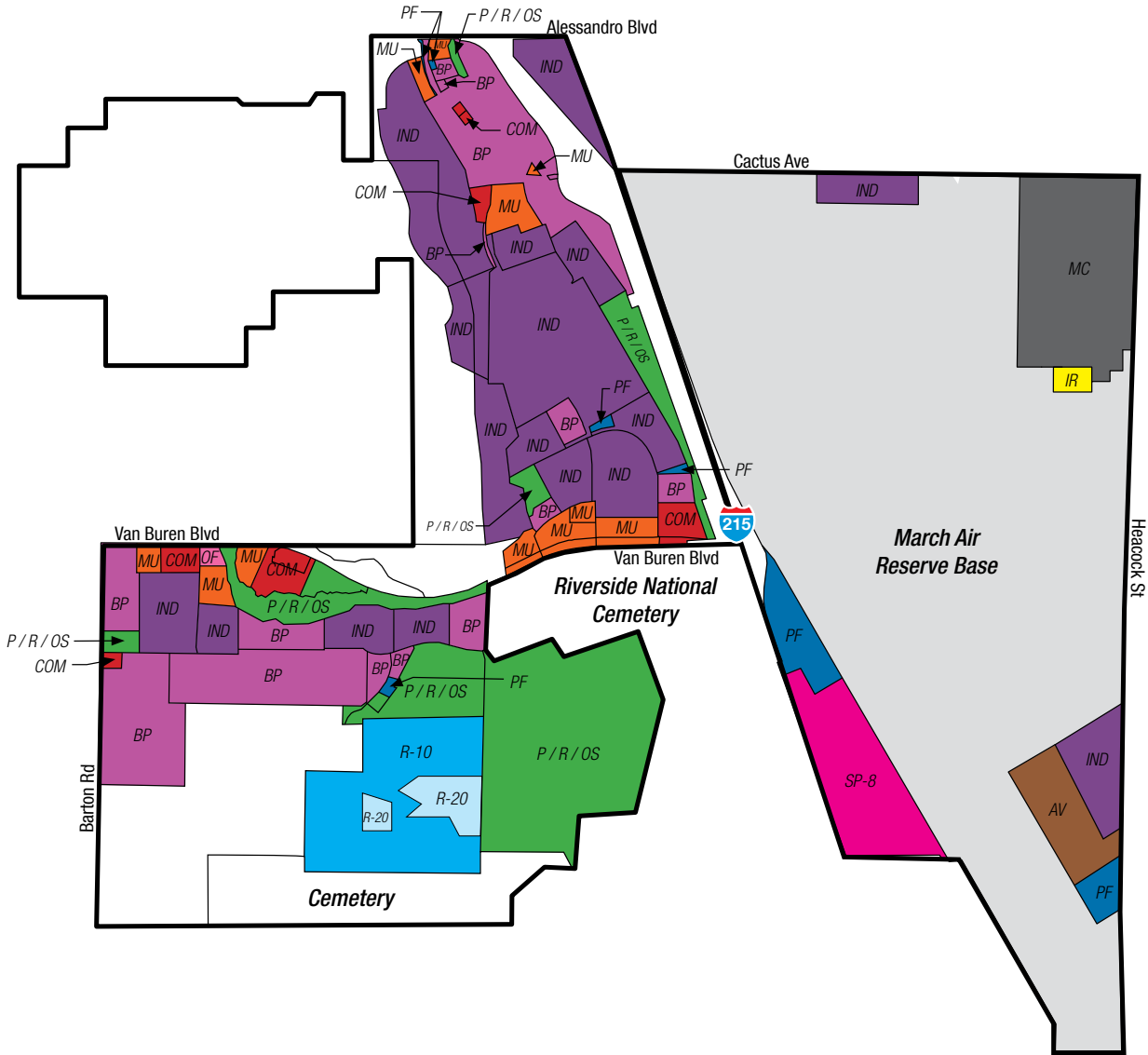
FIGURE 1: Regional Map
 Meridian Storm Drain Pipeline Extension
 Riverside, CA



Source: Nearmap, 2022

FIGURE 2: Vicinity Map
Meridian Storm Drain Pipeline Extension
Riverside, CA

MARCH JOINT POWERS AUTHORITY



Legend

- | | | | | | |
|--|---------------------------|--|--|--|-----------------------------|
| | <i>Business Park (BP)</i> | | <i>Public Facility (PF)</i> | | <i>Specific Plan (SP) 8</i> |
| | <i>Commercial (COM)</i> | | <i>Park/Recreation Open Space (P/R/OS)</i> | | <i>Residential (R-10)</i> |
| | <i>Industrial (IND)</i> | | <i>Aviation (AV)</i> | | <i>Residential (R-20)</i> |
| | <i>Mixed-Use (MU)</i> | | <i>Medical Campus (MC)</i> | | <i>March JPA Boundary</i> |
| | <i>Office (OF)</i> | | <i>Institutional-Residential (IR)</i> | | |

FIGURE 3: March JPA Zoning Map

Meridian Storm Drain Pipeline Extension
Riverside, CA



Kimley»Horn

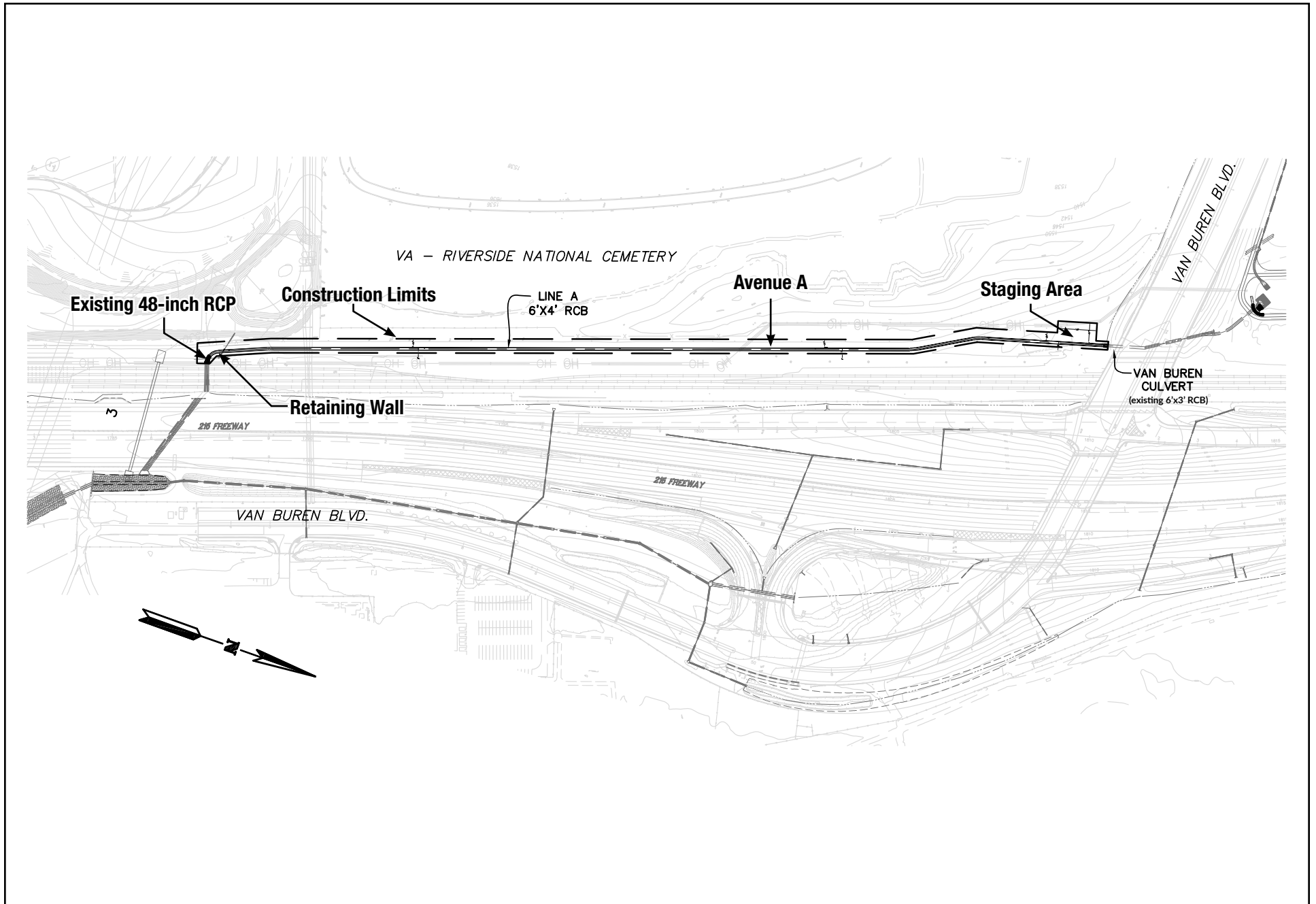


FIGURE 4A: Site Plan
 Meridian Storm Drain Pipeline Extension
 Riverside, CA



FIGURE 4B: Site Plan

Meridian Storm Drain Pipeline Extension
Riverside, CA

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is "Less Than Significant Impact with Mitigation Incorporated" as indicated by the checklist on the following pages.

- | | | |
|--|---|--|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture/Forestry Resources | <input checked="" type="checkbox"/> Air Quality |
| <input checked="" type="checkbox"/> Biological Resources | <input checked="" type="checkbox"/> Cultural Resources | <input type="checkbox"/> Energy |
| <input checked="" type="checkbox"/> Geology / Soils | <input type="checkbox"/> Greenhouse Gas Emissions | <input checked="" type="checkbox"/> Hazards & Hazardous Materials |
| <input type="checkbox"/> Hydrology / Water Quality | <input type="checkbox"/> Land Use / Planning | <input type="checkbox"/> Mineral Resources |
| <input type="checkbox"/> Noise | <input type="checkbox"/> Population / Housing | <input type="checkbox"/> Public Services |
| <input type="checkbox"/> Recreation | <input type="checkbox"/> Transportation / Traffic | <input checked="" type="checkbox"/> Tribal Cultural Resources |
| <input type="checkbox"/> Utilities / Service Systems | <input type="checkbox"/> Wildfire | <input checked="" type="checkbox"/> Mandatory Findings of Significance |

DETERMINATION (To be completed by the Lead Agency):

On the basis of this initial evaluation:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have a "potentially significant" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature

Date

Printed Name

For

EVALUATION OF ENVIRONMENTAL IMPACTS:

- 1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a Lead Agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3) Once the Lead Agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect is significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
- 4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less than Significant Impact." The Lead Agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section XVII, "Earlier Analyses," may be cross-referenced).
- 5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
 - a) Earlier Analyses Used. Identify and state where they are available for review.
 - b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
 - c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- 6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
- 7) Supporting Information Sources. A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
- 8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
- 9) The explanation of each issue should identify:
 - a) the significance criteria or threshold, if any, used to evaluate each question; and
 - b) the mitigation measure identified, if any, to reduce the impact to less than significance.

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
I. AESTHETICS. Would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

- a) Have a substantial adverse effect on a scenic vista? ***Less Than Significant Impact.***

A scenic vista is an area that is designated, signed, and accessible to the public for the express purposes of viewing and sightseeing. This includes any such areas designated by a federal, State, or local agency. According to the March JPA General Plan, scenic vistas are offered from areas looking east and northeast of the March JPA Planning Area, specifically from Cactus Avenue and from residential areas located east of Orange Terrace Boulevard in the City of Riverside’s Orangecrest neighborhood, toward the Box Springs Mountains and San Jacinto Mountains. Conservation of these scenic vistas would ensure preservation of the area’s scenic qualities.¹ The proposed storm drain would be an underground 6-foot by 4-foot RCB. Starting from north to south, the new storm drain would begin by connecting to the existing 6-foot by 3-foot RCB south of Van Buren Boulevard. The alignment would extend southerly and connect to existing dual 48-inch RCP’s at the RCTC railroad right-of-way approximately 2,350 linear feet (0.45 miles) from the beginning, paralleling I-215 and AT & SF railroad tracks. The storm drain would be constructed and placed underground in an area that is already heavily disturbed. The ground surface would be restored to its pre-project condition and elevations; thus, the project would not substantially affect the scenic vista. Construction of the proposed project may create temporary aesthetic nuisances associated with construction activities including excavation, construction and the presence of debris, equipment, and truck traffic. The effect on a scenic vista associated with these activities would be temporary and minor, occurring during the approximately six-month construction period. Furthermore, scenic vistas would be minimally impacted by temporary construction as the project site is lower in elevation than the views of the Box Springs Mountains and

¹ March JPA General Plan, Exhibit 5-5.

San Jacinto Mountains from west of the project site, as identified in Exhibit 5-5 of the March JPA General Plan. However, these impacts would be temporary in nature and would cease upon project completion. Therefore, impacts would be less than significant.

- b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? **No Impact.**

There are no significant trees, or rock outcroppings or historic buildings located on the project site. The nearest eligible state scenic highway is a portion of I-215 located approximately four miles to the south of the project site.² The City of Riverside identifies Alessandro Boulevard and Van Buren Boulevard as scenic boulevards. Van Buren Boulevard is also recognized by the County of Riverside and March JPA as a scenic boulevard. The project site is approximately 1.9 miles south of Alessandro Boulevard and immediately adjacent to Van Buren Boulevard. However, the project would not include Van Buren Boulevard and thus would not require repairs or repaving of Van Buren Boulevard. Further, the storm drain would be constructed underground, and the above-ground project site would be returned to existing conditions. Therefore, it is not anticipated to damage scenic resources. As such, no impacts would occur.

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

An urbanized area is an incorporated city that has a population of at least 100,000 persons, or if less than 100,000 persons, is surrounded by no more than two contiguous incorporated cities with a combined population of at least 100,000 persons.³ The project site is located within a 40-foot sanitary sewer and storm sewer easement at the eastern boundary of the Riverside National Cemetery, which is adjacent to the Cities of Riverside, and Moreno Valley. The City of Riverside had a population of approximately 317,261 in 2021, and the City of Moreno Valley had a population of approximately 211,600 in 2021.⁴ The project site is adjacent to the Riverside National Cemetery to the west and south, and the RCTC railroad right-of-way to the east. Van Buren Boulevard is north of the project site and industrial uses are further north of the project site. Residential uses are further to the northwest, west and south, and the March Air Reserve Base is further east of the project site. The project consists of a master planned storm drain improvement project in a utility easement along the west side of I-215. The property is located within Airport Compatibility Use Zone B2 of the 2014 March Air Reserve Base/ Inland Port Airport Land Use Compatibility Plan. Certain land use restrictions are applicable to projects within this zone, such as building heights. Underground infrastructure improvements, such as the proposed project, do not conflict with height regulations or other regulations governing scenic quality uses within the utility easement or the Airport Compatibility Use Zone B2 of the 2014 March Air Reserve Base/ Inland Port Airport Land Use Compatibility Plan.

The proposed project would result in a temporary change to project site appearance during construction; however, the site would be returned to its pre-project condition after the installation of the storm drain line and no permanent change to the condition of the site would result from the proposed project. The aesthetic appearance of the site would be returned to its pre-project condition, consistent with the project site's existing use and designation as a utility easement granted to the March JPA by the VA. As such, the proposed project would be consistent with the existing and planned development and would not affect long-term visual character, scenic quality, or quality of public views of the site.

As discussed above, construction of the proposed project would create temporary aesthetic nuisances associated with construction activities. The visual impact associated with the construction of the proposed project would result from the presence of vehicles and equipment required for road demolition, site preparation, grading, construction of the storm drain line, and reconstruction of portions of Avenue A and a retaining wall. When not in use, vehicles, machinery and materials would be visible in the staging area. These activities are temporary in nature and would cease upon completion of construction. Thus, they would not result in a substantial degradation to the project site or surrounding area. In addition, no significant aesthetic resources would be altered or destroyed as a result of construction-related activities because the esthetic appearance of the project site would remain consistent with the

² California Department of Transportation. Official Designated Scenic Highways, https://dot.ca.gov/-/media/dot-media/programs/design/documents/desig-and-eligible-aug2019_a11y.xlsx. Available at: https://dot.ca.gov/-/media/dot-media/programs/design/documents/desig-and-eligible-aug2019_a11y.xlsx. Accessed June 21, 2022.

³ California Code, Public Resources Code - PRC § 21071

⁴ United States Census Bureau. Quick Facts. Available at: <https://www.census.gov/quickfacts/fact/table/US/PST045222>. Accessed February 8, 2023.

intent of the existing zoning. For these reasons, the short-term construction impacts of the proposed project would be a less than significant impact in relation to changing the visual character of the project site and its surroundings. Impacts to visual character would be less than significant and no mitigation is required.

- d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?
No Impact.

The project includes the construction of an underground storm drain line and does not propose any operational or temporary construction lighting that would generate new or additional sources of light or glare. The project site is in an urbanized area of the City, which includes nighttime lighting associated with I-215, industrial and commercial businesses (i.e., parking lot lighting, security lighting) and landscaping and security lighting at the adjacent Riverside National Cemetery. Nighttime lighting in the surrounding area also includes street lighting and vehicle lights traveling at night. The project would not include temporary construction lighting or operational lighting. Therefore, no impacts would occur.

Mitigation Measures:

No mitigation is necessary.

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>II. AGRICULTURE AND FOREST 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 the California Dept. 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 the California Department of Forestry and Fire Protection 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 the California Air Resources Board. Would the project:</p>				
<p>a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>d) Result in the loss of forest land or conversion of forest land to non-forest use?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

- a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? **No Impact.**

Per the State of California Department of Conservation, the project site is not located within an area designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance.⁵ The project site is not currently being utilized for farming activities. The project site is located in a developed area within a utility easement granted by the VA. As such, no impacts would occur.

- b) Conflict with existing zoning for agricultural use, or a Williamson Act contract? **No Impact.**
The project site and surrounding area are not zoned for agricultural use, and do not contain agricultural resources or land under a Williamson Act contract. Therefore, no impacts would occur in this regard as a result of implementation of the proposed project.
- c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))? **No Impact.**
The project site is located within the jurisdiction of the VA and is zoned as Public Lands/Property of the United States. The project site is not zoned for timberland or other forestry uses and does not contain timberland or forest land; therefore, no impacts would occur in this regard.
- d) Result in the loss of forest land or conversion of forest land to non-forest use? **No Impact.**
The project site does not contain forest land; therefore, no impacts would occur in this regard.
- e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use? **No Impact.**
The project site does not contain farmland or forest land; therefore, no impacts would occur in this regard.

Mitigation Measures:

No mitigation is necessary.

⁵ California Department of Conservation, California Important Farmland Finder. Available at: <https://maps.conservation.ca.gov/dlrp/ciff/>. Accessed June 21, 2022.

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>III. AIR QUALITY. Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:</p> <p>a) Conflict with or obstruct implementation of the applicable air quality plan?</p> <p>b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?</p> <p>c) Expose sensitive receptors to substantial pollutant concentrations)?</p> <p>d) Result in other emissions (such as those leading to odors adversely affecting a substantial number of people)?</p>	<p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p>	<p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p>	<p><input checked="" type="checkbox"/></p> <p><input checked="" type="checkbox"/></p> <p><input checked="" type="checkbox"/></p> <p><input checked="" type="checkbox"/></p>	<p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p>

Air Quality, Greenhouse Gas, and Health Risk Assessment data were prepared for the proposed project by Kimley-Horn in September 2022 and are included as **Appendix A-1, Appendix A-2, and Appendix A-3**, respectively. The results of the Air Quality, Greenhouse Gas, and Health Risk Assessment data are summarized in the following discussion.

Operational activities associated with the proposed project would occur within the existing 40-foot sanitary sewer and storm drain easement and would include maintenance and inspections as determined by the RCFD. Long-term operational emissions are typically attributed to vehicle trips (mobile emissions), the use of natural gas (energy source emissions), and consumer products, architectural coatings, and landscape maintenance equipment (area source emissions). Implementation of the proposed project would improve an existing storm drainage system. The project would serve existing and planned future development, thus would not generate unplanned growth.

The U.S. Environmental Protection Agency (USEPA) evaluates air quality compliance with the National Ambient Air Quality Standards (NAAQS), which measure seven criteria pollutants: carbon monoxide (CO), nitrogen dioxide (NO₂), ozone (O₃), sulfur dioxide (SO₂), particulate matter measuring less than 10 microns in diameter (PM₁₀), particulate matter measuring less than 2.5 microns in diameter (PM_{2.5}), and lead (Pb). These criteria pollutants are those for which the USEPA has placed the greatest emphasis and has developed health-based concentrations for ambient air.

Air Quality Control Regions (AQCR) that are in violation of NAAQS are designated as nonattainment areas; AQCRs with levels below NAAQS are designated as attainment areas. An area may also be classified as a maintenance area if it was once classified as nonattainment but has since reached attainment of NAAQS for a probationary period through implementation of maintenance plans.

In compliance with the Clean Air Act, California Air Resources Board (CARB) maintains a State Implementation Plan (SIP) that directs statewide goals, milestones, and agreements to reduce criteria pollutants below NAAQS thresholds. In addition, the State of California has instituted the California Ambient Air Quality Standards, which implement generally more stringent thresholds for all NAAQS criteria pollutants and additional standards for sulfates, hydrogen sulfide, vinyl chloride (chloroethene), and visibility-reducing

particles. Areas that violate a NAAQS are designated as nonattainment areas; areas with levels below NAAQS are designated as attainment areas. An area may also be classified as a maintenance area if it was once classified as nonattainment but has since reached attainment of NAAQS for a probationary period through implementation of a maintenance plan.

The project site is located within the South Coast Air Basin (Basin) in unincorporated Riverside County. The Basin includes parts of San Bernardino, Riverside, and Los Angeles counties and all of Orange County. The Basin is bound on the west by the Pacific Ocean and on the east, north, and south by mountains. To the north are the San Gabriel Mountains; to the north and east are the San Bernardino Mountains; to the southeast are the San Jacinto Mountains; and to the south are the Santa Ana Mountains. The Basin forms a low plain and the mountains channel and confines airflow that traps air pollutants. The South Coast Air Quality Management District (SCAQMD) is the air pollution control agency for the Basin. The SCAQMD and the CARB monitor air quality within the Basin. The SCAQMD develops rules and regulations; establishes permitting requirements for stationary sources; inspects emissions sources; and enforces such measures through educational programs or fines, when necessary.

The attainment status for the Basin is included in **Table AQ-1: Attainment Status of the South Coast Air Basin**. Areas that meet ambient air quality standards are classified as attainment areas, while areas that do not meet these standards are classified as nonattainment areas. Areas for which there is insufficient data available are designated unclassified. As shown in the table, the region is designated as a nonattainment area for the federal ozone and PM_{2.5} standards and is also a nonattainment area for the State ozone, PM₁₀, and PM_{2.5} standards.

Table AQ-1: Attainment Status of the South Coast Air Basin

Criteria Pollutant	Federal Designation	State Designation
Ozone	Nonattainment	Nonattainment
PM ₁₀	Attainment (Maintenance)	Nonattainment
PM _{2.5}	Nonattainment	Nonattainment
Carbon Monoxide	Attainment (Maintenance)	Attainment
Nitrogen Dioxide	Attainment (Maintenance)	Attainment
Sulfur Dioxide	Unclassifiable/ Attainment	Attainment
Lead	Unclassifiable/Attainment	Attainment
Sulfates	No Standard	Attainment
Hydrogen Sulfide	No Standard	Unclassified*
Visibility Reducing Particles	No Standard	Unclassified*

*If there is inadequate or inconclusive data to make a definitive attainment designation, districts are considered "unclassified."
 Partial nonattainment designation- LA County portion of Basin only for near-source monitors. Expect to remain in attainment based on current monitoring data.
 Sources: EPA website, <https://www.epa.gov/green-book>, accessed June 2022.
 and CARB website, <http://www.arb.ca.gov/degis/adm/adm.htm>, accessed June 2022.

To determine whether a project would create potential air quality impacts, the March JPA uses SCAQMD Air Quality Thresholds. The screening thresholds for construction and daily operations are shown in **Table AQ-2: SCAQMD Daily Emission Thresholds**.

Table AQ-2: SCAQMD Daily Emission Thresholds

Pollutant	Thresholds (lbs/day)	
	Construction	Operations
Reactive Organic Gases (ROG)	75	55
Carbon Monoxide (CO)	550	550
Nitrogen Oxides (NO _x)	100	55
Sulfur Oxides (SO _x)	150	150
Coarse Particulates (PM ₁₀)	150	150
Fine Particulates (PM _{2.5})	55	55

Source: South Coast Air Quality Management District, *South Coast AQMD Air Quality Significance Thresholds*, April 2019.

- a) Conflict with or obstruct implementation of the applicable air quality plan? ***Less Than Significant Impact.***

SCAQMD, in coordination with the Southern California Association of Governments (SCAG), is responsible for developing, updating, and implementing the Air Quality Management Plan (AQMP) for the Basin. Air quality plans describe air pollution control strategies and measures to be implemented by a city, county, region, and/or air district. The primary purpose of an air quality plan is to bring an area that is in non-attainment with federal and State air quality standards into compliance with the requirements of the federal Clean Air Act and California Clean Air Act. Non-attainment is used to refer to an air basin where one or more ambient air quality standards are exceeded. The primary purpose of an air quality plan is to bring an area that does not attain to federal and State air quality standards into compliance with the requirements of the federal Clean Air Act and California Clean Air Act. In addition, air quality plans are developed to ensure that an area maintains a healthful level of air quality based on the NAAQS and the California Ambient Air Quality Standards (CAAQS).

To reduce such emissions, the SCAQMD drafted the 2016 AQMP. The 2016 AQMP establishes a program of rules and regulations directed at reducing air pollutant emissions and achieving state (California) and national air quality standards. The 2016 AQMP is a regional and multi-agency effort including the SCAQMD, the CARB, the SCAG, and the EPA. The plan's pollutant control strategies are based on the latest scientific and technical information and planning assumptions, including SCAG's growth projections and RTP/SCS, updated emission inventory methodologies for various source categories, and SCAG's latest growth forecasts. SCAG's latest growth forecasts were defined in consultation with local governments and with reference to local general plans. The project is subject to the SCAQMD's AQMP.

The SCAQMD's CEQA Handbook identifies two key indicators of consistency with the AQMP:

- 1) Whether a project will result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP.
- 2) Whether a project will exceed the assumptions in the AQMP based on the year of project buildout and phase.

With respect to the first criterion, based on the air quality modeling analysis conducted for the proposed project (refer to Threshold (b), below), the construction and operation of the project would not result in significant impacts based on the SCAQMD thresholds of significance. Additionally, Threshold (c) localized concentrations of carbon monoxide (CO), nitrogen oxides (NO_x), and particulate matter (PM₁₀ and PM_{2.5}) would be less than significant. Project construction and operation would not increase the frequency or severity of existing air quality violations. The proposed project is not forecasted to contribute to the exceedance of any air pollutant concentration standards.

The project site is located south of the Meridian Specific Plan area. The proposed project does not include any new housing or land uses that are associated with population growth. The proposed improvements would not result in significant vehicle trips or emissions. Therefore, no impact would occur as the project is also consistent with the second criterion.

The proposed project would not result in a long-term impact on the region's ability to meet State and federal air quality standards. Also, the proposed project would be consistent with the goals and policies of the AQMP for the control of fugitive dust with implementation of standard conditions of approval. Therefore, impacts would be considered less than significant.

- b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard? ***Less Than Significant Impact.***

Construction Emissions

Short-term air quality impacts are predicted to occur during demolition, grading, and construction operations associated with implementation of the proposed project. Temporary air emissions would result from the following activities:

- Particulate (fugitive dust) emissions from grading, trenching and storm drain line construction; and
- Exhaust emissions from the construction equipment and the motor vehicles of the construction crew.

The project proposes an underground 6-foot by 4-foot RCB from an existing 6-foot by 3-foot RCB along the west side of I-215, south of Van Buren Boulevard. The proposed storm drain line would extend approximately 2,350 linear feet south and connect to existing dual 48-inch RCP's at the RCTC railroad right-of-way. The project would also include the removal and replacement of portions of Avenue A and the removal and

replacement of an existing retaining wall. Construction associated with the proposed project would generate short-term emissions of criteria air pollutants. The criteria pollutants of primary concern within the project area include ozone-precursor pollutants (i.e., ROG and NO_x) and PM₁₀ and PM_{2.5}. Construction-generated emissions are short term and of temporary duration, lasting only as long as construction activities occur, but would be considered a significant air quality impact if the volume of pollutants generated exceeds the SCAQMD's thresholds of significance.

Project demolition involves the removal of approximately 431 tons of asphalt, requiring approximately 43 round trips by haul trucks during the demolition period. The project would be constructed over approximately six months, beginning in Spring 2023.⁶ The construction phase would include demolition, site preparation (including vegetation and pavement removal), grading, trenching and installation of the storm drain, and paving. The project grading phase would cut/fill approximately 5,000 cubic yards of soil to be balanced onsite. No import or export of soil is proposed. Project construction would disturb approximately 87,991 sf (2.02 acres) of the project site. Construction equipment for demolition would include a concrete saw, dumper, excavator, and two dozers. Site preparation is assumed to require the use of a dumper and tractor/loader/backhoe. The grading phase would require the use of four dumpers, an excavator, and one off-highway tractor. During the construction phase, two excavators and one tractor/loader/backhoe was assumed. During the proposed paving phase, one paver, a piece of paving equipment, one scraper, and one skid steer loader would be utilized. Exhaust emission factors for typical diesel-powered heavy equipment are based on the California Emissions Estimator Model (CalEEMod) program defaults. Variables factored into estimating the total construction emissions include the level of activity, length of construction period, number of pieces and types of equipment in use, site characteristics, weather conditions, number of construction personnel, and the amount of materials to be transported on or off the site. **Table AQ-3: Project Construction Emissions**, presents the anticipated daily short-term mitigated construction emissions prepared using CalEEMod version 2020.4.0.

Table AQ-3: Project Construction Emissions

Emissions Source	Pollutant (pounds per day) ¹					
	Reactive Organic Gases (ROG)	Nitrogen Oxide (NO _x)	Carbon Monoxide (CO)	Sulfur Dioxide (SO ₂)	Coarse Particulate Matter ² (PM ₁₀)	Fine Particulate Matter ² (PM _{2.5})
Construction Emissions (2022)	2.37	23.38	14.99	0.03	1.66	1.13
Construction Emissions (2023)	1.60	12.66	13.31	0.03	0.63	0.51
SCAQMD Significance Threshold	75	100	550	150	150	55
Exceed SCAQMD Threshold after Mitigation?	No	No	No	No	No	No
Notes: 1. Emissions were calculated using the California Emissions Estimator Model (CalEEMod), as recommended by the SCAQMD. Worst-case seasonal emissions are reported. 2. The reported particulate emissions include reduction/credits based on measures included in CalEEMod and as required by the SCAQMD through Rule 403. This includes the following: properly maintain mobile and other construction equipment; replace ground cover in disturbed areas quickly; water exposed surfaces three times daily; cover stock piles with tarps; water all haul roads three times daily; and limit speeds on unpaved roads to 15 miles per hour. Reduction percentages from the SCAQMD CEQA Handbook (Tables XI-A through XI-E) were applied. No reduction credits/mitigation was applied to construction equipment exhaust. Source: Refer to the CalEEMod outputs provided in Appendix A-1 and A-2, <i>Air Quality/GHG Data</i> .						

As shown above in Table AQ-3, project construction would not exceed the SCAQMD thresholds. Furthermore, the proposed project would be required to comply with SCAQMD's dust control rules. In addition, **Mitigation Measure AQ-1** requires the preparation of a fugitive dust control plan. The fugitive dust control plan would include dust control procedures (watering, covering/stabilizing disturbed areas, limiting on-site vehicle speeds, etc.) to further reduce emissions; Therefore, impacts would be less than significant with implementation of mitigation.

⁶ The modeling assumes that construction would commence in September 2022. Emission factors for construction would decrease over time as emissions regulations become more stringent. As construction is anticipated to commence at a later date than what was assumed in the model, the emissions presented herein is conservative.

General Conformity Review

As identified above, the AQCR is nonattainment for O₃ and PM₁₀. Therefore, since construction would result in the emission of these nonattainment or area criteria air pollutants, a review has been conducted to determine if the project is subject to the General Conformity Rule.

A federal action is exempt from the General Conformity Rule requirements if the action's total net emissions are below the *de minimis* threshold or are otherwise exempt per 40 CFR 51.153. If net emissions exceed the relevant *de minimis* value, or if a project is regionally significant, a formal conformity determination process must be followed.

Air quality impacts from proposed construction activities would occur from combustive emissions due to the use of fossil fuel-fired construction equipment and on-road trucks and fugitive dust (PM₁₀/PM_{2.5}) emissions from earth-moving activities, and the use of vehicles on bare soils. Construction related emissions would be short-term and primarily occur within the project area. The average annual emissions projected from construction are shown in **Table AQ-4: Construction Emissions Compared to de minimis Thresholds**.

Table AQ-4: Project Construction Emissions Compared to de minimis Thresholds

Emissions Source	Pollutant (tons per year) ¹					
	Reactive Organic Gases (ROG)	Nitrogen Oxide (NO _x)	Carbon Monoxide (CO)	Sulfur Dioxide (SO ₂)	Coarse Particulate Matter (PM ₁₀)	Fine Particulate Matter (PM _{2.5})
Construction Emissions (2022)	0.03	0.30	0.36	<1	0.02	0.02
Construction Emissions (2023)	0.02	0.14	0.22	<1	<1	<1
de minimis Threshold	10	10	100	100	100	70
Threshold Exceeded?	No	No	No	No	No	No

Notes:
 1. Emissions were calculated using the California Emissions Estimator Model (CalEEMod), as recommended by the SCAQMD. Source: Refer to the CalEEMod outputs provided in Appendix A-1 and A-2, Air Quality/GHG Data.
 2. De minimis levels are established within Title 40 of the Code of Federal Regulations, Section 93.153 (40 CFR 93.153). The project is located within the Riverside County portion of the South Coast Air Basin, which is federally designated as extreme nonattainment for ozone and serious nonattainment for PM_{2.5}.

Construction-related emissions of criteria air pollutants would be less than *de minimis* thresholds. Therefore, there would be no significant construction-related impact on criteria air pollutants. Additionally, operational activities fall within the scope of projects listed in 40 CFR 93.153(c)(2) (ii), (iv), (vii), (x), and (xiii). The project would not be regionally significant and is exempt from the General Conformity Rule, as emissions are below the applicable *de minimis* requirements. Therefore, the project would not 1) cause or contribute to any new violation of any standard in any area; 2) increase the frequency or severity of any existing violation of any standard in any area; or 3) delay timely attainment of any standard, required interim emission reductions, or other milestones in any area. As such, this action is exempt from the General Conformity Rule requirement to prepare a full Conformity Determination, and a detailed analysis of emissions is not warranted.

Operational Emissions

Operational activities associated with the proposed project would occur within the existing 40-foot sanitary sewer and storm drain easement and would include maintenance and inspections as determined by the RCFD. Long-term operational emissions are typically attributed to vehicle trips (mobile emissions), the use of natural gas (energy source emissions), and consumer products, architectural coatings, and landscape maintenance equipment (area source emissions). Implementation of the proposed project would improve an existing storm drainage system. The project would serve existing and planned future development and would not generate unplanned growth. The proposed project does not include any new housing. Furthermore, no stationary sources are proposed and the ongoing inspections and maintenance for the proposed project would generate minimal vehicle trips. Therefore, operational emissions are less than significant, and no mitigation is required.

Cumulative Impacts

California has 35 specific air districts, which are each responsible for ensuring that the criteria pollutants are below the NAAQS and CAAQS. Air basins that exceed either the NAAQS or the CAAQS for any criteria pollutants for set periods are designated as "nonattainment areas" for that pollutant. The cumulative setting for air quality includes western Riverside County and the South Coast Air Basin. The Riverside County portion of the Basin is designated as a nonattainment area for ozone (State and federal), PM₁₀ (State), and PM_{2.5} (State and federal).

Cumulative growth in population and vehicle use could inhibit efforts to improve regional air quality and attain the ambient air quality standards. The SCAQMD's approach to assessing cumulative impacts is based on the AQMP forecasts of attainment of ambient air quality standards in accordance with the requirements of the federal and California Clean Air Acts. The AQMP is designed to assist the region in attaining the applicable State and national ambient air quality standards and is intended to bring the Basin into attainment for all criteria pollutants. Since the construction and operational emission calculated for the proposed project do not exceed the applicable SCAQMD daily significance thresholds, the proposed project would be consistent with the AQMP and cumulative impacts would not be significant.

With respect to the proposed project's construction-period air quality emissions and cumulative Basin conditions, the SCAQMD has developed strategies to reduce criteria pollutant emissions outlined in the AQMP pursuant to the federal Clean Air Act mandates. As such, the project would comply with SCAQMD's Rule 403 (see Standard Condition [SC] AQ-1). Rule 403 requires that fugitive dust be controlled with the best available control measures in order to reduce dust so that it does not remain visible in the atmosphere beyond the property line of a project site. Per SCAQMD rules and mandates, as well as the CEQA requirement that significant impacts be mitigated to the extent feasible, these same requirements (i.e., Rule 403 compliance, implementation of all feasible measures, and compliance with adopted AQMP emissions control measures) would also be imposed on construction projects throughout the Basin, which would include related projects. Compliance with SCAQMD rules and regulations would reduce the proposed project's construction-related impacts to a less than significant level. Therefore, project-related construction emissions, in combination with those from other projects in the area, would not substantially deteriorate the local air quality.

As previously discussed, the proposed project would not result in long-term air quality impacts; emissions would not exceed SCAQMD operational thresholds. Additionally, adherence to SCAQMD rules and regulations would alleviate potential impacts related to cumulative conditions on a project-by-project basis. As a result, the proposed project would not contribute a cumulatively considerable net increase of any nonattainment criteria pollutant. Impacts would be less than significant.

c) Expose sensitive receptors to substantial pollutant concentrations? ***Less Than Significant Impact.***

A significant impact may occur when a project would generate pollutant concentrations to a degree that would significantly affect sensitive receptors, which include populations that are more susceptible to the effects of air pollution than the population at large. Sensitive population groups include children, athletes, the elderly, the acutely ill, and the chronically ill. Residential areas are considered to be sensitive receptors to air pollution because residents (including children and elderly) tend to be at home for extended periods of time, resulting in sustained exposure to any pollutants present.

The proposed project traverses the eastern edge of the Riverside National Cemetery and along the west side of I-215. The March ARB is located 680 feet to the east of the project site across I-215 and railroad tracks. The nearest residential uses are approximately 1.1 miles to the northwest and west and 1.2 miles to the southwest of the project site. The nearest school is Mead Valley Elementary School approximately 2.1 miles southwest of the southernmost portion of the site. Exposure of sensitive receptors is addressed for the following situations: Carbon Monoxide hotspots; localized emissions concentrations, toxic air contaminants (TACs, specifically diesel PM) from on-site construction; and asbestos.

Carbon Monoxide Hotspots

Localized high levels of Carbon Monoxide (CO), CO hotspot, are associated with traffic congestion and idling or slow-moving vehicles. Impacts related to CO hotspots would be less than significant because inspections and maintenance for the proposed project would generate minimal vehicle trips, thus the project would only have short-term temporary traffic impacts during construction and minimal operational related vehicle trips. The primary purpose of the project is to improve the storm drainage system. Thus, although the analysis assumes a minimal amount of vehicle trips related to maintenance, the improved efficiency of the storm drainage system could result in the same number of vehicle trips or potentially reduce vehicle trips related to maintenance. Therefore, impact would be less than significant in this regard.

Localized Significance Thresholds

Localized Significance Threshold (LSTs) were developed in response to SCAQMD Governing Boards' Environmental Justice Enhancement Initiative (I-4). The SCAQMD provided the Final Localized Significance Threshold Methodology (dated June 2003 [revised 2008]) for guidance. The LST methodology assists lead agencies in analyzing localized air quality impacts. The SCAQMD provides the LST screening lookup tables for one, two, and five-acre projects emitting CO, NO_x, PM₁₀ or PM_{2.5}. The LST methodology and associated

mass rates are not designed to evaluate localized impacts from mobile sources traveling over roadways. The project construction phase would include the scraping, trenching, and repaving of approximately 1.91 acres of the project site. The project is located in Source Receptor (SRA) 23, Metropolitan Riverside County. **Table AQ-5: Localized Significance of Construction Emissions**, shows that the emissions of these pollutants on the peak day of construction would not result in significant concentrations of pollutants at nearby sensitive receptors. Therefore, significant impacts would not occur concerning LSTs during construction activities.

Table AQ-5: Localized Significance of Construction Emissions

Source	Pollutant (pounds/day)			
	NO _x	CO	PM ₁₀	PM _{2.5}
Total On-Site Emissions ¹	22.63	14.33	1.45	1.07
<i>Localized Significant Threshold²</i>	<i>212</i>	<i>1,746</i>	<i>30</i>	<i>8</i>
Threshold Exceeded?	No	No	No	No

Notes:
 1. The maximum daily emission is presented as the worst-case scenario.
 2. The Localized Significance Threshold was determined using Appendix C of the SCAQMD Final Localized Significant Threshold Methodology guidance. The Localized Significance Threshold was based on the anticipated daily acreage disturbance for construction (approximately one acre or less; therefore the 1-acre threshold was used), the distance to sensitive receptors (100 meters), and the source receptor area (SRA 23).

Toxic Air Contaminants (Construction-Related Diesel Particulate Matter)

Construction would result in the generation of diesel particulate matter (DPM) emissions from the use of off-road diesel equipment required for grading and excavation, paving, and other construction activities. The amount to which the receptors are exposed (a function of concentration and duration of exposure) is the primary factor used to determine health risk (i.e., potential exposure to toxic air contaminant emission levels that exceed applicable standards). Health-related risks associated with diesel-exhaust emissions are primarily linked to long-term exposure and the associated risk of contracting cancer. The California Office of Environmental Health Hazard Assessment (OEHHA, *Air Toxics Hot Spots Program Guidance Manual*, February 2015) does not recommend assessing cancer risk for projects lasting less than two months due to the uncertainty in assessing cancer risk from very short-term exposures.

Health-related risks associated with diesel-exhaust emissions are primarily linked to long-term exposure and the associated risk of contracting cancer. The use of diesel-powered construction equipment would be episodic and would occur throughout the site. Additionally, construction activities would be subject to and would comply with California regulations limiting idling to no more than 5 minutes, which would further reduce nearby sensitive receptors' exposure to temporary and variable DPM emissions. Furthermore, even during the most intense year of construction, emissions of DPM would be generated from different locations on the project site rather than in a single location because different types of construction activities would not occur at the same place at the same time.

Construction of the storm drain would occur in a linear fashion and would not occur in a single location for extended periods of time. Nonetheless, However, a construction health risk assessment was prepared for the project site to conservatively consider potential impacts on the surrounding receivers, including cemetery workers. The EPA recommended air dispersion model AERMOD has been used to evaluate potential health effects to sensitive receptors from construction emissions of DPM. AERMOD is a steady-state, multiple-source, Gaussian dispersion model designed for use with emission sources situated in terrain where ground elevations can exceed the stack heights of the emission sources (not a factor for this project). AERMOD requires hourly meteorological data consisting of wind vector, wind speed, temperature, stability class, and mixing height. Surface and upper air meteorological data was obtained from CARB. Surface and upper air meteorological data from the Perris Monitoring Station was selected as being the closest and most representative for meteorology based on proximity to the project site. Maximum (worst case) PM₁₀ exhaust construction emissions over the entire construction period were used in AERMOD to approximate construction DPM emissions. Risk levels were calculated in accordance with OEHHA guidance.

PM₁₀ construction emissions rates in grams per second were calculated from the total annual unmitigated exhaust emissions reported in CalEEMod. Annual emissions were converted to grams per second and these emissions rates were input into AERMOD. Results of this assessment indicate that the maximum (i.e., worst case at the boundary of the construction area) 24-hour concentration of PM₁₀ during construction would be 0.10 µg/m³ which is below the State Ambient Air Quality Standard of 20 µg/m³ and the SCAQMD's 10.4 µg/m³ construction threshold. The maximum off-site annual concentration of PM₁₀ during construction would be 0.008 µg/m³. The highest calculated carcinogenic risk at the cemetery from project construction is 2.74 per million, which is below

the SCAQMD threshold of 10 in one million. The maximum annual concentration at the Meridian Specific Plan area would be 0.004 $\mu\text{g}/\text{m}^3$ and the calculated carcinogenic risk is 1.3 per million. The risk calculation used a construction exposure duration of two years and OEHHA 95 percentile breathing rates. Non-cancer hazards for DPM would be below the SCAQMD threshold of 1.0, with a chronic hazard index computed at 0.002 and an acute hazard index of 0.11. As described above, worst-case construction risk levels based on conservative assumptions would be below the SCAQMD's thresholds. Therefore, construction risk levels would be less than significant.

Asbestos During Demolition

There are no existing structures on the project site and therefore very low risk of asbestos. Please refer to the topical issue, Hazards and Hazardous Materials, in this Initial Study.

Naturally Occurring Asbestos

Asbestos is a term used for several types of naturally occurring fibrous minerals that are a human health hazard when airborne. The most common type of asbestos is chrysotile, but other types such as tremolite and actinolite are also found in California. Asbestos is classified as a known human carcinogen by State, federal, and international agencies and was identified as a toxic air contaminant by the California Air Resources Board in 1986. Asbestos can be released from serpentinite and ultramafic rocks when the rock is broken or crushed. At the point of release, the asbestos fibers may become airborne, causing air quality and human health hazards. These rocks have been commonly used for unpaved gravel roads, landscaping, fill projects, and other improvement projects in some localities. Asbestos may be released to the atmosphere due to vehicular traffic on unpaved roads, during grading for development projects, and at quarry operations. All of these activities may have the effect of releasing potentially harmful asbestos into the air. Natural weathering and erosion processes can act on asbestos bearing rock and make it easier for asbestos fibers to become airborne if such rock is disturbed. According to the Department of Conservation Division of Mines and Geology, *A General Location Guide for Ultramafic Rocks in California – Areas More Likely to Contain Naturally Occurring Asbestos Report* (August 2000), serpentinite and ultramafic rocks are not known to occur within the project area. Thus, there would be no impact in this regard.

- d) Result in other emissions (such as those leading to odors adversely affecting a substantial number of people)?
Less Than Significant Impact.

The SCAQMD CEQA Air Quality Handbook (SCAQMD, 1993) identifies certain land uses as sources of odors. These land uses include the following: agriculture, wastewater treatment plant, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. The proposed project is a storm drain improvement that would be located underground and would not include any of the land uses that have been identified by SCAQMD as odor sources.

During construction-related activities, some odors (not substantial pollutant concentrations) that may be detected are those typical of construction vehicles (e.g., diesel exhaust from grading and construction equipment). These odors are a temporary short-term impact that is typical of construction projects and would disperse rapidly. The proposed project would not include any of the land uses that have been identified by the SCAQMD as odor sources. Therefore, impacts would be less than significant, and no mitigation is required.

Standard Conditions and Requirements:

Standard Condition AQ-1: During project construction, construction equipment shall be properly maintained at an off-site location in accordance with manufacturer's specifications; maintenance shall include proper tuning and timing of engines. The equipment maintenance records and equipment design specification data sheets shall be available during construction and subject to inspection.

Standard Condition AQ-2: During project construction, the applicant shall require all contractors to turn off all construction equipment when not in use or limit idling to less than 5 minutes.

Mitigation Measure:

Mitigation Measure AQ-1: Dust Control. During construction, the applicant shall require all construction contractors to comply with South Coast Air Quality Management District's (SCAQMD's) Rules 402 and 403 in order to minimize construction emissions of dust and particulates. SCAQMD Rule 402 requires that air pollutant emissions not be a nuisance off-site. Rule 402 prohibits the 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.

SCAQMD Rule 403 requires that fugitive dust be controlled with Best Available Control Measures so that the presence of such dust does not remain visible beyond the property line of the emission source. This rule is intended to reduce PM₁₀ emissions from any transportation, handling, construction, or storage activity that has the potential to generate fugitive dust. This requirement shall be included as notes on the contractor specifications. Table 1 of Rule 403 lists the Best Available Control Measures that are applicable to all construction projects. The measures include, but are not limited to, the following:

- a) Portions of a construction site to remain inactive longer than a period of three months will be seeded and watered until grass cover is grown or otherwise stabilized.
- b) All on-site roads will be paved as soon as feasible or watered periodically or chemically stabilized.
- c) All material transported off-site will be either sufficiently watered or securely covered to prevent excessive amounts of dust.
- d) The area disturbed by clearing, grading, earthmoving, or excavation operations will be minimized at all times.
- e) Where vehicles leave a construction site and enter adjacent public streets, the streets will be swept daily or washed down at the end of the work day to remove soil tracked onto the paved surface.
- f) Mobile and other construction equipment will be properly maintained.
- g) Ground cover in disturbed areas will be replaced as expeditiously as possible.
- h) Exposed surfaces will be watered three times per day.
- i) Any stock piled materials will be covered with tarps.
- j) Haul roads twice will be watered twice per day.
- k) Speeds on unpaved roads will be limited to 15 miles per hour.

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
IV. BIOLOGICAL RESOURCES. Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion:

A Biological Technical Report (BTR) was prepared for the proposed project by Rocks Biological Consulting (RBC; June 2023) and is included as **Appendix B**. A Biological Technical Report was prepared for the prior Meridian Trunk Sewer project by RBC (January 2019). The 2019 BTR included a Jurisdictional Delineation Report, Burrowing Owl Survey Report, and results of a trapping survey for the Stephens' kangaroo rat. The majority of the proposed project impact area overlaps with the recent Meridian Trunk Sewer project impact area (1.51 acres of 2.02 acres, as shown in **Figure 5: Biological Survey Area for Prior Meridian Trunk Sewer Project**). The prior Meridian Trunk Sewer project was constructed in 2019 – 2020 to increase the capacity of the existing trunk sewer and accommodate existing and planned development in the Meridian Specific Plan area. RBC conducted the general biological surveys, aquatic resources delineation, and special-status species surveys for the Meridian Trunk Sewer project. Where appropriate, information from those surveys is discussed within the biological analysis. All areas of the proposed project site were examined to confirm that site conditions had not significantly changed since preparation of the Biological Report for the Meridian Trunk Sewer Project report.

- a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? ***Less Than Significant Impact With Mitigation Incorporated.***

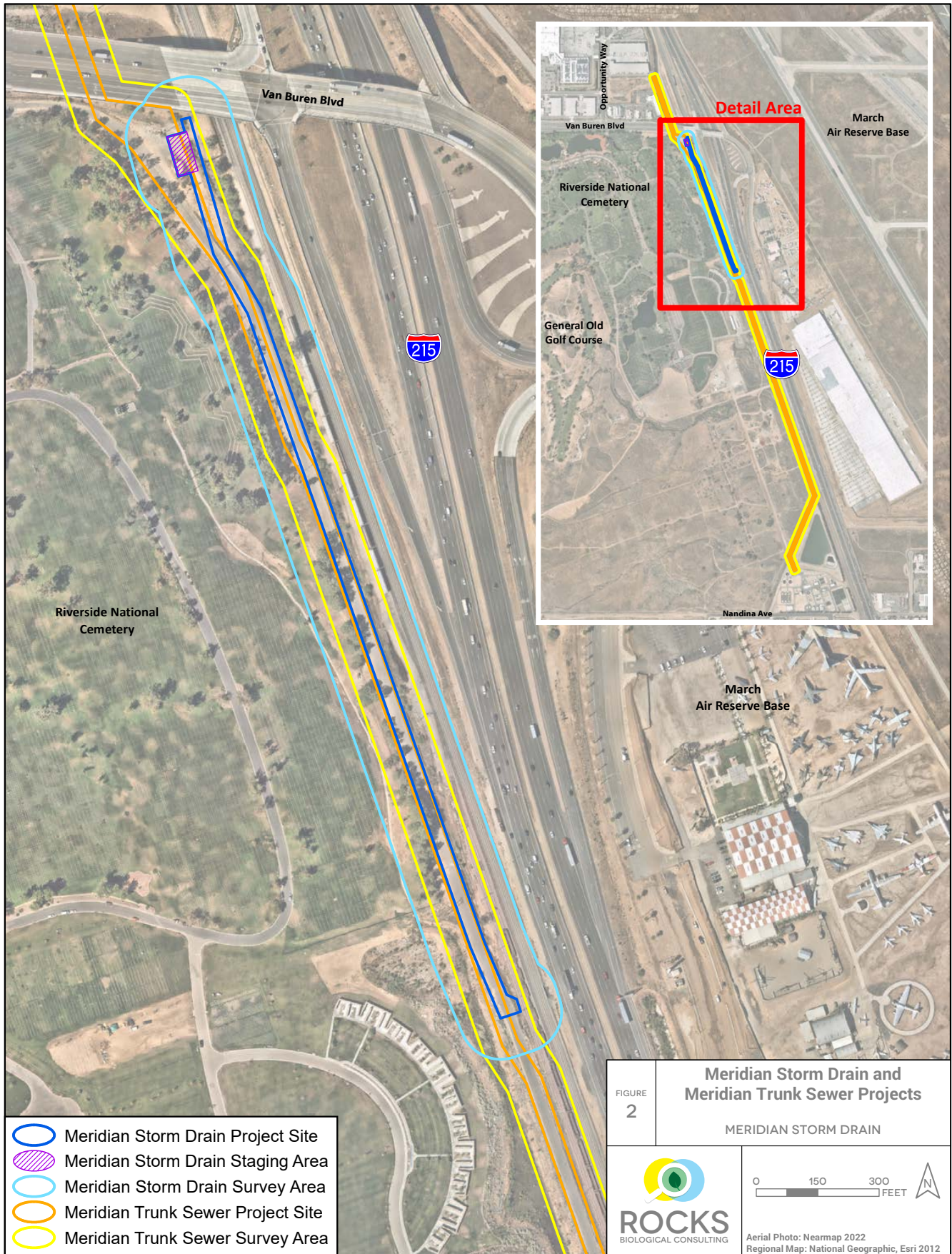
The California Department of Fish and Wildlife (CDFW) and the U.S. Fish and Wildlife Service (USFWS) may list species as threatened or endangered under the California Endangered Species Act (CESA) or Federal Endangered Species Act (FESA), respectively. The USFWS can designate critical habitat that identifies specific areas that are essential to the conservation of a listed species.

For the purposes of this report, species are considered to have special status if they meet one or more of the following criteria:

- Listed under the federal or State Endangered Species Act
- CDFW Species of Special Concern
- CDFW Fully Protected Species
- CDFW Watch List Species
- Listed as having a California Rare Plant Rank

The potential for the survey area to support special-status plant species was assessed based on general biological surveys; analysis of CNDDDB and California Native Plant Society (CNPS) data; and knowledge of the habitat affinities and biogeography of special-status plants in southern California. Paniculate tarplant (*Deinandra paniculata*), California Rare Plant Rank (CRPR) 4.2 (defined as plants of limited distribution and moderately threatened in California (20-80% occurrences threatened/moderate degree and immediacy of threat) was identified within the survey area during 2018 surveys. While not observed in 2022, conditions on site have not significantly changed since 2018; therefore, paniculate tarplant is assumed present. No other rare plant species were observed during general biological surveys in 2022. A complete list of special-status plants with potential to occur on-site is presented in **Table BIO-1: Special Status Plant Species Potential to Occur.**

The project area supports a relatively low diversity of plant species and natural vegetation communities. A total of 58 plant species (45 percent native, 55 percent non-native) were observed during the 2022 general biological survey. A total of 13 species of birds, two reptiles, three mammals, and three invertebrates were observed or presumed present based on track and/or scat during the survey. Because twilight/nighttime surveys were not conducted, crepuscular and nocturnal animals are likely under-represented in this list.



Source:

FIGURE 5: Biological Survey Area for Prior Meridian Trunk Sewer Project
Meridian Storm Drain Pipeline Extension
Riverside, CA

Table BIO-1: Special Status Plant Species Potential to Occur

Species	Status	Habitat Description	Potential to Occur within Project Area
Bristly sedge (<i>Carex comosa</i>)	CRPR 2B.1	Perennial rhizomatous herb. Blooms May-Sep. Coastal prairie, marsh/swamp lake margins, valley/foothill grasslands. Elev. 0-2,050 ft.	Low. Suitable habitat is not present on site.
California satintail (<i>Imperata brevifolia</i>)	CRPR 2B.1	Perennial rhizomatous herb. Blooms Sep-May. Chaparral, coastal scrub, Mojavean desert scrub, alkali meadows and seeps, and riparian scrub. Elev. 0-3,986 ft.	Low. Scrub habitat present on site is limited and disturbed.
California screw moss (<i>Tortula californica</i>)	CRPR 1B.1	Moss. Chenopod scrub and valley and foothill grassland. Elev. 35-4,790 ft.	Low. Suitable habitat is not present on site.
Chaparral ragwort (<i>Senecio aphanactis</i>)	CRPR 2B.2	Annual herb. Blooms Jan-Apr. Chaparral, cismontane woodland, and coastal scrub. Elev. 50-2,625 ft.	Low. Scrub habitat present on site is limited and disturbed.
Chaparral sand verbena (<i>Abronia villosa var. aurita</i>)	CRPR 1B.1	Annual herb. Blooms Jan-Sep. Sandy chaparral, coastal scrub and desert dunes. Elev. 245-5,250 ft.	Low. Scrub habitat present on site is limited and disturbed.
Coulter's goldfields (<i>Lasthenia glabrata ssp. coulteri</i>)	CRPR 1B.1	Annual herb. Blooms Feb-Jun. Coastal salt marshes and swamps, playas, vernal pools. Elev. 5-4,005 ft.	Low. Suitable habitat is not present on site.
Deep Canyon snapdragon (<i>Pseudorontium cyathiferum</i>)	CRPR 2B.3	Annual herb. Blooms Feb-Apr. Sonoran desert scrub. Elev. 0-2,625 ft.	Low. Suitable habitat is not present on site
Horn's milk-vetch (<i>Astragalus hornii var. hornii</i>)	CRPR 1B.1	Annual herb. Blooms May-Oct. Lake margins, meadows and seeps, playas. Elev. 196-2,788 ft.	Low. Suitable habitat is not present on site
Long-spined spineflower (<i>Chorizanthe polygonoides var. longispina</i>)	CRPR 1B.1	Annual herb. Blooms Apr-Jul. Chaparral, coastal scrub, meadows and seeps, valley/foothill grassland, and vernal pools. Elev. 98-5,020 ft.	Low. Scrub habitat present on site is limited and disturbed.
Los Angeles sunflower (<i>Helianthus nuttallii ssp. parishii</i>)	CRPR 1A	Perennial rhizomatous herb. Blooms Aug-Oct. Coastal salt and freshwater marshes and swamps. Elev. 33-5,495 ft.	Very low. Marsh habitat present on site is limited and disturbed. Species believed to be extirpated.
Many-stemmed dudleya (<i>Dudleya multicaulis</i>)	CRPR 1B.2	Perennial herb. Blooms Apr-Jul. Chaparral, coastal scrub, and valley/foothill grasslands. Elev. 50-2,590 ft.	Low. Scrub habitat present on site is limited and disturbed.
Mesa horkelia (<i>Horkelia cuneata var. puberula</i>)	CRPR 1B.1	Perennial herb. Blooms Feb-Sep. Maritime chaparral, cismontane woodland, and coastal scrub. Elev. 230-2,657 ft.	Low. Scrub habitat present on site is limited and disturbed.
Munz's onion (<i>Allium munzii</i>)	CRPR 1B.1	Perennial bulbiferous herb. Blooms Mar-May. Chaparral, cismontane woodland, coastal scrub, pinyon and juniper woodland, and valley/foothill grassland. Elev. 975- 3,510 ft.	Low. Scrub habitat present on site is limited and disturbed.
Nevin's barberry (<i>Berberis nevinii</i>)	CRPR 1B.1	Perennial evergreen shrub. Blooms Feb-Jun. Chaparral, cismontane woodland, coastal scrub, and riparian scrub. Elev. 230-2,705 ft.	None. Scrub habitat present on site is limited and disturbed. This perennial species would have been observed if present.
Paniculate tarplant	CRPR 4.2	Annual herb. Blooms (Mar)Apr-Nov. Coastal scrub, valley and	Assumed present. Species observed during 2018 surveys for

Table BIO-1: Special Status Plant Species Potential to Occur

Species	Status	Habitat Description	Potential to Occur within Project Area
<i>(Deinandra paniculata)</i>		foothill grassland, and vernal pools. Elevation 80-3,085 ft.	the prior Meridian Trunk Sewer project.
Parish's brittle scale (<i>Atriplex parishii</i>)	CRPR 1B.1	Annual herb. Blooms Jun-Oct. Chenopod scrub, playas, and vernal pools within alkaline habitat. Elev. 82-6,233 ft.	Low. Suitable habitat is not present on site.
Parish's desert-thorn (<i>Lycium parishii</i>)	CRPR 2B.3	Perennial shrub. Blooms Mar-Apr. Coastal scrub and Sonoran desert scrub. Elev. 445-3,280 ft.	None. Scrub habitat present on site is limited and disturbed. This perennial species would have been observed if present.
Parry's spineflower (<i>Chorizanthe parryi</i> var. <i>parryi</i>)	CRPR 1B.1	Annual herb. Blooms Apr-Jun. Chaparral, cismontane woodland, coastal scrub, and valley and foothill grassland. Elev. 900-4,000 ft.	Low. Scrub habitat present on site is limited and disturbed.
Prairie wedge grass (<i>Sphenopholis obtusata</i>)	CRPR 2B.2	Perennial herb. Blooms Apr-Jul. Cismontane woodland, meadows and seeps. Elev. 984-6,561 ft.	Low. Suitable habitat is not present on site.
Salt spring checkerbloom (<i>Sidalcea neomexicana</i>)	CRPR 2B.2	Perennial herb. Blooms Mar-Jun. Chaparral, coastal scrub, lower montane coniferous forests, Mojavean desert scrub, and playas. Elev. 50-5,020 ft.	Low. Scrub habitat present on site is limited and disturbed.
San Bernardino aster (<i>Symphotrichum defoliatum</i>)	CRPR 1B.2	Perennial rhizomatous herb. Blooms Jul-Nov. Cismontane woodlands, coastal scrub, lower montane coniferous forest, meadows and seeps, marshes and swamps, and vernal mesic valley/foothill grasslands. Elev. 7-6,690 ft.	Low. Scrub and marsh habitat present on site is limited and disturbed.
San Jacinto Valley crownscale (<i>Atriplex coronata</i> var. <i>notatior</i>)	CRPR 1B.1	Annual herb. Blooms Apr-Aug. Playas, mesic valley/foothill grasslands, and vernal pools within alkaline habitat. Elev. 456-1,640 ft.	Low. Suitable habitat is not present on site.
Santa Ana River woollystar (<i>Eriastrum densifolium</i> ssp. <i>sanctorum</i>)	CRPR 1B.1	Perennial herb. Blooms Apr-Sep. Chaparral and coastal scrub. Elev. 298-2,000 ft.	Low. Scrub habitat present on site is limited and disturbed.
Slender-horned spineflower (<i>Dodecahema leptoceras</i>)	CRPR 1B.1	Annual herb. Blooms Apr-Jun. Chaparral, cismontane woodland, and coastal scrub. Elev. 655-2,490 ft.	Low. Scrub habitat present on site is limited and disturbed.
Smooth tarplant (<i>Centromadia pungens</i> ssp. <i>laevis</i>)	CRPR 1B.1.	Annual herb. Blooms Apr-Sep. Chenopod scrub, meadows and seeps, playa, riparian woodland, valley and foothill grassland. Elev. 0-2,100 ft.	Low. General biological surveys were timed with species phenology for proper identification. <i>Centromadia pungens</i> was observed on site and keyed out to common spikeweed (<i>Centromadia pungens</i> ssp. <i>pungens</i>).
Spreading navarretia (<i>Navarretia fossalis</i>)	FT, CRPR 1B.1	Annual herb. Blooms Apr-Jun. Chenopod scrub, shallow freshwater marshes and swamps, playas, and vernal pools. Elev. 98-2,150 ft.	Very low. Marsh habitat present on site is limited and disturbed.
Thread-leaved brodiaea (<i>Brodiaea fillifolia</i>)	FT, SE, CRPR 1B.1	Perennial bulbiferous herb. Blooms Mar-Jun. Chaparral, cismontane woodlands, coastal scrub, playas, valley/foothill grasslands, vernal pools. Elev. 82-3,675 ft.	Low. Scrub habitat present on site is limited and disturbed.

Table BIO-1: Special Status Plant Species Potential to Occur

Species	Status	Habitat Description	Potential to Occur within Project Area
White rabbit-tobacco (<i>Pseudognaphalium leucocephalum</i>)	CRPR 2B.2	Perennial herb. Blooms Aug-Nov. Chaparral, cismontane woodland, coastal scrub, and riparian woodland. Elev. 0-6,890 ft.	Low. Scrub habitat present on site is limited and disturbed.
White-bracted spineflower (<i>Chorizanthe xanti</i> var. <i>leucotheca</i>)	CRPR 1B.2	Annual herb. Blooms Apr-Jun. Coastal scrub, Mojavean desert scrub, pinyon and juniper woodland. Elev. 985-3,935 ft.	Low. Scrub habitat present on site is limited and disturbed.
<p>Notes:</p> <p>FT – Federally Threatened (USFWS) FE – Federally Endangered (USFWS) CE – California Endangered (CDFW) CRPR – California Rare Plant Rank</p> <p>1A – Presumed extirpated in California and rare or extinct elsewhere 1B – Plants rare, threatened, or endangered in California and elsewhere 2B – Plants Rare, threatened, or endangered in California, but more common elsewhere 4 – Plants of limited distribution</p> <p>0.1 – Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat) 0.2 – Moderately threatened in California (20-80% occurrences threatened/moderate degree and immediacy of threat) 0.3 – Not very threatened in California (less than 20% of occurrences threatened / low degree and immediacy of threat or no current threats known)</p>			

Threatened and Endangered Plant Species

No federal or State-listed threatened or endangered plants were observed during the general field survey. No federally or State listed species are expected to occur due to the disturbed nature of the site and lack of suitable soils, such as clays and alkaline soils, that often support listed plant species with potential to occur in the project vicinity.

Other Special-Status Plant Species

Paniculate Tarplant (*Deinandra paniculata*)

Paniculate tarplant was observed during 2018 surveys for the prior Meridian Trunk Sewer project within the 2022 survey buffer (i.e., Meridian Storm Drain project buffer). While not observed in 2022, conditions on site have not significantly changed since 2018; therefore, paniculate tarplant is assumed present. Paniculate tarplant is an annual herb in the sunflower family (Asteraceae) and has small yellow flowers that bloom from March to November. Paniculate tarplant is native to California and Baja California. In the United States, it occurs from San Diego County to Santa Barbara County at elevations less than 3,000 feet. It is commonly found in coastal scrub, valley and foothill grassland, and vernal pool habitats. Paniculate tarplant is a CRPR rank 4.2 species and State Rank S4. The CRPR 4.2 listing means that it is a plant of limited distribution that is moderately threatened in California (20-80 percent of occurrences threatened); the State Rank S4 means that it is “apparently secure within California.”

Paniculate tarplant was documented outside of the project impact area and is not likely to be directly impacted by project implementation. However, potential trampling or equipment impacts could occur during construction if access and project boundaries are not strictly controlled. **Mitigation Measure BIO-1** strictly limits construction activities to within the predetermined impact area through the demarcation of boundaries with flagging and/or fencing and areas with known rare plant occurrences would be avoided; construction activities would remain outside the clearly demarcated construction limits, therefore would prevent inadvertent disturbance to areas outside the limits of the proposed project activities, including areas that contain paniculate tarplant. With implementation of site monitoring and adjacency impact through **Mitigation Measure BIO-1**, potential indirect impacts on rare plants would be less than significant.

Special-Status Wildlife Species and Critical Habitats

Prior to conducting field surveys, the potential for the project site to support special-status wildlife species was assessed based on the vegetation mapping, analysis of the CNDDDB and USFWS queries and knowledge of the habitat affinities and biogeography of special-status wildlife in southern California. Although not documented on site during the 2022 general biological survey, four listed species, Riverside fairy shrimp (*Streptocephalus woottoni*), least Bell’s vireo (*Vireo bellii pusillus*), San Bernardino kangaroo rat (*Dipodomys merriami parvus*), and Stephens’ kangaroo rat, have been documented within three miles of the project site, along with numerous other non-listed special-status wildlife species.

A table listing the potential for occurrence for all CNDDDB and USFWS-documented special-status wildlife species on is presented in **Table BIO-2: Special Status Wildlife Species Potential to Occur**.

Table BIO-2: Special Status Wildlife Species Potential to Occur

Species	Status	Habitat Description	Potential to Occur within Project Area
Invertebrates			
Riverside fairy shrimp (<i>Streptocephalus woottoni</i>)	FE	Vernal pools or other seasonal pools with a depth greater than 30 cm.	None. Vernal pool habitat not present.
Vernal pool fairy shrimp (<i>Branchinecta lynchi</i>)	FT	Natural vernal pools or other seasonal pools.	None. Vernal pool habitat not present.
Amphibians			
Western spadefoot (<i>Spea hammondi</i>)	SSC	Temporary ponds, vernal pools, and backwaters of flowing creeks, as well as adjacent upland habitats such as grasslands and coastal sage scrub for burrowing.	Low. Suitable ephemeral ponds and flowing creeks not present. Upland habitats are limited and disturbed.
Reptiles			
Coast horned lizard (<i>Phrynosoma blainvillii</i>)	SSC	A variety of habitats including sage scrub, chaparral, and coniferous and broadleaf woodlands. Found on sandy or friable soils with open scrub. Requires open areas, bushes, and fine loose soil.	Low. Suitable sage scrub is limited. Other suitable habitats not present; this species is more common near the coast.
Coastal whiptail (<i>Aspidoscelis tigris stejnegeri</i>)	SSC	A variety of rocky, sandy, dry habitats including sage scrub, chaparral, woodlands on friable loose soil.	Low. Suitable habitat is limited and soils are compacted from previous disturbance.
Orange-throated whiptail (<i>Aspidoscelis hyperythra</i>)	WL	A variety of habitats including sage scrub, chaparral, and coniferous and broadleaf woodlands. Found on sandy or friable soils with open scrub.	Low. Suitable habitat is limited and soils are compacted from previous disturbance
Red-diamond rattlesnake (<i>Crotalus ruber</i>)	SSC	Chaparral, sage scrub, along creek banks, and in rock outcrops or piles of debris. Often associated with dense vegetation in rocky areas.	Low. Suitable chaparral, sage scrub, or creek bank habitats are limited or not present.
Birds			
Burrowing owl (<i>Athene cunicularia</i>)	SSC (at burrowing sites & some wintering sites)	Found in grasslands and open scrub from the coast to foothills. Strongly associated with California ground squirrel (<i>Otospermophilus beecheyi</i>) and other fossorial mammal burrows.	Low. Suitable foraging and nesting habitat present throughout site. Not documented during 2018 protocol surveys for the prior Meridian Trunk Sewer project.
California horned lark (<i>Eremophila alpestris actia</i>)	WL	Found from coastal deserts and grasslands to alpine dwarf-shrub habitat above treeline. Also seen in coniferous or chaparral habitats.	Assumed present. Species was observed in the immediate vicinity of the project site during previous surveys (RBC 2019).
Coastal California gnatcatcher (<i>Polioptila californica californica</i>)	FT, SSC	Found in sage scrub and adjacent chaparral habitats often containing buckwheat or sagebrush.	Low. Sage scrub habitat within the survey area has been revegetated and is not mature enough to support this species.
Cooper's hawk (<i>Accipiter cooperii</i>)	WL (when nesting)	Usually found in oak woodlands but occasionally in willow or eucalyptus woodlands.	Assumed present. No potential for nesting on site. Species was observed in. Species was observed in the immediate vicinity of the project site during previous surveys (RBC 2019). Suitable ornamental habitat is

Table BIO-2: Special Status Wildlife Species Potential to Occur

Species	Status	Habitat Description	Potential to Occur within Project Area
			present in the project buffer.
Least Bell's vireo (<i>Vireo bellii pusillus</i>)	FE (when nesting); SE (when nesting)	Riparian woodland with understory of dense young willows or mulefat and willow canopy. Nests often placed along internal or external edges of riparian thickets.	Low. Suitable riparian habitat not present.
Loggerhead shrike (<i>Lanius ludovicianus</i>)	SSC (when nesting)	Found within grassland, chaparral, desert, and desert edge scrub, particularly near dense vegetation used for nesting.	Low. Suitable foraging habitat is present, but dense nesting habitat is not present.
Northern harrier (<i>Circus hudsonius</i>)	SSC (when nesting)	Found in meadows, grasslands, open rangelands, desert sinks, and fresh and saltwater emergent wetlands. Nests on the ground, usually near marsh edge, but may also nest in grasslands, grain fields, or sagebrush flats several miles from water.	Low. Suitable foraging and nesting habitat are limited.
Sharp-shinned hawk (<i>Accipiter striatus</i>)	WL (when nesting)	Found in ponderosa pine, black oak, riparian deciduous, mixed conifer, and Jeffrey pine habitats.	Low. Suitable nesting habitats not present.
Southwestern willow flycatcher (<i>Empidonax traillii extimus</i>)	FE, SE	Dense riparian woodlands comprised of willows and cottonwoods.	Low. Suitable riparian habitat not present.
Tricolored blackbird (<i>Agelaius tricolor</i>)	ST (nesting colony)	Found nesting in wetlands with cattails, bulrushes, and willows. Forages in cultivated fields, feedlots associated with dairy farms, and wetlands.	Low. Freshwater marsh habitat within the survey area is small and isolated.
Yellow warbler (<i>Setophaga petechia</i>)	SSC	Found within riparian woodlands, including disturbed habitats, and are associated with streamside cottonwood, willow, alder, and ash trees.	Low. Suitable riparian habitat not present.
Mammals			
Los Angeles pocket mouse (<i>Perognathus longimembris brevinasus</i>)	SSC	Found in low elevation grassland, alluvial sage scrub, and coastal sage scrub.	Low. Suitable alluvial sage scrub and native grassland habitat not present and coastal sage scrub on site is isolated and disturbed.
Northwestern San Diego pocket mouse (<i>Chaetodipus fallax fallax</i>)	SSC	Found in shrublands that vary from sparse desert shrubland to dense coastal sage scrub.	High. Species was documented within the survey area during 2018 protocol surveys for Stephens' kangaroo rat (RBC 2019).
Pocketed free-tailed bat (<i>Nyctinomops femorosaccus</i>)	SSC	Found in pinyon-juniper woodlands, desert scrub, desert riparian, desert wash, alkali desert scrub, Joshua tree, and palm oasis habitats. Roosts in rock crevices in cliffs and must drop from the roost to gain flight speed.	Low. Suitable rocky outcrops and foraging habitat not present.
San Bernardino kangaroo rat (<i>Dipodomys merriami parvus</i>)	FE, SSC	Primarily found in alluvial scrub and floodplain habitats containing sandy loam substrate and open vegetative cover.	Low. Suitable habitats not present.
Southern grasshopper mouse (<i>Onychomys torridus</i>)	SSC	Occurs primarily in desert scrub habitats. Habitats with low open	Low. Suitable desert scrub habitats not present.

Table BIO-2: Special Status Wildlife Species Potential to Occur

Species	Status	Habitat Description	Potential to Occur within Project Area
<i>ramona</i>)		and semi-open scrubs habitats including coastal sage scrub, mixed chaparral, low sagebrush, riparian scrub. Annual grassland with scattered shrubs, are less frequently inhabited by this species.	
Stephens' kangaroo rat (<i>Dipodomys stephensi</i>)	FT; ST	Habitats include annual grassland and coastal sage scrub with sparse shrub cover. Commonly in association with <i>Eriogonum fasciculatum</i> , <i>Artemisia californica</i> , and <i>Erodium cicutarium</i> , in areas with loose, friable, well-drained soil, and flat or gently rolling terrain.	Assumed present. Species was documented within survey area during 2018 protocol surveys (RBC 2019).
Western yellow bat (<i>Lasiurus xanthinus</i>)	SSC	Found in valley foothill riparian, desert riparian, desert wash, and palm oasis habitats. Roosts in trees.	Low. Suitable roosting and foraging habitat not present.
Notes: FT – Federally Threatened FE – Federally Endangered SE – State Endangered ST – State Threatened SSC: CDFW Species of Special Concern WL: CDFW Watch List Species			

Threatened and Endangered Wildlife Species

Stephens' Kangaroo Rat (Dipodomys stephensi)

Stephens' kangaroo rat is federally and state-listed as threatened; its federal status was down-listed from endangered to threatened effective on March 21, 2022. There are three distinct regions with Stephens' kangaroo rat populations: western Riverside County, western San Diego County, and central San Diego County. Stephens' kangaroo rat historically occurred in southwestern San Bernardino County but is believed to be extirpated from that area.

Habitat for Stephens' kangaroo rat includes open grasslands, fallow agricultural fields, and sparse coastal sage scrub in areas with penetrable soils and flat to steep sloping topography. Stephens' kangaroo rat is found at elevations of 180 to 4,100 feet above mean sea level (amsl), with most populations located at elevations below 2,000 feet amsl. Habitat for Stephens' kangaroo rat varies in composition and density from place to place and season to season. Filaree (*Erodium spp.*) frequently dominates the best Stephens' kangaroo rat habitat areas, especially during and shortly after the rainy season. Areas with dense grass cover are typically not suitable for Stephens' kangaroo rat. A nocturnal species, Stephens' kangaroo rat consumes a diet primarily of seeds. The decline of this species is attributed in large part to habitat loss and fragmentation due to urban development and agriculture. Other factors contributing to the loss of the species include off-road vehicles, rodent control, and predation by feral and domestic cats.

Stephens' kangaroo rat was documented on site during protocol surveys for the Meridian Trunk Sewer project in September 2018 and is assumed present in the project area and has been previously reported within one mile of the project site. During 2018 protocol surveys, a total of 27 Stephens' kangaroo rats were captured, most of them on and along the dirt road south of the current project site. Within the Meridian Storm Drain survey area, which differs slightly from the Meridian Trunk Sewer project alignment, five Stephens' kangaroo rats were captured in 2018 between Avenue A and the railroad tracks. Suitable habitat for Stephen's kangaroo rat remains present within undeveloped portions of the project site, including Riversidean sage scrub and disturbed habitat (0.86 acre). Developed land within the project site, which consists of the asphalt Avenue A and active railroad tracks, is not suitable for Stephen's kangaroo rat due to lack of penetrable soils. In addition, the on-site ornamental vegetation and mulefat scrub habitats do not provide suitable habitat for Stephen's kangaroo rat.

Protocol surveys were not conducted in 2022; however, Stephens' kangaroo rat is assumed present within the survey area given that the species was observed during 2018 surveys and conditions have not changed significantly. Therefore, impacts on Stephens' kangaroo rat are potentially significant and require mitigation (**Mitigation Measure BIO-2A**). The project site will impact 0.86 acre of potentially suitable Stephens' kangaroo rat habitat, which would be mitigated through the purchase of SKRHCP credits or through consultation with USFWS. Further, project ground-disturbing activities have the potential to result in direct take of this species, if present. **Mitigation Measure BIO-2B** would reduce the risk of mortality and injury by excluding Stephens' kangaroo rat from the project site, thereby reducing the potential for this species to encounter construction equipment. In addition, **Mitigation Measure BIO-2B** would require the use of best management practices that would reduce the risk of wildlife entrapment. Impacts on Stephen's kangaroo rat are potentially significant; however, with implementation of **Mitigation Measure BIO-2A** and **2-B**, impacts would be less than significant.

Direct mortality and removal of suitable habitat would result in impacts to this species. Any ground-disturbing activities have the potential to result in take of this species under the federal Endangered Species Act. Project impacts on Stephens' kangaroo rat are potentially significant and require mitigation. With the implementation of **Mitigation Measure BIO-2A** and **BIO-2B**, the project would not result in significant impacts to this species.

Other Special-status Wildlife Species

Cooper's Hawk (Accipiter cooperii)

Cooper's hawk is a CDFW watch list species when nesting. Cooper's hawk breeds throughout the United States and into Canada and Mexico. In California, Cooper's hawk nests in live oak, riparian, and other forest habitats from sea level to 9,000 feet. The Cooper's hawk is tolerant of human disturbance and habitat fragmentation and nests in suburban and urban settings. Cooper's hawk hunts in open woodland and habitat edges, catching avian prey in the air, on the ground, and in vegetation. The Cooper's hawk hunts a variety of small birds and may also hunt small mammals, reptiles, and amphibians. Their nest is typically a platform of sticks and twigs lined with bark and eggs are laid in February through June with the clutch size of 4 to 5 eggs.

Habitat loss, especially in riparian areas, is attributed to declining populations of Cooper's hawk in Southern California. Other threats include direct or indirect human disturbance at nest sites and eggshell thinning from pesticide use, although this threat is largely abated through the change in pesticide chemicals used after the 1970's.

An individual Cooper's hawk was observed foraging approximately 350 feet west of the project site during 2018 general biological surveys. Although suitable nesting habitat occurs within the survey area, no nesting Cooper's hawks or nesting behaviors were observed during project surveys. While not observed in 2022, Cooper's hawk is well known from the project vicinity and is assumed present within the survey area. Despite assumed presence within the survey area (i.e., the project site and surrounding buffer), there is no potential for nesting on the project site; therefore, impacts on this species are not anticipated. However, **Mitigation Measure BIO-3** requires vegetation clearing and ground disturbing activities be conducted outside of the bird nesting season or, if avoidance of the nesting season is not feasible, surveys be conducted by a qualified biologist as prescribed in **Mitigation Measure BIO-3**. Thus, potential impacts to the Cooper's Hawk would be mitigated to a less than significant level with implementation of **Mitigation Measure BIO-3**.

Burrowing Owl (Athene cunicularia)

Burrowing owl is a California Species of Special Concern at nesting sites and is federally protected under the Migratory Bird Treaty Act. The western subspecies of burrowing owl breeds from southern Canada to the western half of the United States and into Baja California and central Mexico. In California, suitable habitat for Burrowing owl is generally characterized by short, sparse vegetation with few shrubs, level to gentle topography, and well-drained soils, such as naturally occurring grassland, shrub steppe, and desert habitats. Burrowing owl may also occur in agricultural areas, ruderal grassy fields, vacant lots, and pastures containing suitable vegetation structure and useable burrows with foraging habitat in proximity. Burrowing owl usually use burrows dug by California ground squirrel (*Otospermophilus beecheyi*) and round-tailed ground squirrel (*Citellus tereticaudus*) and dens or holes dug by other fossorial species including badger (*Taxidea taxus*), coyote (*Canis latrans*), and fox (e.g., San Joaquin kit fox (*Vulpes macrotis mutica*)). Burrowing owl also frequently use natural rock cavities, debris piles, culverts, and pipes for nesting and roosting and have been documented using artificial burrows for nesting and cover.

Burrowing owl has been documented within less than three miles of the project site. However, burrowing owls were not documented during the 2022 general biological survey and habitat on site was determined to have low potential to support this species. The project site was included in 2018 protocol burrowing owl surveys for the prior Meridian Trunk Sewer project and surveys were negative. The Meridian Trunk Sewer project included an 8,200-linear-foot alignment whereas the current Meridian Strom Drain alignment is only 2,350 linear feet. The longer

alignment resulted in a larger 2018 survey area that included habitat of higher suitability for burrowing owl, including several large, undeveloped fields at the southern end of 2018 survey area. The Meridian Trunk Sewer project required protocol surveys due to the presence of suitable nesting and foraging habitat within the survey area.

The developed road, ornamental trees, freshwater marsh, mule fat scrub, and Riversidean sage scrub do not constitute suitable vegetation communities or land uses for burrowing owl. The disturbed habitat within the survey area exists as thin linear strips between I-215 and the Riverside National Cemetery and lacks connectivity to suitable habitat capable of supporting burrowing owl foraging. Few suitably-sized California ground squirrel and other fossorial mammal burrows occur within the site. As such, burrowing owl has low potential to occur on the project site.

The project site has low potential to support burrowing owl. Burrowing owls and/or their sign have not been observed at the project site during either the 2022 general biological survey or the 2018 Meridian Trunk Sewer project focused burrowing owl surveys. While on-site habitat has low suitability for burrowing owl, the presence of fossorial mammal burrows and the location of the project site within species' range warrants the need for focused surveys and pre-construction (i.e., take avoidance) surveys. If the site becomes occupied by breeding burrowing owl, direct impacts in the form of habitat destruction, and potentially death, injury, or harassment of nesting birds, their eggs, and their young could occur. Injury or mortality occurs most frequently during the vegetation clearing stage of construction and involves eggs, nestlings, and recently fledged young that cannot safely avoid equipment. **Mitigation Measures BIO-4A, and BIO-4B** outline take avoidance measures for the project, including focused surveys, pre-construction surveys, and disturbance buffers should an active nest burrow be found on site. Such protocols have been developed by CDFW and are widely acknowledged to be successful in identifying active burrowing owl nests. Avoiding such nests, if present, until burrows are no longer occupied would prevent direct take of burrowing owl. If avoidance of burrowing owls is determined to be unattainable, **Mitigation Measure 4-C** requires the implementation of a CDFW approved Burrowing Owl Relocation Plan prior to ground disturbing activities. Therefore, Implementation of **Mitigation Measures BIO-4A through BIO-4C** would reduce impacts on burrowing owl to a less than significant level.

*Northwestern San Diego Pocket Mouse (*Chaetodipus fallax fallax*)*

The northwestern San Diego pocket mouse is a CDFW Species of Special Concern that is found in coastal sage scrub, sage scrub/grassland ecotones, and chaparral communities and is associated with rocky and gravelly substrates. In San Diego County the San Diego pocket mouse was associated with shrub cover greater than 50 percent. The northwestern San Diego pocket mouse is one of six subspecies of San Diego pocket mouse and is primarily a granivore (seed-eater). Beyond specialization on seeds, little is known of the foraging behavior of the San Diego pocket mouse. However, other pocket mice (*Chaetodipus*, *Perognathus spp.*) tend to forage under shrub and tree canopies, or around rock crevices. San Diego pocket mice are nocturnal and spend their days in burrows. The San Diego pocket mouse is threatened by development, habitat fragmentation, and degradation. San Diego pocket mouse was documented on-site during focused Stephens' kangaroo rat surveys in September 2018. Focused fossorial mammal surveys were not conducted in 2022; however, conditions on site have not significantly changed since 2018 and northwestern San Diego pocket mouse is assumed present within the survey area. Potential direct mortality of northwestern San Diego pocket mouse, if present, could occur during construction activities. Impacts on this species is potentially significant and mitigation is required to reduce impacts on the species to a level below significant. **Mitigation Measure BIO-2B** would reduce the risk of mortality and injury by excluding northwestern San Diego pocket mouse from the project site, thereby reducing the potential for this species to encounter construction equipment. The mitigation measure would also require the use of best management practices that would reduce the risk of wildlife entrapment. Additionally, the project occurs within the Multiple Species Habitat Conservation Plan (MSHCP) area. The MSHCP is a regional effort to preserve sensitive habitats and species, and all development in the region that permitted through the County of Riverside must comply with the MSHCP. The goal of such regional biological planning efforts is to preserve sufficient native habitats such that special status species are also conserved. Though the JPA is an independent agency and therefore not covered under the MSHCP, project mitigation will be pursued in a manner consistent with the MSHCP, further off-setting potential minor impacts on special-status species that could occur with project implementation. Potential direct mortality of Northwestern San Diego pocket mouse, if present, could occur during construction activities. The proposed mitigation measures would reduce the risk of mortality and injury by excluding northwestern San Diego pocket mouse from the project site, thereby reducing the potential for this species to encounter construction equipment. The mitigation measure would also require the use of best management practices that would reduce the risk of wildlife entrapment. Impacts on this species is potentially significant and mitigation (**Mitigation Measure BIO-2B**), is required to reduce impacts on the species to a less than significant level.

California Horned Lark (Eremophila alpestris actia)

California horned lark is a CDFW Species of Special Concern found from coastal deserts and grasslands to alpine dwarf-shrub habitat above treeline and in coniferous or chaparral habitats. It is a common to abundant resident in a variety of open habitats, usually found in habitats where trees and large shrubs are absent. Within southern California, California horned larks nest on the ground in open fields, grasslands, and rangelands. Horned larks forage in areas with low-growing vegetation and feed primarily on grains and other seeds most of the year, shifting to an insect-based diet in summer months. California horned lark breeds from March through July, with a peak in activity in May. Outside of the breeding season pairs do not maintain territories and instead form large gregarious, somewhat nomadic flocks. During 2018 general biological surveys, a small flock of California horned larks was observed foraging in disturbed habitat approximately 150 feet west of the project site. No nests or nesting behaviors were observed during the biological surveys. While not observed in 2022, horned lark is well known from the project vicinity and is assumed present within the survey area. **Mitigation Measure BIO-3** requires vegetation clearing and ground disturbing activities be conducted outside of the bird nesting season or, if avoidance of the nesting season is not feasible, surveys be conducted by a qualified biologist as prescribed in **Mitigation Measure BIO-3**. Thus, potential impacts to California Horned Lark would be mitigated with implementation of **Mitigation Measure BIO-3**.

Critical Habitat

The Endangered Species Act defines critical habitat as a specific geographic area, or areas, that contain features essential for the survival and recovery of endangered and threatened species. Critical habitat is designated by USFWS for endangered and threatened species and may include sites for breeding and rearing, movement or migration, feeding, roosting, cover, and shelter. Critical habitat may also include areas that are not currently occupied by the species, but that will be needed for its recovery. Special management of critical habitat, including measures for water quality and quantity, host animals and plants, food availability, pollinators, sunlight, and specific soil types is required to ensure the long-term survival and recovery of the identified species. No USFWS-designated critical habitat or proposed critical habitat occurs within three miles of the project site. Therefore, no impacts to critical habitat are expected with implementation of the proposed project.

- b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? ***Less Than Significant Impact With Mitigation Incorporated.***

Vegetation Communities

Vegetation within the survey area is predominantly comprised of disturbed habitat and developed land cover (i.e., roads and railroad tracks). Several small areas of upland vegetation occur within the survey area, including ornamental and Riversidean sage scrub. No large stands of riparian vegetation communities are present within the survey area, although small stands of freshwater marsh and mulefat (*Baccharis salicifolia*) scrub are present.

The proposed project would result in temporary impacts on disturbed habitat and developed land and small temporary impacts on mule fat scrub, ornamental vegetation, and Riversidean sage scrub. Disturbed habitat, developed land, and ornamental vegetation are non-native habitats that are not considered sensitive vegetation communities; therefore, impacts on these vegetation communities would not be significant.

Minor temporary impacts may occur on mule fat scrub within the central portion of the project site (0.001 acre) and Riversidean sage scrub within the southern portion of the survey area (0.004 acre). While not considered sensitive natural communities under CEQA, the project will avoid direct impacts on these native vegetation communities through the implementation of **Mitigation Measure BIO-1** which prescribes that construction limits will not extend into these native communities and flagging and/or fencing will be installed to clearly mark the project boundaries. With implementation of **Mitigation Measure BIO-1**, impacts on these native vegetation communities would be avoided and therefore mitigated to a less than significant level.

Aquatic Resources

The on-site jurisdictional delineation for the proposed project was conducted on June 27 and July 17, 2018 in preparation of the Meridian Trunk Sewer Project Jurisdictional Delineation Report. The identified potentially jurisdictional aquatic resources were examined on June 3, 2022, during the general biological survey, to identify any changes to the features. All currently proposed project impacts are within the 2018 formal jurisdictional delineation survey area and conditions on site have not significantly changed since 2018; therefore, the results of this delineation survey remain valid for assessing potential project impacts.

Prior to the on-site delineation, field maps were created using a Geographic Information System (GIS) and incorporating topographic maps and a color aerial photograph at a 1:100 scale. The USFWS National Wetlands

Inventory (NWI) and U.S. Geological Survey (USGS) National Hydrography Dataset (NHD) data was overlaid on a USGS topographic map of the area to further determine the locations of potential areas of jurisdiction. Areas with depressions, drainage patterns, and/or wetland vegetation within the project survey area were evaluated for potential jurisdictional status, with focus on the presence of defined channels and/or wetland vegetation, soils and hydrology.

One potentially jurisdictional ephemeral channel was identified on and adjacent to the project site (Feature 2). This potential non-wetland, ephemeral Corps/ Regional Water Quality Control Board (RWQCB) waters of the U.S./State and CDFW streambed runs parallel and immediately outside the project site to the east. It is approximately four feet wide, originates from a culvert south of Van Buren Boulevard, and flows northwest to southeast into a culvert that runs under I-215. As shown in Figure 5 the Jurisdictional Delineation Report in **Appendix B**, Feature 2 appeared to be a constructed drainage between the railroad and Avenue A to channelize flows downstream. RBC staff observed an ordinary high-water mark (OHWM) in most sections of the channel based on the presence of a break in slope, change in sediment texture, and change in vegetation species and cover. Some sections of the channel contain less defined flow; however, vegetation wracking was consistent throughout the feature. A Wetland Sample Point, taken adjacent to several mule fat individuals, met the hydrophytic vegetation and wetland hydrology parameters per the Arid West Supplement; however, the sample point did not show evidence of hydric soils (the channel was predominately unvegetated).

Based on the results of the on-site jurisdictional delineation, the proposed project would temporarily impact approximately 0.01 acre (91 linear feet) of potential non-wetland, ephemeral Corps/RWQCB waters of the U.S./State and CDFW streambed through the placement of a storm drain. All project areas would be restored back to pre-construction elevations and contours after project implementation; however, temporary impacts are potentially significant and require consultation and permitting through the Corps, RWQCB, and CDFW. Final mitigation ratios would be determined in consultation with the CDFW, Corps, and/or RWQCB based on agency evaluation of current resource functions and values. It is anticipated that a minimum 1:1 ratio is required, though ratios will likely be higher. If mitigation is not achieved on-site, it must be performed in an agency-approved location that will be conserved and managed in perpetuity. Temporary impacts are potentially significant and require consultation and permitting through Corps, RWQCB, and CDFW. With the implementation of **Mitigation Measure BIO-6**, impacts would be less than significant.

- c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? ***Less Than Significant Impact With Mitigation Incorporated.***

As discussed above in Threshold (b), the project site contains a jurisdictional feature (Feature 2 as shown in Figure 5 of the Jurisdictional Delineation Report in **Appendix B**), which is a non-wetland, ephemeral Corps/RWQCB waters of the U.S./State and CDFW streambed. All project areas would be restored back to pre-construction elevations and contours after project implementation; however, temporary impacts are considered significant. **Mitigation Measure BIO-6** requires consultation and permitting through Corps, RWQCB, and the CDFW, which would reduce impacts by requiring the restoration to pre-construction elevations and contours through the permitting process. Thus, with implantation of **Mitigation Measure BIO-6**, impacts would be mitigated to a less than significant level.

- d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? ***Less Than Significant Impact With Mitigation Incorporated.***

Wildlife Corridors

A wildlife corridor can be defined as a physical feature that links wildlife habitat, often consisting of native vegetation that joins two or more larger areas of similar wildlife habitat. Corridors enable migration, colonization, and genetic diversity through interbreeding and are therefore critical for the movement of animals and the continuation of viable populations. Based on a review of the CDFW Biogeographic Information and Observation System data, no wildlife movement corridors are mapped within the survey area. The land within and around the survey area are designated as Rank 1, "Limited Connectivity Opportunity", which is the lowest rank within the Terrestrial Connectivity, Areas of Conservation Emphasis (ACE) dataset. Due to the disturbed nature of the survey area and the proximity to the I-215, the project likely does not serve as a wildlife corridor. In addition, the proposed project site is not identified as an existing or proposed linkage or constrained linkage in the MSHCP.

Nesting Birds

The project site has the potential to support nests, including those of ground-nesting species, that would be protected under the Migratory Bird Treaty Act (MBTA) and/or the California Fish and Game Code (§3503) under which it is unlawful to "take, possess, or needlessly destroy" avian nests or eggs. These nests would also be protected under

the MBTA if active. Thus, potential impacts could occur if construction, such as ground disturbing activities or vegetation clearing is undertaken during the breeding season. To avoid potential impacts on nesting birds, removal of habitat should occur outside of the breeding season (generally February 15 to August 31). If vegetation/habitat removal cannot occur outside of the breeding season, a qualified biologist should survey the area prior to construction initiation. If active nests are found, active construction in that area plus an appropriate buffer (determined by the qualified biologist in consultation with CDFW) should be avoided until nestlings have fledged and the nest becomes inactive. With the implementation of implementation of the pre-construction nesting bird surveys and avoidance measures as identified in **Mitigation Measure BIO-3**, take of avian nests would be avoided and potential impacts on nesting birds would be less than significant.

- e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? **No Impact.**

The project is located in an area subject to Riverside County Code of Ordinances and the Riverside County Oak Tree Management Guidelines. However, no native oaks occur within the project site; therefore, no impacts on oak trees, which are protected under the Riverside County Oak Tree Management Guidelines, would occur with project implementation. Riverside County Ordinance No. 499.11 (as amended though 499.11), requires a permit for removal or severe trimming of any tree planted in the right of way of any County highway, however, as there have been no street trees planted on the project site, no impacts to trees protected under Ordinance No. 499.11 would occur with project implementation. Chapter 12.24 of the Riverside County Code of Ordinances includes regulations related to tree removal on parcels or property greater than 0.5 acre in size, located in unincorporated Riverside County, and above 5,000 feet in elevation requires a permit. The project site elevation is below 5,000 acres; as such, this ordinance is not applicable. As the project would not conflict with any local policies or ordinances protecting biological resources, no impact would occur and no mitigation is required.

- f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? **Less Than Significant Impact.**

The project occurs within an area covered by the Western Riverside MSHCP. Projects where the lead agency is signatory to the MSHCP are covered under the MSHCP; however, the March JPA is the lead agency for the project and is not a signatory to the MSHCP. As such, the project is not subject to MSHCP regulations, nor does it receive take authority granted under the MSHCP. Nevertheless, the Western Riverside County Regional Conservation Authority(RCA)MSHCPInformationMap(RCA2022)was reviewed for requirements that could result in a potential conflict between the proposed project and the MSHCP. The project site is not located within a Criteria Cell. The project site is within an area where burrowing owl surveys are required, but not in an area where surveys for narrow endemic criteria area plants, small mammals, and/or amphibians are required. For plant and wildlife species that are covered under the MSHCP, impacts are fully mitigated for covered activities within Riverside County by payment of the MSHCP fee and through consistency with MSHCP Section 6 policies and requirements. Though the March JPA is not a Permittee in the MSHCP and as such is not subject to MSHCP, regulations, project mitigation outlined herein is consistent with general MSHCP requirements. The project does not conflict with the MSHCP and the goals and objectives set therein.

The project is also located within Stephens' Kangaroo Rat Habitat Conservation Plan (SKRHCP) area. March JPA is not a signatory this SKRHCP, however, the JPA can participate in the plan for project mitigation. Mitigation for potentially significant impacts on Stephens' kangaroo rat are consistent with the goals and objectives of the SKRHCP. As the project site would comply with applicable local habitat conservation plans, there would be no impact relative to adopted habitat conservation or other approved local, regional or State plans and no mitigation is required.

Mitigation Measures:

- Mitigation Measure BIO-1: Site Monitoring and Adjacency Impact Avoidance:** To prevent inadvertent disturbance to areas outside the limits of the proposed project activities including areas that contain paniculate tarplant, the following monitoring requirements and BMPs shall be implemented. A biologist shall be contracted to perform monitoring to ensure implementation of the following requirements and BMPs. Monitoring reports and a post-construction monitoring report will be prepared to document compliance with these requirements. March JPA shall ensure that the following monitoring requirements and BMPs be implemented:

- 1) A qualified biologist shall be contracted to perform daily monitoring during initial vegetation removal and throughout ground-disturbing activities that result in the breaking of the ground surface. After initial vegetation removal and ground disturbance that results in breaking of the ground surface, a biologist shall be contracted to perform regular random checks (not less than twice per month but could be increased depending on the presence of special-status species) to ensure that all mitigation and BMPs are implemented. In addition, monitoring reports and a post-construction monitoring report shall be prepared by biologists to document compliance with these mitigation measures and BMPs.
- 2) To prevent inadvertent disturbance to areas outside the limits of work, including areas that contain particulate tarplant, the construction limits shall be clearly demarcated (e.g., installation of flagging or temporary visibility construction fence) prior to ground disturbance activities and all construction activities, including equipment staging and maintenance shall be conducted within the marked disturbance limits.
- 3) A qualified biologist shall flush special-status species (i.e., avian or other mobile species) from suitable habitat areas to the maximum extent practicable immediately prior to initial vegetation removal activities.
- 4) Construction vehicles shall not exceed 15 miles per hour on unpaved roads adjacent to the project site or the right-of-way accessing the site.
- 5) Construction activities will occur during daytime hours.
- 6) If trash and debris need to be stored overnight during maintenance activities, fully covered trash receptacles that are animal-proof and weather-proof will be used by the maintenance contractor to contain all food, food scraps, food wrappers, beverage containers, and other miscellaneous trash. Alternatively, standard trash receptacles may be used during the day, but must be removed each night.
- 7) Cut vegetation shall be hauled out of any waterways and stored, if necessary, where it cannot be washed by rainfall or runoff into waterways. When maintenance activities are completed, any excess materials or debris shall be removed from the project site.
- 8) Temporary structures and storage of construction materials will not be located in jurisdictional waters, including wetlands or riparian areas.
- 9) Staging/storage areas for construction equipment and materials will not be located in jurisdictional waters, including wetland or riparian areas.
- 10) The operator will not permit pets on or adjacent to construction sites.
- 11) As per the Landscaping Guidelines of the Resource Management Element of the March Joint Powers Authority (JPA) General Plan (1999), drought-tolerant vegetation and native vegetation will be used to the extent feasible, consistent with March JPA Landscape Water Efficiency Ordinance #JPA 16-03, with the purpose of preserving existing mature trees and native vegetation. A qualified botanist shall review landscape plans to recommend appropriate provisions to minimize the spread of invasive plant species, as defined by the California Invasive Plant Council (www.calipc.org) and California Native Plant Society (www.cnps.org), within the project site. Provisions may include a) installation of container plants and/or hydro-seeding areas adjacent to existing, undisturbed native vegetation areas with native plant species that are common within temporary impact areas; and b) review and screening of proposed plants to identify and avoid potential invasive species and weed removal during the initial planting of landscaped areas.
- 12) At the end of each workday during construction, March JPA, or its contractors, will cover all excavated, steep-sided holes or trenches more than eight inches deep and that have sidewalls steeper than 1:1 (45 degree) slope with plywood or similar materials, or provide a minimum of one escape ramp per 100 feet of trenching (with slopes no greater than 3:1) constructed of earth fill or wooden planks. The project

biologist will thoroughly inspect holes and trenches for trapped animals at the start and end of each workday.

- 13) March JPA, and/or its contractors, will screen, cover, or elevate at least one (1) foot above ground, all construction pipe, culverts, or similar structures with a diameter of three (3) inches or greater that are stored on site overnight. These pipes, culverts, and similar structures will be inspected by the project biologist for wildlife before such material is moved, buried, or capped.

Mitigation Measure BIO-2: Stephens' Kangaroo Rat and Northwestern San Diego Pocket Mouse:

Stephens' kangaroo rat and northwestern San Diego pocket mouse have been documented within the project survey area previously and are assumed present. Mitigation is required for Stephens' kangaroo rat habitat impacts and to avoid direct take of Stephens' kangaroo rat and northwestern San Diego pocket mouse. The following protection measures shall be implemented prior to and during construction activities:

Mitigation Measure BIO-2A: Stephens' Kangaroo Rat

March JPA shall either:

- 1) Initiate consultation with the USFWS for potential impacts on Stephens' kangaroo rat and ensure that all mitigation measures and conditions resulting from that consultation are implemented.

OR

- 2) Purchase 0.86 acre of credit through the SKRHCP implemented by the Riverside County Habitat Conservation Agency in order to receive third party take authority for potential impacts on Stephens' kangaroo rat habitat.

Mitigation Measure BIO-2B: Stephens' Kangaroo Rat and Northwestern San Diego Pocket Mouse:

March JPA will ensure that the following measures are implemented in order to avoid and minimize the potential for direct impacts on Stephens' kangaroo rat and northwestern San Diego pocket mouse:

- 1) The perimeter of construction will be delineated with enclosure fencing. The installation and removal of fencing will avoid direct impacts to existing fossorial mammal burrows. Enclosure fencing will have the following specifications:
 - a. Chain link fence with an erect height of 3 feet.
 - b. The bottom 2 feet of the erect portion of the fencing needs to be covered in a material that cannot be climbed or chewed through by Stephens' kangaroo rat or northwestern San Diego pocket mouse; metal flash or similar material is recommended.
 - c. The bottom 2 feet of fencing must be buried two feet underground.
 - d. The fence must be installed under the supervision of a qualified biologist with small fossorial mammal experience to oversee installation. This biologist will inspect the fence before leaving the job site in the evening and repair any openings in the fencing. The fence removal will also require the supervision of a qualified biologist.
- 2) A Worker Environmental Awareness Program (WEAP) will be developed and implemented prior to the start of excavation. The WEAP will be presented by the qualified biologist(s) and will cover the sensitive resources found on site, flagging/fencing of exclusion areas, permit requirements, trash and debris collection and disposal, spill avoidance and clean-up, and other environmental issues.
- 3) Spoils, trash, and any excavation-generated debris will be removed to an approved off-site disposal facility. Trash and food items will be contained in closed containers and removed daily to reduce the attraction of opportunistic predators to the site,

such as common ravens, coyotes, and feral cats and dogs that may prey on listed species.

- 4) Construction activities will be limited to daylight hours to the maximum extent feasible. If nighttime work is necessary, lighting will be shielded away from surrounding natural areas. Fixtures will be shielded to downcast below the horizontal plane of the fixture height and mounted as low as possible.

Mitigation Measure BIO-3: Nesting Birds: To ensure compliance with CFGC sections 3503, 3503.5, and 3513 and to avoid potential impacts to nesting birds, including ground-nesting special-status species (i.e., California horned lark), vegetation clearing and ground disturbing activities shall be conducted outside of the bird nesting season (generally February 15 to August 31). If avoidance of the nesting season is not feasible, then a qualified biologist will conduct a nesting bird survey within three (3) days prior to any disturbance of the site, including but not limited to vegetation clearing, diking, demolition activities, and grading. If active nests are identified, the biologist shall establish suitable buffers around the nests depending on the level of activity within the buffer and the species observed, and the buffer areas shall be avoided until the nests are no longer occupied, and the juvenile birds can survive independently from the nests. A letter report or mitigation plan in conformance with applicable state and federal law (i.e., appropriate follow-up surveys, monitoring schedules, construction and noise barriers/buffers, etc.) shall be prepared and include proposed measures to ensure that take of birds or eggs or disturbance of breeding activities is avoided. The report or mitigation plan shall be submitted to the CDFW and/or the USFWS as applicable for review and approval and implemented to the satisfaction of those agencies. The project biologist shall verify and approve that all measures identified in the report or mitigation plan are in place prior to and/or during construction. During construction activities, the qualified biologist shall continue biological monitoring at a frequency recommended by the qualified biologist using their best professional judgement. If nesting birds are detected, avoidance and minimization measures may be adjusted, and construction activities stopped or redirected by the qualified biologist using their best professional judgement to avoid take of nesting birds.

Mitigation Measure BIO-4A: Burrowing Owl: To determine burrowing owl presence/absence from the project site, focused breeding season surveys shall be conducted in accordance with the guidelines established in the Staff Report on Burrowing Owl Mitigation. Four focused surveys shall be conducted by qualified biologists during the breeding season (February 1 – August 31); one survey will be conducted between February 1 – April 15 and three visits, at least three weeks apart between April 15 and July 15. For the purposes of this mitigation measure, “qualified biologist” is a biologist who meets the requirements set forth in the Staff Report on Burrowing Owl Mitigation. Surveys shall be conducted between morning civil twilight and 1000 during favorable conditions. Surveys shall not be conducted during rain, dense fog, when high winds were greater than 20 miles per hour, or when cloud cover was greater than 75% for a prolonged period. The burrowing owl survey area will include the project site plus a 500-foot (150-meter) buffer. Qualified biologists shall conduct surveys by walking transects spaced 20 meters apart throughout suitable burrowing owl habitat within the survey area. At the beginning of each transect, and approximately every 100 meters, biologists shall use binoculars to scan the survey area for burrowing owl, active and potential burrows, and/or sign of burrowing owl. Any inaccessible areas of the 500-foot buffer will be surveyed with binoculars to greatest extent possible. All observed burrows shall be examined for sign, including feathers, pellets, excrement (e.g., scat and whitewash), and prey remains. Following surveys, a report documenting the results shall be prepared in accordance with CDFW guidelines.

Mitigation Measure BIO-4B: Burrowing Owl: No less than 14 days prior to the onset of construction activities, a qualified biologist shall survey the construction limits of the project area and a 500-foot buffer for the presence of burrowing owls and occupied nest burrows. A second survey shall be conducted within 24 hours prior to the onset of construction activities. The surveys shall be conducted in accordance with the most current CDFW survey methods. If burrowing owls are not observed during the clearance survey, no additional conditions

may be required to avoid impacts to burrowing owl. Following pre-construction surveys, the project applicant shall submit a report to CDFW summarizing the results of the pre-construction surveys that documents compliance with this mitigation measure. The report shall be submitted within 60 days of survey completion.

Mitigation Measure BIO-4C: If burrowing owl is documented during either the focused or pre-construction survey, the following measures shall be followed:

- 1) Occupied burrowing owl burrows shall not be disturbed during the nesting season (February 1 through August 31) unless a qualified biologist approved by CDFW verifies through non-invasive methods that either the birds have not begun egg laying and incubation, or that juveniles from the occupied burrows are foraging independently and capable of independent survival. Disturbance buffers shall be implemented by a qualified biologist in accordance with the recommendations included in the Staff Report on Burrowing Owl Mitigation. A biologist shall be contracted to perform monitoring during all construction activities approximately every other day. The definitive frequency and duration of monitoring shall be dependent on whether it is the breeding versus non-breeding season and the efficacy of the exclusion buffers, as determined by a qualified biologist and in coordination with CDFW.

If burrowing owl is observed during the non-breeding season (September 1 through January 31) or confirmed to not be nesting, a non-disturbance buffer between the project activities and the occupied burrow shall be installed by a qualified biologist in accordance with the recommendations included in the Staff Report on Burrowing Owl Mitigation.

- 2) If avoidance is not possible, either directly or indirectly, a Burrowing Owl Relocation and Mitigation Plan (Plan) shall be prepared and submitted for approval by CDFW prior to ground disturbing activities. Once approved, the Plan would be implemented to relocate non-breeding burrowing owls from the project site. The Plan shall detail methods for relocation of burrowing owls from the project site, provide guidance for the monitoring and management of the replacement burrow sites and associated reporting requirements, and ensure that a minimum of two suitable, unoccupied burrows are available off site for every burrowing owl or pair of burrowing owls to be relocated.

Mitigation Measure BIO-5: **Native Vegetation Communities Impact Avoidance:** To avoid impacts on native vegetation communities occurring at the boundaries of the project site, the March JPA shall ensure that the project avoids direct impacts on native vegetation communities adjacent to the project site, namely, mule fat scrub along the eastern project boundary and Riversidean sage scrub along the southwestern project boundary. The construction limits shall be clearly demarcated and installed in such a way that avoids native vegetation communities. A qualified biologist shall be present during the installation of flagging or temporary visibility construction fence along boundaries of the entire project site and guide the placement of flagging/fencing along the segments adjacent to native vegetation communities.

Mitigation Measure BIO-6: **Aquatic Resources:** March JPA shall require proof that any required Section 404, 401, and 1600 permits and/or clearances have been obtained prior to any disturbance of the jurisdictional feature (Feature 2) on site. All mitigation measures and conditions contained within the permits shall be implemented by the applicant as identified in the permits. The following on site, off site, in lieu fee mitigation, or a combination of the aforementioned options shall be completed for mitigation for impacts to waters of the U.S. and jurisdictional streambeds to replace any disturbed jurisdictional features, including sensitive riparian vegetation communities, at a minimum of 1:1 ratio for temporary impacts and 3:1 ratio for permanent impacts. Avoided jurisdictional waters shall be fenced or flagged for avoidance. Best Management Practices (BMPs) shall be implemented to avoid indirect impacts to jurisdictional waters, including the following:

- 1) Vehicles and equipment will not be operated in ponded or flowing water except as described in the permits.
- 2) Water containing mud, silt, or other pollutants from grading or other activities will not be allowed to enter jurisdictional waters or be placed in locations that may be subjected to high storm flows.
- 3) Spoil sites will not be located within 30 feet from the boundaries of jurisdictional waters or in locations that may be subject to high storm flows, where spoils might be washed back into drainages.
- 4) Raw cement/concrete or washings thereof, asphalt, paint or other coating material, oil, or other petroleum products, or any other substances that could be hazardous to vegetation or wildlife resources, resulting from project-related activities, will be prevented from contaminating the soil and/or entering avoided jurisdictional waters.
- 5) No equipment maintenance will occur within 100 feet of jurisdictional waters and no petroleum products or other pollutants from the equipment will be allowed to enter these areas or enter any off-site state-jurisdictional waters under any flow.

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
V. CULTURAL RESOURCES. Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion:

Information in this section was derived from the Cultural Resources Technical Report for the Meridian Storm Drain Pipeline Extension Project, Riverside, California, prepared by ASM Affiliates (ASM; July 2022). This report is included as **Appendix C**.

As discussed in **Appendix C**, in 2018, ASM performed an architectural history and archaeological survey, evaluation, and analysis of effects/impacts as part of the Meridian Trunk Sewer Line project to identify and document cultural resource sites that are eligible or are potentially eligible for listing in the NRHP for the purposes of compliance with Section 106 of the NHPA, as amended (54 U.S.C. §300101); and for listing in the CRHR for the purposes of compliance with CEQA. As shown in **Figure 6: APE for Proposed Project and Prior Meridian Trunk Sewer Project**, the Area of Potential Effect (APE) of the northern portion of the prior Meridian Trunk Sewer project shared essentially the same APE as the current project, and as it was fully surveyed at that time. It was determined that the 2018 survey was sufficient to support the current project since it took place less than five years earlier and no significant changes have been made to the project area.

Cultural resources, which are protected under the National Historic Preservation Act of 1966 (NHPA) and the Archaeological Resources Protection Act of 1979, include the non-renewable remains of past human use of an area. Cultural resources can include both archaeological resources and ethnographic resources. Archaeological resources consist of architectural remains, isolated features such as rock piles, hearths (fire pits), or scatters of artifacts (pottery or rock fragments). Ethnographic resources are often less tangible as they define materials, places, or things used by living communities.

Historic structures and sites are generally defined by local, State, and federal criteria. A site or structure may be designated as historically significant by a local government through a general plan or historic preservation ordinance. In addition, a site or structure may be historically significant if it meets certain State or federal criteria even if the locality does not recognize such significance. The State of California, through the State Historic Preservation Office (SHPO), maintains an inventory of those sites and structures that are considered to be historically significant. Finally, the U.S. Department of the Interior has established specific guidelines and criteria that indicate the manner in which a site, structure, or district is to be identified as having historic significance. Significance may be determined if the property is associated with events, activities, or developments that were important in the past, with the lives of people who were important in the past, or represents significant architectural, landscape, or engineering elements.

The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association and meet one of the following criteria:

APE for Meridian Trunk Sewer Project



APE for Proposed Project



Source:

FIGURE 6: APE for Proposed Project Prior Meridian Trunk Sewer Project
 Meridian Storm Drain Pipeline Extension
 Riverside, CA

- A) that are associated with events that have made a significant contribution to the broad patterns of our history; or
- B) that are associated with the lives of persons significant in our past; or
- C) that embody 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) that have yielded, or may be likely to yield, information important in prehistory or history.

Ordinarily, properties that have achieved significance within the past 50 years are not considered eligible for the National Register. Buildings and properties would qualify for a listing on the National Register if they are integral parts of districts that meet certain criteria or if they fall within the following categories:

- A religious property deriving primary significance from architectural or artistic distinction or historical importance;
- A building or structure removed from its original location but which is primarily significant for architectural value, or which is the surviving structure most importantly associated with a historic person or event;
- A birthplace or grave of a historical figure of outstanding importance if there is no appropriate site or building associated with his or her productive life;
- A cemetery that derives its primary importance from graves of persons of transcendent importance, from age, from distinctive design features, or from association with historic events;
- A reconstructed building when accurately executed in a suitable environment and presented in a dignified manner as part of a restoration master plan, and when no other building or structure with the same association has survived;
- A property primarily commemorative in intent if design, age, tradition, or symbolic value has invested it with its own exceptional significance; or,

A property achieving significance within the past 50 years if it is of exceptional importance.⁷

- a) Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5? ***Less Than Significant Impact.***

A project's direct APE is defined as the geographic area or areas, regardless of land ownership, within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist. The indirect APE is the same boundary as the direct APE due to the nature of the project. The National Register of Historic Places (NRHP)-eligible Santa Fe Railroad line (RCTC AT & SF) to the east of the project was not included in the APE, as it is on the opposite side of Avenue A from the project area and there is no potential for impact from the project to this resource.

Two NRHP-eligible resources are located within the surrounding project area, but not within the APE. The VA with concurrence from SHPO has previously determined that the Riverside National Cemetery is eligible under Criterion A for its memorial association with one or more events that have made a significant contribution to the broad patterns of national, State, or local history. The Riverside National Cemetery represented changing attitudes and expressions of commemorating military service in the 1970s through its freer and more informal overall design, structures and roadways, and integral features such as grave markers. In consideration of the cemetery's eligibility under Criterion C as well, not enough time has passed nor sufficient scholarly assessment to determine the architectural significance of the property within the broader context. The NRHP-eligible Santa Fe Railroad line is situated to the east of the project and there would be no impact from the project to this resource.

The Riverside National Cemetery is eligible for the CRHR. CEQA defines a historical resource as any building determined to be eligible for listing in the CRHR. As such, the Riverside National Cemetery is a historical resource under CEQA Guidelines 15064.5, because it meets the criteria outlined in PRC §5024.1; Title 14, CCR, §4850 et seq.

The proposed project does not propose to remove any properties from their historic locations nor change the

⁷ U.S. Department of the Interior, National Park Service. National Register of Historic Places. Available at: https://www.nps.gov/subjects/nationalregister/upload/NRB-15_web508.pdf. Accessed July 27, 2022.

character of any historic property's use or setting that contribute to its historic significance. The project would not result in the neglect of any historic properties or transfer, lease, or sale of any historic properties within federal control.

The trenching and installation of the storm drain line has the potential for physical destruction of historic property within the APE. However, the trenching for the storm drain line would occur in already-disturbed areas of the property and as such, would not result in damage to, or destruction of, any potentially eligible structures, objects, or other features of the cemetery property.

In consideration of indirect effects, the trenching and storm drain installation would be performed by equipment that may temporarily introduce visual, atmospheric, or audible elements at the southeastern edge of the developed cemetery area. However, these changes would be temporary in nature, and would not result in an overall adverse effect to the NRHP-eligible developed section of the cemetery or the railroad alignment. As the storm drain line would be subterranean, it does not have the potential to adversely impact the spatial relationship between the character-defining features (CDFs) in the Riverside National Cemetery and the viewshed from those CDFs, nor would it impact the operation of the railroad. Similarly, potential indirect impacts would be temporary in nature and would not result in an overall adverse impact to the CRHR-eligible developed section of the cemetery. Therefore, potential impacts are considered less than significant and no mitigation is required.

- b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5? ***Less Than Significant Impact With Mitigation Incorporated.***

The Meridian Trunk Sewer project shared essentially the same APE as the current project, and as it was fully surveyed at that time, it was determined that the 2018 survey was sufficient to support the current project since it took place less than five years earlier and no significant changes have been made to the project area. The 2018 survey revealed that the entire project alignment has undergone a large amount of disturbance over time, beginning with its military use and continuing into the present day. As part of the Cultural Resources Technical Study for this project an intensive pedestrian survey was undertaken in 2018 within all accessible areas of the alignment. The RCTC AT & SF railroad line parallels the eastern edge of the entire alignment. The storm drain alignment is adjacent the eastern edge of the Riverside National Cemetery.

The project area was carefully inspected by intensive pedestrian archaeological survey for any sign of the presence of prehistoric or historic cultural materials. No previously undocumented resources were encountered within of the project alignment. However, the potential remains that unknown cultural resources could be discovered during the construction process once grading and excavation activities begin. **Mitigation Measure CUL-1** and **CUL-2** are proposed to address the discovery of unrecorded archaeological resources during construction activities. In compliance with **Mitigation Measure CUL-1** and **CUL-2**, an archaeologist would monitor grading and excavation activities. The archaeologist would have the ability to temporarily halt or redirect work to permit the sampling, identification, and evaluation of the artifacts and resources, as appropriate. If resources are found to be significant, the archaeologist would determine appropriate actions. Therefore, with incorporation of mitigation, potential impacts to historical and archaeological resources would be reduced to a less than significant level.

To ensure that the proposed project protects cultural resources in the same manner as other development in the surrounding area, **Mitigation Measures CUL-1** and **CUL-2** are required. Potential impacts are considered less than significant with the implementation of mitigation measures.

- c) Disturb any human remains, including those interred outside of dedicated cemeteries? ***Less Than Significant Impact With Mitigation Incorporated.***

The project site is not located within a known or suspected cemetery and there are no known human remains within the project site. The project site is adjacent to the Riverside National Cemetery; however, the Riverside National Cemetery was established as a National Cemetery in 1976 on land that did not previously function as a cemetery; therefore, it is unlikely that interred human remains would be found on the project site. While burial sites have not been located in the project area, there is still a possibility that undiscovered human remains may exist within the project area. As such, grading and construction activities within the project area have the potential to impact unknown human remains. However, this risk is considered low given the much of the project site has been previously disturbed, and the fact that no ethnographic camps or villages have been reported in the area. Thus, the likelihood of undiscovered human remains is remote.

State law provides guidance should human remains be discovered during construction. The California Health and Safety Code requires that if human remains are inadvertently discovered during excavation or construction activities, all construction affecting the discovery site must halt, the contractor must contact the appropriate professionals, and the county coroner must examine the remains within 48 hours of discovery. Additionally, if the

remains are determined to be Native American, the March JPA would work with local Native American representatives to ensure that the remains and any associated artifacts are treated in a respectful and dignified manner. Despite the applicable regulatory framework and the relatively low likelihood of discovery, it remains possible that the proposed project would discover human remains during subsurface activities, which could then result in the remains being inadvertently damaged. To reduce this potentially significant impact to a less than significant level, all construction related impacts of human remains would be monitored in accordance with **Mitigation Measure CUL-3**. With the implementation of **Mitigation Measure CUL-3**, potential impacts are considered less than significant.

Mitigation Measures:

The analysis did not identify any cultural or historical impacts associated with the project, however, per the March JPA, the following mitigation measures are required to ensure consistency with surrounding development and reduce any potential impacts to a less than significant level.

Mitigation Measure CUL-1: Archeologist Retained. Prior to issuance of a grading permit the project applicant shall retain a qualified archaeologist to monitor all ground disturbing activities in an effort to identify any unknown archaeological resources.

The project archaeologist shall be included in the pre-grade meetings to provide cultural/historical sensitivity training including the establishment of set guidelines for ground disturbance in sensitive areas with the grading contractors. The project archaeologist shall manage and oversee monitoring for all initial ground disturbing activities and excavation of each portion of the project site including clearing, grubbing, tree removals, mass or rough grading, trenching, stockpiling of materials, rock crushing, structure demolition and etc. The project archaeologist shall have the authority to temporarily divert, redirect or halt the ground disturbance activities to allow identification, evaluation, and potential recovery of cultural resources in coordination with any required special interest or tribal monitors.

The developer/permit holder shall submit a fully executed copy of the contract to the Planning Department to ensure compliance with this condition of approval. Upon verification, the March JPA Planning Department shall clear this condition.

Any newly discovered cultural resources shall be subject to an evaluation, in which will require the development of a treatment plan and monitoring agreement for the newly discovered resources.

Mitigation Measure CUL-2: Inadvertent Archeological Find. If during ground disturbance activities, unique cultural resources are discovered that were not assessed by the archaeological report(s) and/or environmental assessment conducted prior to project approval, the following procedures shall be followed. Unique cultural resources are defined, for this condition only, as being multiple artifacts in close association with each other, but may include fewer artifacts if the area of the find is determined to be of significance due to its sacred or cultural importance as determined in consultation with the Native American Tribe(s).

- a) All ground disturbance activities within 100 feet of the discovered cultural resources shall be halted until a meeting is convened between the developer, the archaeologist, a representative of the Agua Caliente band of Cahuilla Indians (ACBCI) (tribal representative(s)) and the Planning Director to discuss the significance of the find.
- b) At the meeting, the significance of the discoveries shall be discussed and after consultation with the tribal representative(s) and the archaeologist, a decision shall be made, with the concurrence of the Planning Director, as to the appropriate mitigation (documentation, recovery, avoidance, etc.) for the cultural resources.
- c) Grading of further ground disturbance shall not resume within the area of the discovery until an agreement has been reached by all parties as to the appropriate mitigation.
- d) Treatment and avoidance of the newly discovered resources shall be consistent with the Cultural Resources Treatment and Monitoring Agreements entered into with the

appropriate tribes. This may include avoidance of the cultural resources through project design, in-place preservation of cultural resources located in native soils and/or re-burial on the project property so they are not subject to further disturbance in perpetuity.

- e) Pursuant to Calif. Pub. Res. Code § 21083.2(b) avoidance is the preferred method of preservation for archaeological resources and cultural resources. If the landowner and the (ACBCI) cannot agree on the significance or the mitigation for the archaeological or cultural resources, these issues will be presented to the March JPA Planning Director for decision. The March JPA Planning Director shall make the determination based on the provisions of the California Environmental Quality Act with respect to archaeological resources, recommendations of the project archeologist and shall take into account the cultural and religious principles and practices of the (ACBCI). Notwithstanding any other rights available under the law, the decision of the March JPA Planning Director shall be appealable to the March Joint Powers Commission.

Mitigation Measure CUL-3: Human Remains. If human remains are encountered, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the Riverside County Coroner has made the necessary findings as to origin. Further, pursuant to Public Resource Code Section 5097.98(b) remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made. If the Riverside County Coroner determines the remains to be Native American, the Native American Heritage Commission shall be contacted within the period specified by law (24 hours). Subsequently, the Native American Heritage Commission shall identify the "most likely descendant." The most likely descendant shall then make recommendations and engage in consultation concerning the treatment of the remains as provided in Public Resources Code section 5097.98. Human remains from other ethnic/cultural groups with recognized historical associations to the project area shall also be subject to consultation between appropriate representatives from that group and the March JPA Planning Director.

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
VI. ENERGY. Would the project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion:

Energy Data was prepared for the proposed project by Kimley-Horn in June 2022 and is included as **Appendix D**. The results of the Energy Data are summarized in the following discussion.

In 1975, largely in response to the oil crisis of the 1970s, the California State Legislature adopted Assembly Bill 1575 (AB 1575), which created the California Energy Commission (CEC). The statutory mission of the CEC is to forecast future energy needs, license thermal power plants of 50 megawatts or larger, develop energy technologies and renewable energy resources, plan for and direct state responses to energy emergencies, and, perhaps most importantly, promote energy efficiency through the adoption and enforcement of appliance and building energy efficiency standards. AB 1575 also amended Public Resources Code Section 21100(b)(3) to require Environmental Impact Reports (EIRs) to consider the wasteful, inefficient, and unnecessary consumption of energy caused by a project. Thereafter, the State Resources Agency created Appendix F, *Energy Conservation*, in the California Environmental Quality Act Guidelines (CEQA Guidelines). CEQA Guidelines Appendix F is an advisory document that assists EIR preparers in determining whether a project will result in the inefficient, wasteful, and unnecessary consumption of energy.

In addition, the California Natural Resources Agency finalized updates to the CEQA Guidelines in December 2018. CEQA Guidelines Section 15126.2(b) treats “wasteful, inefficient, or unnecessary” energy consumption as a significant environmental impact. As a result, energy thresholds have been incorporated into Appendix G of the CEQA Guidelines. This discussion has been prepared to assess energy impacts in accordance with Appendix G of the CEQA Guidelines.

In accordance with CEQA Guidelines, the effects of a project are evaluated to determine whether they would result in a significant adverse impact on the environment. This discussion will focus on these effects and offer mitigation measures to reduce or avoid any significant impacts that are identified. The criteria used to determine the significance of impacts may vary depending on the nature of the project. According to Appendix G of the CEQA Guidelines, the proposed project would have a significant impact related to energy, if it would:

- Result in 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 or local plan for renewable energy or energy efficiency.

The project consists of a master planned storm drain improvement. Operational activities associated with the proposed project would occur within the existing 40-foot sanitary sewer and storm drain easement and would include maintenance and inspections as determined by the RCFD. Once constructed, the subsurface storm drain would operate as an unstaffed facility and would not result in energy demand during operations. Therefore, the impact analysis focuses on transportation fuel for vehicle trips associated with project construction. Construction fuel was calculated based on CalEEMod emissions outputs and conversion ratios from the Climate Registry.

- a) Would the project result in wasteful, inefficient, or unnecessary consumption of energy resources? *Less than Significant Impact*

Construction-Related Energy

During construction, the project would consume energy in two general forms: (1) the fuel energy consumed by construction vehicles and equipment; and (2) bound energy in construction materials, such as asphalt, steel, concrete, pipes, and manufactured or processed materials such as lumber and glass.

Fossil fuels used for construction vehicles and other energy-consuming equipment would be used during grading, paving, and building construction. Fuel energy consumed during construction would be temporary in nature and would not represent a significant demand on energy resources. Some incidental energy conservation would occur during construction through compliance with State requirements that equipment not in use for more than five minutes be turned off. Project construction equipment would also be required to comply with the latest EPA and California Air Resources Board engine emissions standards. These emissions standards require highly efficient combustion systems that maximize fuel efficiency and reduce unnecessary fuel consumption. Due to increasing transportation costs and fuel prices, contractors and owners have a strong financial incentive to avoid wasteful, inefficient, and unnecessary consumption of energy during construction.

Table EN-1: Project and Countywide Energy Consumption

Energy Type	Project Annual Energy Consumption	Riverside County Annual Energy Consumption ¹	Percentage Increase Countywide
Automotive Fuel Consumption²			
Project Construction ^{3,4}			
Diesel	8,526 gallons	253,490,900 gallons	0.0034%
Gasoline	730 gallons	718,749,800 gallons	0.0001%
Notes:			
1. The project increases in automotive fuel consumption are compared with the countywide fuel consumption (projected) in 2022.			
2. Countywide fuel consumption is from the California Air Resources Board EMFAC2021 model.			
3. Construction fuel consumption is based equipment and load factors from California Emissions Estimator Model (CalEEMod version 2020.4.0).			
4. The estimated construction fuel consumption is based on the project’s construction equipment list timing/phasing, and hours of duration for construction equipment, as well as vendor, hauling, and construction worker trips.			
Refer to Appendix D: Energy Data for assumptions used in this analysis.			

Substantial reductions in energy inputs for construction materials can be achieved by selecting building materials composed of recycled materials that require substantially less energy to produce than non-recycled materials. The incremental increase in the use of energy bound in construction materials such as asphalt, steel, concrete, pipes and manufactured or processed materials (e.g., lumber and gas) would not substantially increase demand for energy compared to overall local and regional demand for construction materials. It is reasonable to assume that production of building materials such as concrete, steel, etc., would employ all reasonable energy conservation practices in the interest in minimizing the cost of doing business.

As indicated in **Table EN-1: Project and Countywide Energy Consumption**, the overall diesel fuel consumption during construction of the project would be 8,526 gallons and gasoline consumption would be 730 gallons, which would result in a nominal increase (0.0034 percent and 0.0001 percent, respectively) in fuel use in the County. As such, project construction would have a minimal effect on the local and regional energy supplies. It is noted that construction fuel use is temporary and would cease upon completion of construction activities. There are no unusual project characteristics that would necessitate the use of construction equipment that would be less energy-efficient than at comparable construction sites in the region or State. Therefore, construction fuel consumption would not be any more inefficient, wasteful, or unnecessary than other similar development projects of this nature. A less than significant impact would occur in this regard.

Operational Energy Demand

Operational activities associated with the proposed project would occur within the existing 40-foot sanitary sewer and storm sewer easement and would include maintenance and inspections. Implementation of the proposed project would improve a storm drainage system. The proposed project would not generate new vehicle trips, require electricity, or natural gas. Therefore, the project would not generate operational energy demand and would be less than significant.

- b) Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency? *Less than Significant Impact*

Title 24 of the California Code of Regulations contains energy efficiency standards for residential and non-residential buildings based on a state mandate to reduce California's energy demand. Specifically, Title 24 addresses a number of energy efficiency measures that impact energy used for lighting, water heating, heating, and air conditioning, including the energy impact of the building envelope such as windows, doors, skylights, wall/floor/ceiling assemblies, attics, and roofs.

Title 24, Part 11, contains voluntary and mandatory energy measures that are applicable to the project under the California Green Building Standards Code. As discussed above, the project would result in an increased demand for electricity, natural gas, and petroleum. In accordance with Title 24 Part 11 mandatory compliance, the Applicant would have (a) 50 percent of its construction and demolition waste diverted from landfills; (b) mandatory inspections of energy systems to ensure optimal working efficiency; (c) low pollutant emitting exterior and interior finish materials, such as paints, carpets, vinyl flooring and particle boards; and (d) a 20% reduction in indoor water use. Compliance with all of these mandatory measures would decrease the consumption of electricity, natural gas, and petroleum.

Project construction would not increase the demand of electricity or natural gas and would comply with all applicable regulations and policies. Operational activities associated with the proposed project would occur within the existing 40-foot sanitary sewer and storm sewer easement and would include maintenance and inspections. Implementation of the proposed project would improve a storm drainage system. The proposed project would not generate new vehicle trips, require electricity, or natural gas. Therefore, the project would not generate operational energy demand and would be less than significant.

The project consists of a master planned storm drain improvement. Operational activities associated with the proposed project would occur within the existing 40-foot sanitary sewer and storm drain easement and would include maintenance and inspections as determined by the RCFD. Once constructed, the subsurface storm drain would operate as an unstaffed facility and would not result in energy demand during operations, thus project operations would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

The project would not conflict with any of the federal, state, or local plans for renewable energy and energy efficiency. Because the project would comply with applicable components of Title 24, no conflict with existing energy standards and regulations would occur. Therefore, impacts associated with renewable energy or energy efficiency plans would be considered less than significant

Mitigation Measures:

No mitigation is necessary.

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
VII. GEOLOGY AND SOILS. Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code, creating substantial direct or indirect risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion:

A Geotechnical Exploration Report was prepared for an adjacent project, the Meridian Trunk Sewer project, by Leighton Consulting, Inc. (Leighton; October 2018); however, as shown in **Figure 7: Boring Locations for Prior Meridian Trunk Sewer Project**, the proposed project alignment is within approximately the same alignment as the Meridian Trunk Sewer project, which also extended further south of the proposed project's alignment, therefore it can be assumed that the environmental setting with respect to geology and soils is reasonably similar. Leighton Consulting conducted a field exploration on September 26, 2018 and September 27, 2018 which consisted of the excavation of 12 hollow stem auger borings in accessible areas along the proposed sewer alignment, which ranges from approximately 8 to 23 feet to the west of the alignment proposed for the storm drain. The 2018 Geotechnical Exploration Report is included as **Appendix E**. The results of this technical study are summarized in the following discussion.

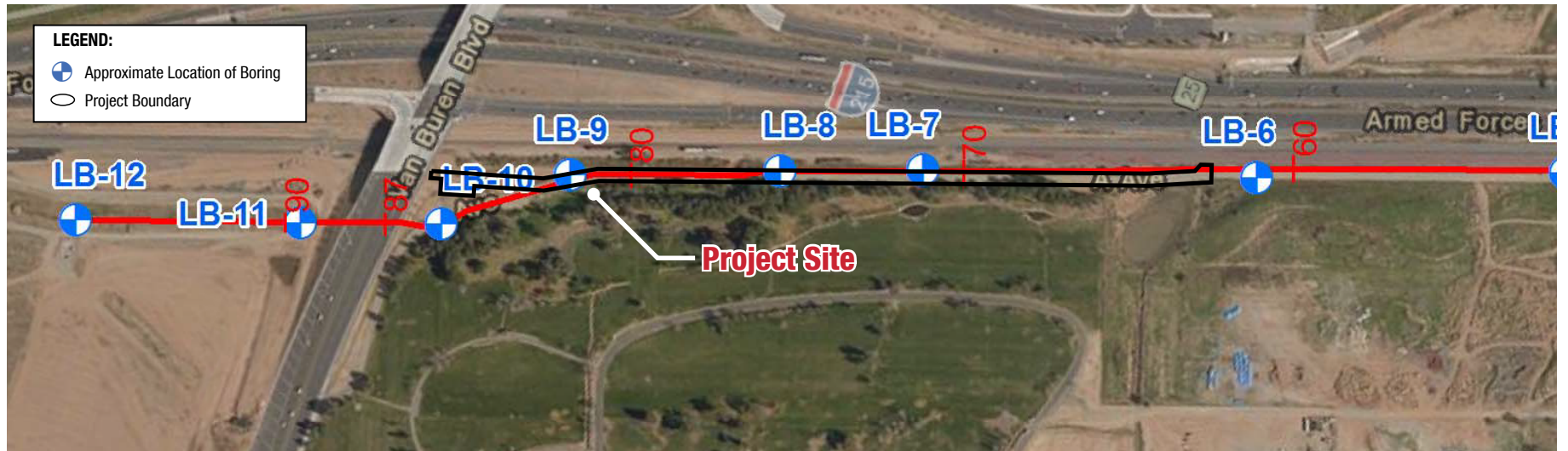
- a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving:
- i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? ***Less Than Significant Impact with Mitigation Incorporated.***

The Alquist-Priolo Earthquake Fault Zoning Act (Act) was passed in 1972 to address the hazard of surface faulting to structures for human occupancy. The Act's main purpose is to prevent the construction of buildings used for human occupancy on the surface trace of active faults. The Act requires the State Geologist to establish regulatory zones, known as "Alquist-Priolo (AP) Earthquake Fault Zones" around the surface traces of active faults and to issue appropriate maps. If an active fault is found, a structure for human occupancy cannot be placed over the trace of the fault and must be set back from the fault (typically 50 feet). Per the Geotechnical Exploration Report prepared by Leighton Consulting (**Appendix E**), the site is not located within any Fault Zone as defined by the Alquist-Priolo Earthquake Fault Zoning Act. Similarly, the Riverside County General Plan Figure S-2 does not identify any Alquist-Priolo Earthquake Fault Zones or active faults within the project site.⁸ Therefore, the potential for damage due to direct fault rupture is considered to be low. Nonetheless, the project would be required to comply with **Mitigation Measure GEO-1**, which would ensure that the findings of the geotechnical exploration are incorporated into the grading plans. Accordingly, the possibility of significant fault rupture on the project site is considered to be less than significant with the incorporation of mitigation.

- ii) Strong seismic ground shaking? ***Less Than Significant Impact.***

The project site is located between two major fault zones: the Elsinore-Whittier Fault Zone (approximately 14.5 miles to the southwest) and the San Jacinto Fault Zone (approximately 8.5 miles to the northeast). The area between the faults is known as the Perris Block or Perris Plain. The Perris Block, approximately 20 miles by 50 miles in extent, is bound by the San Jacinto Fault Zone to the northeast and the Elsinore Fault Zone to the southwest. The Perris Block has had a complex tectonic history, undergoing relative vertical land-movements of several thousand feet in response to movement on the Elsinore-Whittier and San Jacinto Fault Zones. These northwest trending faults are considered active faults by the California Division of Mines and Geology. The Casa Loma Fault (8.5 miles to the east-northeast) is the closest "fork" of the San Jacinto Fault Zone to the project site. The fault has a maximum credible earthquake magnitude of 7.5. Earthquakes along other major faults in the area, such as the Elsinore-Whittier Fault Zone (approximately 14.5 miles to the southwest), could also cause major damage to buildings and infrastructure. Because of the close proximity to active faults, the potential for strong seismic ground shaking to occur at the project site is high. The proposed project would comply with "Standard Specifications for Public Works Construction" (Greenbook: Standard Specifications for Public Works Construction, 2018) and Caltrans Standard Specifications, Section 39 or the Standard Specifications for Public Works Construction, as applicable to asphalt concrete and aggregate base. Furthermore, the proposed project would be required to comply with Uniform Building Code (UBC) and California Building Code (CBC), as well as the geotechnical exploration conducted for the project and the grading requirements contained within the March JPA Development Code. Accordingly, impacts associated with strong seismic ground shaking would be less than significant.

⁸ Riverside County General Plan. Available at: http://planning.rctlma.org/Portals/0/genplan/content/gp/chapter06.html#List_1_3. Accessed June 28, 2022.



Source:

FIGURE 7: Boring Locations for Prior Meridian Trunk Sewer Project
 Meridian Storm Drain Pipeline Extension
 Riverside, CA

iii) Seismic-related ground failure, including liquefaction? ***Less Than Significant Impact.***

According to the Riverside County General Plan Figure S-3, the project site is located in an area designated as having moderate to low susceptibility for liquefaction.⁹ Further, as identified in **Appendix E**, the potential for secondary hazards such as ground rupture, seiches and tsunamis, landsliding, rockfall, ground fissuring, and liquefaction and seismic densification are considered very low for the proposed project. As discussed in **Appendix E**, groundwater is not anticipated to be encountered along the alignment; groundwater was previously observed for the Meridian Trunk Sewer project at Boring LB-1 (approximately 0.85 miles south of the project site). Although groundwater is not anticipated to occur, the presence of groundwater at shallow depths does not cause liquefaction; rather, the soil characteristics are the determining factor of liquefaction potential. In this case, the soil is mostly very dense, older alluvium and/or shallow bedrock. Neither is conducive to liquefaction. Thus, potential direct or indirect impacts related to liquefaction are anticipated to be less than significant.

iv) Landslides? ***No Impact.***

The site is relatively flat and the regional topography slopes to the south and southeast. No substantial slopes or hillsides occur within the project vicinity. As such, the potential for landslides to occur is considered minimal. Additionally, the storm drain is proposed to be located underground, and all ground surfaces would be returned to their pre-project conditions. The project would be required to comply with Uniform Building Code (UBC) and California Building Code (CBC), as well as the geotechnical exploration conducted for the project and the grading requirements contained within the March JPA Development Code, thus further reducing any direct or indirect impacts associated with landslides. No impacts would occur.

b) Result in substantial soil erosion or the loss of topsoil? ***Less Than Significant Impact.***

According to the 2018 Geotechnical Exploration Report prepared for the Meridian Trunk Sewer project (i.e., located 8 to 23 feet west of the proposed storm drain), the site contains artificial fill associated with existing roadways or from previous grading of the Riverside National Cemetery. The fill appears to be generated from near or on-site sources (i.e., alluvium) and generally consisted of silty sand with varying amounts of gravel. The site also contains quaternary alluvial deposits consisting of silty sand to clayey sand with interbedded poorly to well-graded sand and silty sand layers. Granitic bedrock was also encountered at a depth of approximately 19 feet, which exceeds the approximate depth of the storm drain line, which would be constructed with a minimum cover of 6 inches and a maximum depth of 9 feet. Surficial soils have a moderate-to-high susceptibility to erosion, while bedrock materials appear only slightly susceptible to erosion. Excavation and grading activities could exacerbate these conditions. The soils would be considered Type C soils by the Division of Occupational Safety and Health (DOSH), better known as Cal/OSHA, and as such, sloped excavations would be required to protect workers within excavations, if shoring or shields are not used. Grading during the construction phase of the proposed project would displace soils and temporarily increase the potential for soils to be subject to wind and water erosion. However, erosion and loss of topsoil would be controlled using standard erosion control practices during construction. Accordingly, the proposed project would be required to prepare a Stormwater Pollution Prevention Plan (SWPPP) under the National Pollutant Discharge Elimination System (NPDES) General Construction Permit to implement Best Management Practices (BMPs) intended to minimize stormwater runoff during construction. Adherence to the SWPPP prepared for the proposed project would reduce possible impacts related to the erosion to less than significant.

Following construction of the project, ground surfaces would be covered by landscape and paving. The proposed project would construct a storm drain line that would eliminate storm water runoff from the surrounding area, minimizing impacts from erosion. Therefore, the potential for substantial soil erosion or the loss of topsoil is considered less than significant.

c) 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? ***Less Than Significant Impact with Mitigation Incorporated.***

⁹ Riverside County General Plan. Available at: http://planning.rctlma.org/Portals/0/genplan/content/gp/chapter06.html#List_1_3. Accessed June 21, 2022.

Compliance with **Mitigation Measure GEO-1**, including implementation of the recommendations of the 2018 Geotechnical Exploration Report would minimize potential impacts related to lateral spreading, subsidence or soil stability.

Refer to Threshold (a. iii) and (a. iv) above for a discussion regarding landslides and liquefaction. The primary soil type at the site is Monserate sandy loam, 0 to 5 percent slopes and Monserate sandy loam, 5 to 8 percent slopes. Soils characterized as Monserate sandy loam consist of sandy loam over indurated and cemented materials and loamy coarse sand. These soils are well drained and are not considered hydric soils. The presence of hydric soil is indicative of wetland-like conditions.¹⁰ The potential for liquefaction and seismic densification is considered very low for the proposed project. Thus, the potential for lateral spreading, subsidence, and/or collapse is considered low. Impacts would be less than significant with mitigation incorporated.

- d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code, creating substantial direct or indirect risks to life or property? ***Less Than Significant Impact.***

Refer to Threshold (c), above. Expansive soils have a significant amount of clay particles which can give up water (shrink) or take on water (swell). The change in volume exerts stress on buildings and other loads placed on these soils. The occurrence of these soils is often associated with geologic units having marginal stability. Expansive soils can be widely dispersed and can be found in hillside areas as well as low-lying alluvial basins. Boring logs were taken from twelve locations on the previous project site, within the same alignment as the proposed project. Existing alluvial soils encountered are classified as Cal/OSHA soil Type C. The Expansion Index (EI) of the silty clayey sand materials in the alluvial deposits are expected to be low with an EI of less than 51. The Sand Equivalent (SE) is expected to vary depending on silt content. The collapse potential is typically less than 2 percent which is considered low. In addition, the proposed project would be required to conform to the California Building Code, March JPA regulations, and other applicable construction and design standards. Conformance with standard engineering practices and design criteria would ensure direct or indirect impacts related to expansive soil potential remain less than significant.

- e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater? ***No Impact.***

The project includes the development of a storm drain line and does not include the use or development of septic tanks. As such, no impacts would occur.

- f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? ***Less Than Significant Impact with Mitigation Incorporated.***

It is unknown if there are unique paleontological resources known to occur on, or within the immediate vicinity of the project site. Therefore, the potential that site grading and preparation activities would result in impacts to paleontological resources is also unknown. As described in **Mitigation Measure GEO-2**, paleontological monitoring would be required to minimize impacts to potential paleontological resources. With implementation of **Mitigation Measure GEO-2**, impacts would be reduced to a less than significant level.

Mitigation Measures:

Mitigation Measure GEO-1: Prior to issuance of a grading permit, the developer shall, to the satisfaction of the March JPA Planning Director, show that precise grading plan(s) include(s) all recommendations contained in the 2018 Geotechnical Exploration Report prepared for the Meridian Trunk Sewer project, within the same alignment as the proposed project. The performance standard for this measure is to assure that all recommended grading and structures for the project conform to JPA standards.

Mitigation Measure GEO-2: Paleontologist Required. The potential for this site to contain paleontological resources (fossils) at shallow depth is unknown. Therefore, **PRIOR TO ISSUANCE OF GRADING PERMITS:**

¹⁰ U.S. Department of Agriculture, Natural Resources Conservation Service, Web Soil Survey. Available at: <http://websoilsurvey.nrcs.usda.gov/app/>. Accessed June 28, 2022.

The permittee shall retain a qualified paleontologist approved by the March JPA to create and implement a project-specific plan for monitoring site grading/earthmoving activities (project paleontologist).

The project paleontologist retained shall review the approved development plan and shall conduct any pre-construction work necessary to render appropriate monitoring and mitigation requirements as appropriate. These requirements shall be documented by the project paleontologist in a Paleontological Resource Impact Mitigation Program (PRIMP). This PRIMP shall be submitted to the Planning Department for review and approval prior to issuance of a Grading Permit.

Information to be contained in the PRIMP, at a minimum and in addition to other industry standard and Society of Vertebrate Paleontology standards, are as follows:

- a) The project paleontologist shall participate in a pre-construction project meeting with development staff and construction operations to ensure an understanding of any mitigation measures required during construction, as applicable.
- b) Paleontological monitoring of earthmoving activities will be conducted on an as-needed basis by the project paleontologist during all earthmoving activities that may expose sensitive strata. Earthmoving activities in areas of the project area where previously undisturbed strata will be buried but not otherwise disturbed will not be monitored. The project paleontologist or his/her assign will have the authority to reduce monitoring once he/she determines the probability of encountering fossils has dropped below an acceptable level.
- c) If the project paleontologist finds fossil remains, earthmoving activities will be diverted temporarily around the fossil site until the remains have been evaluated and recovered. Earthmoving will be allowed to proceed through the site when the project paleontologist determines the fossils have been recovered and/or the site mitigated to the extent necessary.
- d) If fossil remains are encountered by earthmoving activities when the project paleontologist is not on-site, these activities will be diverted around the fossil site and the project paleontologist called to the site immediately to recover the remains.
- e) If fossil remains are encountered, fossiliferous rock will be recovered from the fossil site and processed to allow for the recovery of smaller fossil remains. Test samples may be recovered from other sampling sites in the rock unit if appropriate.
- f) Any recovered fossil remains will be prepared to the point of identification and identified to the lowest taxonomic level possible by knowledgeable paleontologists. The remains then will be curated (assigned and labeled with museum* repository fossil specimen numbers and corresponding fossil site numbers, as appropriate; places in specimen trays and, if necessary, vials with completed specimen data cards) and catalogued, an associated specimen data and corresponding geologic and geographic site data will be archived (specimen and site numbers and corresponding data entered into appropriate museum repository catalogs and computerized data bases) at the museum repository by a laboratory technician. The remains will then be accessioned into the museum* repository fossil collection, where they will be permanently stored, maintained, and, along with associated specimen and site data, made available for future study by qualified scientific investigators.

The March Joint Powers Authority must be consulted on the repository/museum to receive the fossil material prior to being curated.

- g) A qualified paleontologist shall prepare a report of findings made during all site grading activity with an appended itemized list of fossil specimens recovered during grading (if any). This report shall be submitted to the Planning Department for review and approval prior to building final inspection as described elsewhere in these conditions.

All reports shall be signed by the project paleontologist and all other professionals responsible for the report's content (e.g., Professional Geologist, Professional Engineer, etc.), as appropriate. Two wet-signed original copies of the report shall be submitted directly to the March JPA Planning Department along with a copy of this condition, deposit-based fee and the grading plan for appropriate case processing and tracking.

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
VIII. GREENHOUSE GAS EMISSIONS. Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emission of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion:

Global climate change refers to changes in average climatic conditions on Earth as a whole, including temperature, wind patterns and precipitation. Unlike emissions of criteria and toxic air pollutants, which have local or regional impacts, emissions of Greenhouse Gases (GHGs) have a broader, global impact. Certain gases in the earth’s atmosphere, classified as “greenhouse” gases (GHGs), play a critical role in determining the earth’s surface temperature. These naturally occurring atmospheric gases, including water vapor, carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O), as well as hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆) are greenhouse gases. The “greenhouse effect” is the natural process that retains heat in the troposphere, the bottom layer of the atmosphere. Without the greenhouse effect, thermal energy would “leak” into space resulting in a much colder and inhospitable planet.

GHGs are emitted by both natural processes and human activities. Concentrations of GHG have increased in the atmosphere since the industrial revolution. Human activities that generate GHG emissions include combustion of fossil fuels (CO₂ and N₂O); natural gas generated from landfills, fermentation of manure and cattle farming (CH₄); and industrial processes such as nylon and nitric acid production (N₂O). Emissions of GHGs contributing to global climate change are attributable in large part to human activities associated with transportation, industrial/manufacturing, utility, residential, commercial, and agricultural sectors.

GHGs have varying global warming potentials (GWP). The GWP is the potential of a gas or aerosol to trap heat in the atmosphere; it is the “cumulative radiative forcing effect of a gas over a specified time horizon resulting from the emission of a unit of mass of gas relative to a reference gas.” The reference gas for GWP is CO₂; therefore, CO₂ has a GWP factor of 1. The other main GHGs that have been attributed to human activity include CH₄, which has a GWP factor of 25, and N₂O, which has a GWP factor of 298. When accounting for GHGs, all types of GHG emissions are expressed in terms of CO₂ equivalents (CO₂e) and are typically quantified in metric tons (MT) or million metric tons (MMT).

Regulations and Significance Criteria

California Governor Arnold Schwarzenegger issued Executive Order S-3-05 was issued in June 2005, which established the following GHG emission reduction targets: by 2010: reduce GHG emissions to 2000 levels; by 2020: reduce GHG emissions to 1990 levels; and by 2050: reduce GHG emissions to 80 percent below 1990 levels.

Assembly Bill (AB) 32 Statutes of 2006, Health and Safety Code section 38500 et seq. requires that CARB determine what the Statewide GHG emissions level was in 1990 and approve a Statewide GHG emissions limit that is equivalent to that level, to be achieved by 2020. CARB has approved a 2020 emissions limit of 427 million metric tons of CO₂ equivalent (MTCO₂e). Additionally, issued in April 2015, Executive Order B-30-15 requires Statewide GHG emissions to be reduced 40 percent below 1990 levels by 2030.

Executive Order B-30-15, which was issued in April 2015, requires statewide GHG emissions to be reduced 40 percent below 1990 levels by 2030. Senate Bill 32 (SB 32), signed into law in September 2016, codifies the 2030 GHG reduction target in Executive Order B-30-15. The bill authorizes CARB to adopt an interim GHG emissions level target to be achieved by 2030 and to adopt rules and regulations in an open public process to achieve the maximum, technologically

feasible, and cost-effective GHG reductions. With SB 32, the Legislature passed companion legislation AB 197, which provided additional direction for developing an updated Scoping Plan. CARB released the second update to the Scoping Plan to reflect the 2030 target set by Executive Order B-30-15 and codified by SB 32 in November 2017.

Due to the nature of global climate change, it is not anticipated that any single development project would have a substantial effect on global climate change. GHG emissions from the proposed project would combine with emissions emitted across California, the United States, and the world to cumulatively contribute to global climate change.

Addressing GHG emissions generation impacts requires an agency to make a determination as to what constitutes a significant impact. The amendments to the CEQA Guidelines specifically allow lead agencies to determine thresholds of significance that illustrate the extent of an impact and are a basis from which to apply mitigation measures. This means that each agency is left to determine whether a project's GHG emissions would have a "significant" impact on the environment. The guidelines direct that agencies are to use "careful judgment" and "make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate" the project's GHG emissions (14 California Code of Regulations Section 15064.4(a)).

On September 28, 2010, the SCAQMD GHG CEQA Significance Threshold Stakeholder Working Group staff recommended an interim screening level numeric bright-line threshold of 10,000 MTCO_{2e} per year for industrial projects. For all non-industrial projects, the SCAQMD is proposing a screening threshold of 3,000 MTCO_{2e} per year. SCAQMD concluded that projects with emissions less than the screening threshold would not result in a significant cumulative impact. This analysis relies on SCAQMD's proposed screening threshold of 3,000 MTCO_{2e} per year.

The working group was formed to assist the SCAQMD's efforts to develop a GHG significance threshold and is composed of a wide variety of stakeholders including the State Office of Planning and Research (OPR), CARB, the Attorney General's Office, a variety of city and county planning departments in the South Coast Air Basin, various utilities such as sanitation and power companies throughout the basin, industry groups, and environmental and professional organizations. The proposed thresholds were developed to be consistent with CEQA requirements for developing significance thresholds, are supported by substantial evidence, and provide guidance to CEQA practitioners and lead agencies with regard to determining whether GHG emissions from a proposed project are significant.

- a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? ***Less Than Significant Impact.***

GHGs, primarily CO₂, CH₄, and N₂O, collectively reported as CO_{2e}, are directly emitted from stationary source combustion of natural gas in equipment such as water heaters, boilers, process heaters, and furnaces. GHGs are also emitted from mobile sources such as on-road vehicles and off-road construction equipment burning fuels, such as gasoline, diesel, biodiesel, propane, or natural gas (compressed or liquefied). Indirect GHG emissions result from electric power generated elsewhere (i.e., power plants) used to operate process equipment, lighting, and utilities at a facility. Also, included in GHG quantification is electric power used to pump the water supply (e.g., aqueducts, wells, pipelines) and the disposal and decomposition of municipal waste in landfills. The proposed project involves construction of a master planned storm drain improvement project and does not include any stationary uses.

The analysis included in this Initial Study includes a calculation of project-specific emissions. Based on SCAQMD's proposed screening threshold of 3,000 MTCO_{2e} per year, these emissions are not significant on a project-specific level. A single project would not affect climate change. Accordingly, this analysis focuses on the project's potential cumulative impact on global climate change, as discussed in the State CEQA Guidelines confirming that the focus of a GHG analysis is the cumulative impact. GHG emissions associated with the proposed project include emissions from construction and emissions from operations.

Construction Emissions

Using CalEEMod, direct on-site and off-site GHG emissions were estimated for construction emissions. **Table GHG-1: Annual Greenhouse Gas Construction Emissions**, shows mitigated GHG emissions during construction. As shown in the table, project construction would result in the generation of approximately 93 metric tons of CO_{2e} over the course of construction. Once construction is complete, the generation of these GHG emissions would cease.

Table GHG-1: Annual Greenhouse Gas Construction Emissions

Construction Year	CO₂ (Metric Tons)	CH₄ (Metric Tons)	N₂O (Metric Tons)	Total CO₂e (Metric Tons)
2022	57.75	0.02	<1	58.32
2023	34.11	0.01	<1	34.43
Total	91.86	0.03	<1	92.74
CO ₂ = carbon dioxide; CH ₄ = methane; N ₂ O = nitrous oxide; CO ₂ e = carbon dioxide equivalent				
Source: CalEEMod version 2020.4.0. Refer to Appendix A-1 and A-2 for model data outputs.				

Operational Emissions

Operational activities associated with the proposed project would occur within the existing 40-foot sanitary sewer and storm sewer easement and would include maintenance and inspections as determined by RCFD. Operational emissions generally consist of area sources, energy sources, mobile sources, solid waste generation, water use, and wastewater treatment. Area source emissions occur from hearths, architectural coatings, landscaping equipment, and consumer products. Mobile source emissions are based on the net new vehicle trips generated by the proposed project. Emissions from water consumption occur from energy use for conveyance and treatment, and emissions from solid waste occur as materials decompose. Implementation of the proposed project would improve a planned storm drainage system. As discussed in the project description, the storm drain line is identified in the 2003 Focused EIR for the March Business Center as a future storm drain extension and a needed improvement to convey stormwater in the Meridian Specific Plan area. The project would serve existing and planned future development and would increase stormwater capacity to remedy an existing deficiency within the Meridian Specific Plan area. The proposed project does not include any new housing. Further, the proposed project would not generate new vehicle trips and no stationary sources are proposed. Therefore, the project would not generate operational GHG emissions and impacts would be less than significant.

- b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emission of greenhouse gases? ***Less Than Significant Impact.***

As described above, implementation of the proposed project would improve a storm drainage system. The storm drain would serve existing and planned development and would increase stormwater capacity to remedy an existing deficiency within the Meridian Specific Plan area. Future development within the Meridian Specific Plan area would be required to comply with the approved Specific Plan, thus unplanned development would not result from implementation of the proposed project. The proposed project does not include any new housing. Further, the proposed project would not generate new vehicle trips and no stationary sources are proposed. As such, the project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing GHG emissions and impacts are less than significant and no mitigation is required.

Mitigation Measures:

No mitigation is necessary.

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
IX. HAZARDS AND HAZARDOUS MATERIALS. Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

A Phase I Environmental Site Assessment (ESA) was prepared for the Meridian Trunk Sewer project by Kimley-Horn and Associates (September 2018). As shown in **Figure 8: Phase I ESA Area of Analysis for Prior Meridian Trunk Sewer Project**, the Meridian Trunk Sewer project is in approximately the same location as the proposed project, although the Meridian Trunk Sewer project extends further south. Given the Phase I ESA covers the same area as the proposed project, it will be used in this analysis to evaluate hazardous materials for the proposed project. In addition a regulatory database search of the Department of Toxic Substances Control (DTSC)'s Envirostor website (<http://www.envirostor.dtsc.ca.gov/public/>) and the State Water Resources Control Board's Geotracker website (<http://geotracker.waterboards.ca.gov/>) were performed to identify hazardous material regulated facilities on or in the vicinity of the proposed project that have occurred since the Phase I ESA was prepared in 2018. This section of the Initial Study incorporates the information contained within the 2018 Phase I ESA and the results of the regulatory database searches performed in June 2022. The Phase I ESA is provided as **Appendix F**; the results of the report are summarized herein.

- a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? *Less Than Significant Impact With Mitigation Incorporated.*

2018 Phase I ESA

Per the Phase I ESA, structures and roadways were located on the project site prior to 1901. Agricultural uses were visible in historical aerial photographs by 1938 and by 1942 Camp Haan (future March Air Force Base) was located on and west of the site. Increased development related to the March Air Force Base continued during the following decades including the construction of the Arnold Heights residential development (north of the subject site) and March Field Airport (east of the subject site) sometime prior to 1953. The Riverside National Cemetery and the Wastewater Treatment Plant (WWTP) were constructed prior to 1978. In 2009, land north of Van Buren Boulevard was cleared and graded and by 2012 initial construction of industrial developments in the surrounding area commenced. By 2016, Van Buren Boulevard was widened and the overpass and on-ramps to the I-215 were reconfigured to match their current alignment.

The northern portion of the site is located in a disturbed and undeveloped area just to the south of Van Buren Boulevard, in between an existing public roadway (Avenue A) and the existing RCTC AT & SF railway. The remainder of the site is located within Avenue A, which is paved with asphalt. No regulated substances or materials were observed to be stored or stockpiled adjacent to the project site during the August 23, 2018 Phase I ESA site visit.

There are no structures located on the project site. There are overhead lines that cross Avenue A in two places at the northern end of the site. The overhead lines parallel the RCTC AT & SF railway in between the project site and the tracks. There are transformers associated with these lines, but all transformers appear on poles located outside of the project site. There was no staining observed in association with these transformers. No evidence of stressed or stained vegetation was observed on-site. Aside from wind-blown trash and debris, no evidence of contamination or potential sources of contamination were identified in association with the Meridian Trunk Sewer alignment during the August 23, 2018 site reconnaissance for the Phase I ESA. According to the Geotechnical Exploration Report for the Meridian Trunk Sewer project (included as **Appendix E**), a local-service pressurized gas pipeline is aligned within the Van Buren Boulevard roadway embankment.

As discussed in the 2018 Phase I ESA, Kimley-Horn reviewed a third-party report prepared by EDR that provided regulatory database information from federal and State regulatory agencies. Kimley-Horn reviewed this database information to determine the potential or likelihood of contamination to the project site from adjoining and nearby sites. A recognized environmental condition (REC) is defined in the American Society for Testing and Material Standard (ASTM) as the presence or likely presence of a hazardous substance or petroleum product in, on or at a property due to release to the environment, under conditions indicative of a release to the environment, or under conditions that pose a material threat of a future release to the environment. Kimley-Horn identified the following RECs in association with the project site:

- Riverside National Cemetery (immediately to the west of the project site)

This cemetery is located immediately to the west of the proposed storm drain alignment. This facility is listed on the HIST CORTESE database. According to the GeoTracker database (<http://geotracker.waterboards.ca.gov/> accessed August 27, 2018), the Riverside National Cemetery site received regulatory closure on April 4, 1989. Notwithstanding this instance, the cemetery is a potential source of localized contamination resulting in the common and legal use of embalming fluids that may result in localized impacts to soil and ground water. Given that this existing cemetery is directly adjacent to the project site and ground disturbance is planned within the cemetery expansion area, this facility is considered a REC for the project site.

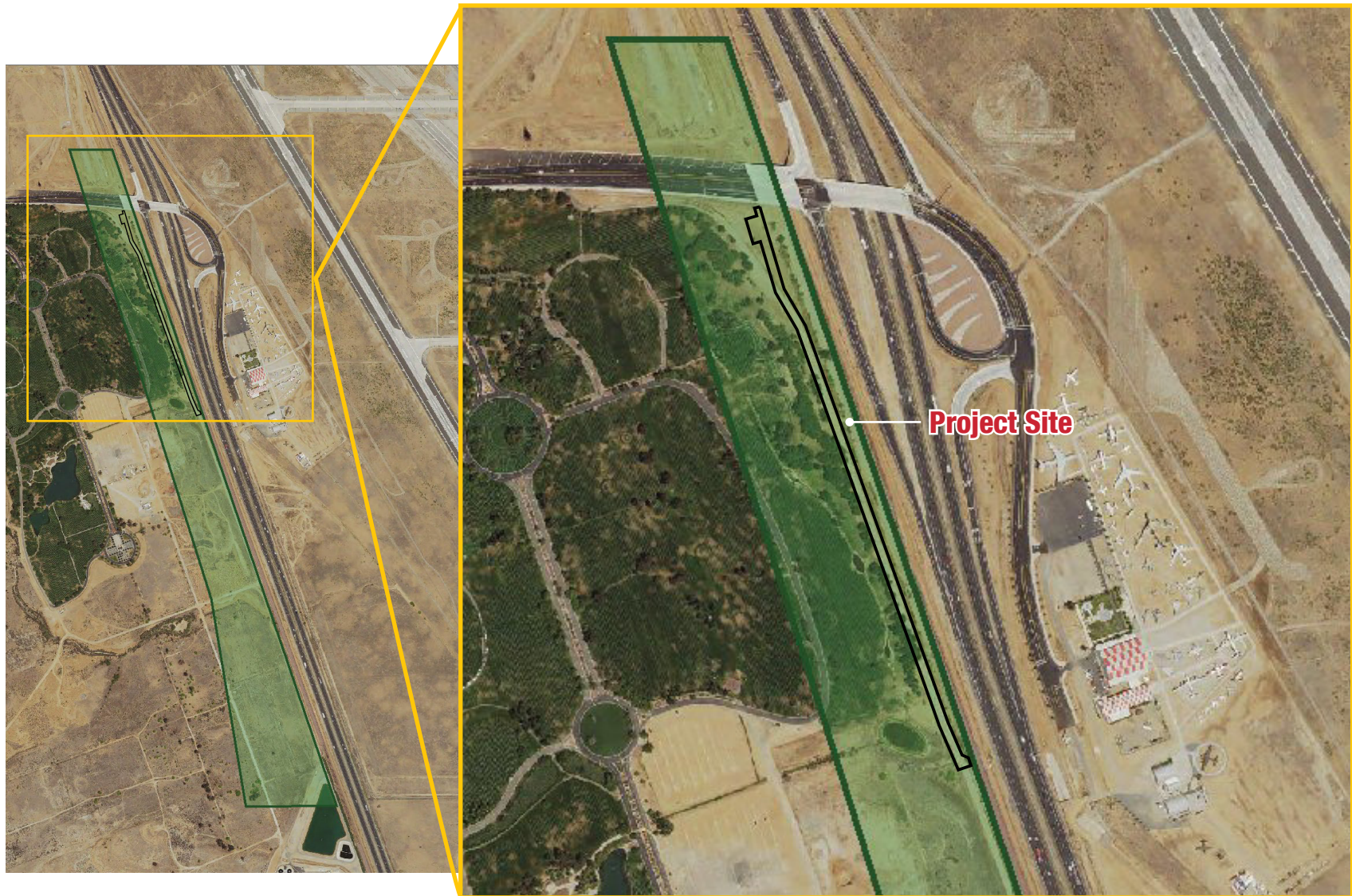


FIGURE 8: Phase I ESA Area of Analysis for Prior Meridian Trunk Sewer Project
Meridian Storm Drain Pipeline Extension
Riverside, CA

- RCTC AT & SF Railway (immediately east of the project site)
The RCTC AT & SF Railway is immediately to the east of the proposed storm drain alignment outside of the project's construction limits. This facility is listed on the CIWQS (California Integrated Water Quality System) database. There is very limited information in the EDR report regarding this site. The site is not listed on the GeoTracker database (<http://geotracker.waterboards.ca.gov/> accessed August 27, 2018) or the Envirostor database (<https://www.envirostor.dtsc.ca.gov/> accessed August 27, 2018). However, the common and legal use of creosote and arsenic in rail ties could result in localized impacts to soil. Given that the railway is within 50 feet of the proposed storm drain alignment, this facility is considered a REC for the project site.
- Former Camp Haan Site Y (immediately to the southwest of the project site)
This facility is listed on the SWF/LF (State and tribal landfill and/or solid waste disposal site lists), RESPONSE, ENVIROSTOR and Cortese databases. According to the GeoTracker database (<http://geotracker.waterboards.ca.gov/> accessed August 27, 2018), the Camp Haan Site Y site is an open site assessment. Site Y consists of a landfill within Riverside National Cemetery, formerly known as Camp Haan. The site has historically been used as a landfill. The landfill is described as having received solid waste during Camp Haan operations (November 1940 through August 1946). Such waste has included waste and ash from the incinerator that was located within the site area. Demolition debris from former Camp Haan buildings has also been placed within the landfill. In recent years, surplus soil from cemetery operations has been placed in the landfill. Soil and groundwater sampling have taken place and remedial action plans have been prepared and implemented for Site Y. However, as recent as June 2018, the RWQCB has issued a letter in response to their review of the "Draft Final Decision Document for Site Y at Former Camp Haan, Riverside County" dated April 2018 to say that they do not agree that no further action is needed. They state that the non-engineered soil cover will need maintenance in order to provide positive drainage, to minimize erosion, to prevent ponding, and to minimize water infiltration through the cover. The RWQCB also requests that the site include a development of appropriate institutional controls to restrict access to prevent digging in the soil cover or disposal of additional waste to the site, and a long-term monitoring and maintenance plan for the non-engineered soil cover. Given that this site is directly adjacent to the project site, this facility is considered a REC for the project site.

Federal and State Records Review Update

Kimley-Horn and Associates, Inc. reviewed information from Department of Toxic Substances Control (DTSC)'s Envirostor website (<http://www.envirostor.dtsc.ca.gov/public/> accessed June 23, 2022) and the State Water Resources Control Board's Geotracker website (<http://geotracker.waterboards.ca.gov/> accessed June 23, 2022) to obtain an understanding of any releases of regulated substances or petroleum products that occurred on or near the project site. The searches identified five records in close proximity to the project.¹¹ The facilities documented in the database searches were the same facilities documented in the database search conducted for the 2018 Phase I ESA.

The two records evaluated as part of the 2018 Phase I ESA that were not identified as RECs are as follows:

- Former March Air Force Base OU-2-Site 19 West March Sludge Drying Beds (immediately south of the subject Site).
According to the Geotracker database (<http://geotracker.waterboards.ca.gov/> accessed August 27, 2018), the former March Air Force Base OU-2-Site 19 West March Sludge Drying Beds Site was located southeast of the wastewater treatment facility. The site contained four lined sludge drying beds and three unlined sludge drying beds. Approximately 7,000 cubic yards of surface and near-surface soil contamination was estimated to exist over the site. The contaminants of concern and ecological concern were: polynuclear aromatic hydrocarbons, polychlorinated biphenyls, hexavalent chromium, and thallium. The current and future land use expected for the site is a public wastewater treatment facility.
- The March Installation Restoration Program (IRP) began in September of 1983. The initial study identified 30 potential contaminated sites for further investigation. A second study, completed in March 1987, consisted of the collection of soil, water, and soil gas samples. In June 1987, further investigation was conducted. This investigation indicated that further investigation was required to better define the extent

¹¹ California, State of, State Water Resources Control Board. Available at: <http://geotracker.waterboards.ca.gov/> Accessed: June 23, 2022.

California, State of, Department of Toxic Substances Control, DTSC's Envirostor Tool. Available at: <http://www.envirostor.dtsc.ca.gov/public/> Accessed: June 23, 2022.

of soil and groundwater contamination and off-base migration of the chlorinated solvent trichloroethene in groundwater. In November 1991, March was listed on the U.S EPA National Priorities List (Superfund site) due to the presence of contamination in groundwater beneath the base. Sites were placed into 3 separate Operable Units (OU). Site 19 was placed in OU-2. The OU-2 Air Force Real Property Agency (AFRPA) Remedial Investigation/Feasibility Study (for 15 Sites) was made available to the public in November 1996. The OU-2 AFRPA Record of Decision (ROD) was final in April 2004. The site was closed without restrictions by Amendment to the ROD dated October 6, 2016. Given the no further action and regulatory closure for this site, this facility is not considered a REC for the subject Site.

- Former March Air Force Base OU-2-Site 24 Landfill No. 1 (immediately south of the subject Site). According to the Geotracker database (<http://geotracker.waterboards.ca.gov/> accessed August 27, 2018), the former March Air Force Base OU-2-Site 24 Landfill No. 1 Site was located immediately south of the subject Site. As described above, it was part of the March Air Force Base IRP OU-2. The site received regulatory closure in April 2004 when the OU-2 AFRPA ROD was issued. Given the no further action and regulatory closure for this site, this facility is not considered a REC for the subject Site.

The findings of the 2018 Phase I ESA and the 2022 federal and state records review update suggest that contaminated sites are located immediately adjacent to the proposed storm drain alignment. At these sites, impacts to the soil or groundwater by deleterious substances are known or suspected to be present. As such, there is the potential for contaminated media to be encountered during the construction of the proposed storm drain alignment. As identified in **Mitigation Measure HAZ-1**, a Soil Management Plan shall be prepared to address potential contamination issues during construction. Implementation of **Mitigation Measure HAZ-1**, would reduce the impacts to a less than significant level.

- b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? **Less Than Significant Impact.**

The project consists of a master planned storm drain improvement. Potential hazards resulting from the handling or storage of hazardous materials on-site during construction would be minimized by the adherence to the BMPs identified in the SWPPP produced for the proposed project. The BMPs include proper material use, waste disposal, and training of employees and subcontractors. Once it is constructed, the project is not anticipated to result in releases of hazardous materials into the environment. The storm drain pipeline would be constructed to applicable federal and State requirements. A less than significant impact would occur and no mitigation is required.

- c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? **No Impact.**

The closest school is Mead Valley Elementary School which is located approximately 2.1 miles southwest of the southernmost portion of the site. The project site is not located within 0.25 mile of Mead Valley Elementary School or within 0.25 miles of any other existing or proposed school. As a result, no impacts are anticipated.

- d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? **Less Than Significant Impact with Mitigation Incorporated.**

The project site is not included on a hazardous site list compiled pursuant to California Government Code section 65962.5.¹² However, according to the Phase I ESA prepared for the adjacent Meridian Sewer Project site by Kimley-Horn and Associates in September 2018, there were three RECs (as defined by ASTM Practice E 1527-13) identified in association with the project site that required additional investigation to determine impacts related to ground disturbance. A Soil Management Plan is recommended to address potential contamination issues that may arise during construction. The Soil Management Plan shall identify the nearby contaminated site(s), affected media, and corresponding contaminants of concern. It will also include specific procedures for handling potentially impacted media during construction and outline a contingency plan in the event that gross contamination is discovered during construction. With implementation of a Soil Management Plan, as identified in **Mitigation Measure HAZ-1**, potential impacts to the public or environment would be reduced to a less than significant level.

¹² California, State of, Department of Toxic Substances Control, DTSC's Hazardous Waste and Substances Site List - Site Cleanup (Cortese List). Available at: https://www.dtsc.ca.gov/SiteCleanup/Cortese_List.cfm accessed June 23, 2022.

- e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area? **No Impact.**

The proposed project is located approximately 0.25 miles to the west of March ARB and is located within Zone B2 of the March Air Reserve Base/Inland Port Airport Joint Land Use Study. The proposed project is consistent with the compatible land use and associated development standards described in the March Air Reserve Base/Inland Port Airport Joint Land Use Study for development within the B2 zone. Certain land use restrictions are applicable to projects within this zone, such as building heights. Underground infrastructure improvements, such as the proposed project, are not prohibited uses within the zones. Compatibility Zone B2 encompasses areas of high noise and medium risk with projected 65 dB noise contours. The project site is not a sensitive land use and is considered an acceptable use within the noise contours. The proposed project would not expose people residing or working in the area to excessive noise levels. Furthermore, given the nature of the proposed project, the storm drain pipeline would be constructed underground and not interfere with airport operations. Therefore, the proposed project would not result in a safety hazard for people residing or working in the project area. Thus, no impacts would occur.

- f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? **Less than Significant Impact.**

The March JPA adopted the March Area Emergency Resource Guide in 2008. The Guide provides a list of resources and contact information for emergency resources in the area, including local hospitals, animal disaster resources, law enforcement, fire protection, airports/air services, emergency services for the March Inland Port, mass transportation information, nearby health care clinics, utilities providers, pharmacies, and ambulance resources. The proposed project would not result in any changes to the resources identified in the March Area Emergency Resource Guide. Furthermore, the construction and operation of the storm drain pipeline would not result in a physical interference with emergency routes. Moreover, primary access to all roads would be maintained during construction of the proposed project. The proposed project would be constructed over approximately six months and would prepare a traffic control plan to address potential any potential roadway or partial roadway closures. The traffic control plan would be subject to March JPA review and approval. Primary access to Avenue A and Van Buren Boulevard would be maintained during construction of the proposed project. Therefore, a less than significant impact would occur.

- g) Expose people or structures to a significant risk either directly or indirectly, of loss, injury or death involving wildland fires? **No Impact.**

According to the Western Riverside County Wildfire Susceptibility Map, the proposed project is not located within a fire hazard zone. Additionally, the proposed project is located within previously graded vacant land or within an existing roadway, Avenue A and the project site is surrounded by developed land. Furthermore, the proposed project is an underground storm drain pipeline and therefore, would not generate significant impacts related to exposure of people or structures to wildland fire hazards. Therefore, no impact would occur.

Mitigation Measures:

Mitigation Measure HAZ-1: Prior to issuance of grading permits, a Soil Management Plan shall be prepared to address potential contamination issues that may arise during construction. The Soil Management Plan shall include the Recognized Environmental Condition (RECs) identified in the 2018 Phase I ESA prepared for the project and identify the nearby contaminated site(s), affected media, and corresponding contaminants of concern. Specific procedures should be identified for handling potentially impacted media during construction. Furthermore, a contingency plan should be incorporated into the Soil Management Plan in the event that gross contamination is discovered during construction. The Soil Management Plan should also outline health and safety concerns for workers coming in contact with the contaminated media. The Soil Management Plan should be submitted to the March JPA for review and approval.

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
X. HYDROLOGY AND WATER QUALITY. Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
i. Result in substantial erosion or siltation on- or off-site?				
ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?				
iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?				
iv. Impede or redirect flood flows?				
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

The project consists of a master planned storm drain improvement in a utility easement that would serve existing and planned developments within the Meridian Specific Plan. Implementation of the proposed project would increase stormwater capacity to remedy an existing deficiency within the Meridian Specific Plan area, north of the project site. This planned storm drain extension, as identified in the 2003 Focused EIR, is a needed improvement to convey stormwater in the Meridian Specific Plan project area. Mitigation Measure IV.F-1, adopted as part of a Mitigation Monitoring and Reporting Program when March JPA certified the 2003 Focused EIR, required detention basins and improvements to the storm drain system to be constructed to reduce peak flows to less than those associated with existing conditions in accordance with the approved Drainage Master Plan. The 2010 SEIR identified that, in accordance with Mitigation Measure IV.F-1, the desired draw down time for detention basins in the Meridian Specific Plan project area would be reduced to 12 hours once the box culvert and channel south of Van Buren Boulevard and associated stormwater infrastructure have been constructed.

With respect to the hydrology for the Meridian Specific Plan, the 2010 SEIR analyzed an Ultimate Drainage Conditions Study to review previous drainage analyses for the Meridian Specific Plan area and confirm that the findings from the 2003 Focused EIR remained valid. This study evaluated the interim East Detention Basin contemplated with Unit 4, which captures project area runoff and intercepts and detains off-site flow from the South Campus, the Future Development Area, and the Orangecrest residential development further to the west of the Meridian Specific Plan area. The 2010 SEIR found that compliance with applicable mitigation measures from the 2003 Focused EIR would result in less than significant impacts to hydrology with mitigation incorporated. As described in Section IV.F, *Hydrology/Water Quality*, of the 2010 SEIR, the Santa Ana Regional Water Quality Control Board (RWQCB) is responsible for regulating stormwater discharges and maintaining the quality of water resources within the northwestern portion of Riverside County, including the project site. Construction activities would be required to obtain authorization by the Santa Ana RWQCB and coverage under a National Pollutant Discharge Elimination System (NPDES) permit, per Section 402 of the Clean Water Act.

In June 2022, Q3 Consulting prepared a Master Drainage Plan Update for the proposed Project (**Appendix G**). The purpose of the report is to provide design recommendations and document the hydrologic and hydraulic analysis performed as part of an update for the Perris Valley Master Drainage Plan Line B within the March JPA. Within the Line B watershed, the following three main problems were identified:

- The existing grade of the drainage ditch conveying Meridian flows south of Van Buren Boulevard, through Riverside National Cemetery coupled with the grade of the adjacent railroad tracks results in significant overtopping of the railroad during a 100-year storm.
- The 42” RCP culvert adjacent to the Riverside National Cemetery retention basin is undersized to convey the 100-year storm. This results in significant overtopping of the railroad.
- The dual 48” RCP culvert located to the east of the irrigation lake is undersized to convey the 100- year storm. This results in significant overtopping of the railroad.

The proposed project consists of the first of the proposed improvements outlined in the Master Drainage Plan Update which includes the extension of the storm drain line for 2,350 linear feet and connecting to the existing dual 48” RCP railroad culvert. According to the Master Drainage Plan, with implementation of this improvement, no overtopping of the railroad and I-215 by stormwater runoff is shown in both the 3-hour and 6-hour storm modeling scenario.

- a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality? ***Less Than Significant Impact.***

The proposed project would not include the construction of any new above-ground impermeable surfaces (i.e.,

pavement and structures. The March JPA is primarily a redevelopment agency charged with the redevelopment of the former March Air Force Base. March JPA is not a Co-Permittee of, and is not subject to, NPDES Permit No CAS618033 Order No. R8-2010-0033 (Riverside County MS4 Permit). The NPDES New Development & Redevelopment Guidelines for Projects Under the March Joint Powers Authority (March JPA WQMP Guidance Document) is a guidance document intended to provide the March JPA with guidance procedures and a format to implement the regional NPDES land development requirements. This document meets the intent of the County MS4 Permit.

The March JPA WQMP Guidance Document identifies that new or significant redevelopment projects require a project specific Water Quality Management Plan (WQMP). The March JPA WQMP Guidance Document defines new development as a residential development of 10 dwelling units or more; industrial or commercial development for 100,000 square feet or more; automotive repair shops; restaurants; hillside development that creates 10,000 square feet or more of impervious surface; or developments that create 10,000 square feet or more of impervious surface that is adjacent to or discharges directly into areas designated in the Santa Ana River Basin Plan (Basin Plan) as waters supporting habitats necessary for the survival and successful maintenance of plant or animal species designated under state or federal law as rare, threatened, or endangered species. The March JPA WQMP Guidance Document defines significant redevelopment as the addition or creation of 5,000 or more square feet of impervious surface on an existing developed site. The proposed project does not include the construction of any new above-ground impermeable surfaces (i.e., pavement and structures) and is not considered new development or significant redevelopment. Therefore, the project would not be required to prepare a WQMP because the project does not meet the March JPA WQMP Guidance Document criteria for a project-specific WQMP. However, because the project is greater than 1 acre, it would be required to obtain a NPDES permit to address water quality impacts during construction. One of the requirements to obtain a NPDES permit is the preparation of a SWPPP, consistent with the General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit). Implementation of a SWPPP would incorporate BMPs to be employed to prevent stormwater pollutants from leaving the project site during construction (e.g., gravel bags, silt fence, fiber rolls, etc.). Preparation and implementation of the SWPPP, would reduce potential impacts to water quality during construction and avoid violations of water quality standards. In addition, the proposed project would construct a storm drain line and the quality of the flows conveyed within the storm drain line are not a result of the project in and of itself and are from upstream, offsite activities. With implementation of existing regulations related to water quality, impacts to water quality from the project would be less than significant.

- b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin? **No Impact.**

The proposed project is a master planned storm drain line and would not involve the extraction of groundwater. Additionally, the proposed project would not include the construction of new above-ground impermeable surfaces, thus, it would not impact percolation or recharge of groundwater on-site. No impacts to groundwater would occur.

- c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces, in a manner which would?

- i. Result in substantial erosion or siltation on- or off-site? **Less Than Significant Impact.**

The project would improve drainage patterns and alleviate existing flooding concerns that impact the adjacent railroad and I-215 during storm events. The existing project site consists of a drainage ditch with disturbed vegetation and developed land cover. The ditch conveys flows south to an existing culvert at the RCTC Railroad right-of-way. Flows are then conveyed east underneath the railroad and into an earthen median where an existing Caltrans culvert picks up the flow and conveys it directly into Line B. Once constructed, the proposed project would provide a direct connection of Line B from the Van Buren culvert to the RCTC culvert at the termination of the project site. The storm drain line would be constructed underground and the ground surface would be restored to its pre-project condition. Because the project site would be returned to pre-project conditions, it would not increase erosion or siltation, on-or off-site. Implementation of the storm-drain would alleviate existing upstream flooding and capacity issues; thus, it would reduce upstream runoff, reducing erosion or saltation related to stormwater flows. In addition, as discussed in Threshold (a) above, the proposed project is required to prepare a SWPPP and implement BMPs to minimize water quality impacts during construction. Impacts to water quality are less than significant.

- ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite? **Less Than Significant Impact.**

As discussed in Threshold (c)i. above, the proposed project ground surface would be restored to its pre-project condition and would be constructed to address existing flooding problems for the project area. As

discussed in **Appendix G**, the regional hydraulic analysis demonstrates that the project has been designed to eliminate the existing flood hazard without adversely affect downstream properties. Further, the proposed project does not include any streams or rivers. The proposed project is required to prepare a SWPPP under the NPDES Construction General Permit to implement BMPs to minimize storm water runoff during construction. Impacts to flooding are less than significant.

- iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff? ***Less Than Significant Impact.***

During construction, water quality impacts could result from temporary construction activities associated with the project including grading, excavation, and other earthmoving activities that have the potential to cause substantial erosion on the project site. If erosion is not prevented or contained during construction, sediments and particulates, along with other contaminants found on the project site, could be conveyed off-site and into downstream waters, resulting in water quality degradation and the subsequent violation of water quality standards. Compliance with the BMPs identified in the SWPPP produced for the proposed project would minimize any potential water quality impacts resulting from polluted runoff. Upon completion of the storm drain, the project site would be returned to its pre-project condition and operations would not contribute to or create additional runoff. Although implementation of the proposed project would increase stormwater capacity to remedy an existing deficiency within the Meridian Specific Plan area, future development within the Meridian Specific Plan area would be required to comply with Mitigation Measure H-2 of the 2003 Focused EIR, which requires the Master Developer to construct storm drain and flood control facilities, in accordance with the approved March Business Center Drainage Plan, prior to the issuance of the first certificate of occupancy for each phase. Further, the project has been designed to eliminate the existing flood hazard without adversely affect downstream properties. Therefore, impacts resulting from the project would be less than significant.

- iv. Impede or redirect flood flows? ***Less Than Significant Impact.***

As discussed in Threshold (c) i. above, the proposed project would be constructed to remedy an existing stormwater deficiency within the Meridian Specific Plan area and related to storm water infrastructure south of Van Buren Boulevard, east of the Riverside National Cemetery, and west of I-215. The existing culverts and drainage ditch conveying flows from the Meridian Specific Plan area and the Riverside National Cemetery are undersized. This project would construct a master planned storm drain line designed to handle the upstream flows such that they would not result in runoff that overtops the adjacent railroad and I-215. Impacts to flooding are less than significant.

- d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation? ***No Impact.***

The project site is located approximately 75 miles from the Pacific Ocean and is not downstream of a significant body of water and therefore not subject to a tsunami or seiche. In addition, the project site is not located within a 100-year flood hazard area;¹³ therefore, there is no risk of releasing pollutants as a result of flooding, tsunami or seiche.

- e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan? ***No Impact***

As discussed in Threshold (b) above, the proposed project is a master planned storm drain line and therefore, does not involve the extraction of groundwater. Additionally, the proposed project would not include the construction of new, above-ground impermeable surfaces that would impact the recharge of groundwater. Further, as discussed in Threshold (a) above, the project would be compliant with NPDES permit requirements, thus consistent with the Basin Plan. Given that the project would not construct new impermeable surfaces, it does not require the preparation of a WQMP. Therefore, no impacts would occur to either a water quality control plan or a sustainable groundwater management plan.

Mitigation Measures:

No mitigation is necessary.

¹³ Federal Emergency Management Agency Flood Map Service Center. Available at: <https://msc.fema.gov/portal/home>. Accessed June 22, 2022.

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XI. LAND USE AND PLANNING. Would the project:				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

- a) Physically divide an established community? **No Impact.**

The proposed project is an extension of existing storm drain infrastructure to serve existing and planned development and remedy an existing deficiency within the Meridian Specific Plan area. The proposed project traverses the eastern edge of the Riverside National Cemetery and is located adjacent to the west side of I-215. The proposed project does not propose any new roadways or other significant infrastructure improvements that would restrict access, require a diversion of existing travel routes, or otherwise divide an established community. The infrastructure improvements would be located underground and would not physically divide an established community. Therefore, no impacts would occur, and no mitigation is required.

- b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect? **No Impact.**

The project site is currently vacant with no buildings. The project is located within an existing utility easement. The limits of construction along the proposed storm drain line alignment would be within a 36-foot-wide expanse along the 2,350-foot alignment. In addition to construction of the storm drain line, construction activities along the alignment would include trenching, staging of material, replacement of a retaining wall, and replacement of portions of Avenue A. The 36-foot area is within an existing 40-foot sanitary sewer and storm sewer easement. The proposed project is located within an easement granted to the March JPA on property owned by the federal government, specifically the VA, which manages the Riverside National Cemetery. The development of utilities within this easement is considered compatible and is identified as an acceptable use in the Deed of Easement for the project site (included as **Appendix H**), which states that the easement is granted for sanitary and storm sewer line work. As such, no significant environmental impacts would occur.

The property is located within Airport Compatibility Use Zone B2 of the 2014 March Air Reserve Base/ Inland Port Airport Land Use Compatibility Plan.¹⁴ Certain land use restrictions are applicable to projects within this zone, such as building heights. Underground infrastructure improvements, such as the proposed project, are not prohibited uses within Zone B2. As such, the project is consistent with the March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan and no significant impacts would occur.

Mitigation Measures:

No mitigation is necessary.

¹⁴ March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan. <https://rcaluc.org/Portals/13/17%20-%20Vol.%201%20March%20Air%20Reserve%20Base%20Final.pdf?ver=2016-08-15-145812-700>. Available at: <https://rcaluc.org/Portals/13/17%20-%20Vol.%201%20March%20Air%20Reserve%20Base%20Final.pdf?ver=2016-08-15-145812-700>. Accessed June 21, 2022.

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XII. MINERAL RESOURCES. Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

- a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? ***No Impact.***

The Riverside County General Plan EIR notes that lands within City are either designated Mineral Resource Zone Three (MRZ-3) or Mineral Resource Zone Four (MRZ-4), as defined by the California Department of Conservation. According to the Riverside County General Plan EIR Figure 4.14.1, the project site is located in an area designated as MRZ-3, Significance of Mineral Deposits Is Undetermined.¹⁵ However, the project site is not designated for mineral resource extraction, nor is it currently or historically been utilized for mineral resource uses. As such, no impacts relative to mineral resources would occur.

- b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan? ***No Impact.***

Refer to Threshold (a), above. No sites have been designated as locally-important mineral resource recovery sites on any local plan. No impacts would occur.

Mitigation Measures:

No mitigation is necessary.

¹⁵ Riverside County General Plan. Available at: https://rctlma.org/Portals/14/genplan/general_plan_2015/DEIR%20521/04-14_MineralResources.pdf. Accessed June 21, 2022.

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XIII. NOISE. Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion:

Sound is technically described in terms of amplitude (loudness) and frequency (pitch). The standard unit of sound amplitude measurement is the decibel (dB). The decibel scale is a logarithmic scale that describes the physical intensity of the pressure vibrations that make up any sound. The pitch of the sound is related to the frequency of the pressure vibration. Since the human ear is not equally sensitive to a given sound level at all frequencies, a special frequency-dependent rating scale has been devised to relate noise to human sensitivity. The A-weighted decibel scale (dBA) provides this compensation by discriminating against frequencies in a manner approximating the sensitivity of the human ear.

Noise is typically defined as unwanted sound. A typical noise environment consists of a base of steady ambient noise that is the sum of many distant and indistinguishable noise sources. Superimposed on this background noise is the sound from individual local sources. These can vary from an occasional aircraft or train passing by to virtually continuous noise from traffic on a major highway.

Several rating scales have been developed to analyze the adverse effect of community noise on people. Since environmental noise fluctuates over time, these scales consider that the effect of noise on people is largely dependent on the total acoustical energy content of the noise as well as the time of day when the noise occurs. For example, the equivalent continuous sound level (L_{eq}) is the average acoustic energy content of noise for a stated period of time; thus, the L_{eq} of a time-varying noise and that of a steady noise are the same if they deliver the same acoustic energy to the ear during exposure. The Day-Night Sound level (L_{dn}) is a 24-hour average L_{eq} with a 10 dBA “weighting” added to noise during the hours of 10:00 p.m. to 7:00 a.m. to account for noise sensitivity in the nighttime. The Community Noise Equivalent Level (CNEL) is a 24-hour average L_{eq} with a 10-dBA weighting added to noise during the hours of 10:00 p.m. to 7:00 a.m. and an additional 5 dBA weighting during the hours of 7:00 p.m. to 10:00 p.m. to account for noise sensitivity in the evening and nighttime.

Setting

The proposed project traverses the eastern edge of the Riverside National Cemetery and along the west side of I-215. The March ARB is located 680 feet to the east of the project site across I-215 and railroad tracks. The nearest sensitive

receptor is the Hampton Inn located approximately 600 feet to the north of the project site.¹⁶ The nearest residential uses are approximately 1.1 miles to the northwest and west and 1.2 miles to the southwest of the project site. The nearest school is Mead Valley Elementary School approximately 2.1 miles southwest of the southernmost portion of the site. The existing noise environment is influenced primarily by warehouses, aviation activity at March ARB, railroad, and vehicular noise emanating from traffic on roadways such as I-215 and Van Buren Boulevard.

The project area is located west of I-215 and March ARB, which is approved for both military and civilian aviation operations. Noise concerns for the project area are mainly associated with traffic noise and air base operations. Most of the project site is located within the 65 CNEL for the March ARB noise contours.¹⁷

Noise-Sensitive Receptors

Noise-sensitive land uses are generally considered to include those uses where noise exposure could result in health-related risks to individuals, as well as places where quiet is an essential element of their intended purpose. Residential dwellings are of primary concern because of the potential for increased and prolonged exposure of individuals to both interior and exterior noise levels. Additional land uses such as parks, historic sites, cemeteries, and recreation areas are considered sensitive to increases in exterior noise levels. Schools, churches, hotels, libraries, and other places where low interior noise levels are essential are also considered noise-sensitive land uses. The closest sensitive noise receptors are Hampton Inn located to the north and the residential areas located west, northwest, and southwest of the site. These residential areas are a mile or more from the project site and are buffered by the Riverside National Cemetery, General Old Golf Course, and undeveloped land. Other noise receptors include General Old Golf Course and the existing operational areas of Riverside National Cemetery.

Existing Noise Environment

The background ambient noise levels in the project study area are dominated by the transportation-related noise associated with the arterial transportation network, vehicular travel on I-215, and existing background industrial land use activities.

March JPA General Plan

The Noise / Air Quality Element of the March JPA General Plan and the Noise / Air Quality Profile Report present a guide for land use compatibility of noise sensitive land uses in areas that are subject to noise levels of 55 to 80 dB CNEL (March JPA, 1998). Residential uses are normally unacceptable in areas exceeding 70 dB CNEL and conditionally acceptable between 55 and 70 dB CNEL for low density single family, duplex, mobile homes, and between 60 and 70 dB CNEL for multi-family units. Schools, libraries, hospitals, and nursing homes are treated as noise sensitive land uses requiring acoustical studies within areas exceeding 60 dB CNEL. Commercial / professional office buildings and industrial land uses are normally unacceptable in areas exceeding 75 dB CNEL and are conditionally acceptable within 67 to 78 dB CNEL (for commercial and professional offices) and 70 to 80 dB CNEL (for industrial land uses). Transient lodging including motel and hotel land uses are normally unacceptable in areas exceeding 70 dB CNEL and are conditionally acceptable within 60 to 70 dB CNEL. Golf courses are normally unacceptable in areas exceeding 70 dB CNEL. Development of land uses within the normally unacceptable or clearly unacceptable noise exposure category would require mitigation under CEQA.

The following construction noise mitigation measures were identified in the March JPA General Plan Master Environmental Impact Report (1999):

- 1) All construction projects shall be reviewed on a project-by-project basis by the March JPA staff to determine possible impacts upon identified sensitive noise receptors and to determine the need for project specific acoustical analysis. If a specific construction activity is determined to have significant noise impacts, an acoustical analysis shall be prepared containing appropriate mitigation.
- 2) All construction activities shall be limited to between 7:00 a.m. and 8:00 p.m., if occupied residences are located within 300 feet. If no residences are located within 300 feet, no restrictions or construction hours are required.
- 3) All construction equipment used for construction activities shall be fitted with exhaust muffling and noise control filter devices to reduce noise impacts.
- 4) All future developments occurring as a result of implementation of the proposed General Plan shall conform to the goals and policies of the proposed plan.

¹⁶ The Hampton Inn is not considered an air quality sensitive receptor. A sensitive receptor includes long-term living quarters, schools, and health care facilities. The Hampton Inn would not be considered long-term living quarters.

¹⁷ March Air Reserve Base, *Inland Port Airport Land Use Compatibility Plan – Background Data: March Air Reserve Base/Inland Port Airport*, Chapter W7, November 2014. Available online: <https://www.rcaluc.org/Portals/13/42%20-%20Vol.%202%20March%20Air%20Reserve%20Base%20Final.pdf?ver=2016-08-15-150039-073>, Accessed December 2022

County of Riverside Municipal Code

The County of Riverside Ordinance No. 847: Regulating Noise establishes exterior noise standards for various land use categories, as shown (in abbreviated form) in **Table N-2: County of Riverside Ordinance No. 847 Sound Level Standards**. According to the County of Riverside Noise/Land Use Compatibility Criteria, cemeteries can experience Ldn or CNEL levels up to 75 dBA normally acceptable.

Table N-2: County of Riverside Ordinance No. 847 Sound Level Standards

General Plan Land Use Designation Name	7 AM- 10 PM	10 PM- 7 AM
Residential	55	45
Commercial, Community Center	65	55
Light Industrial	75	55
Heavy Industrial	75	75
Business Park, Public Facility	65	45
Rural, Agriculture, Residential	45	45
Mineral Resources	75	45

- 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?? **Less Than Significant Impact.**

Construction Noise

Construction noise represents a short-term impact on ambient noise levels. The project would involve only minimal construction activities which be temporary and have a short duration resulting in periodic increases in the ambient noise environment. Construction equipment for demolition would include a concrete saw, dumper, excavator, and two dozers. Site preparation is assumed to require the use of a dumper and tractor/loader/backhoe. The grading phase would require the use of four dumpers, an excavator, and one off-highway tractor. During the construction phase, two excavators and one tractor/loader/backhoe was assumed. During the proposed paving phase, one paver, a piece of paving equipment, one scraper, and one skid steer loader would be utilized the grading phase, which is assumed to occur over 15 days.

The Federal Highway Administration (FTA) has published standard noise levels for construction equipment operations. Typical noise levels generated by construction equipment are shown in **Table N-3: Maximum Noise Levels Generated by Construction Equipment**. Operating cycles for these types of construction equipment may involve one or two minutes of full power operation followed by three to four minutes at lower power settings. Other primary sources of acoustical disturbance would be due to random incidents, which would last less than one minute (such as dropping large pieces of equipment or the hydraulic movement of machinery lifts). Based on FHWA data, construction activity is estimated to be up to 90 dBA Lmax at 50 feet. The closest sensitive receptors are located approximately 600 feet north of the project site. It should be noted that construction/installation of the storm drain would consist of trenching using primarily excavators and loaders. The use of heavy-duty graders and scrapers would be limited. As such, noise levels would be less intense than typical construction projects.

Table N-3: Maximum Noise Levels Generated by Construction Equipment

Type of Equipment	Acoustical Use Factor ¹	L _{max} at 50 feet (dBA)	L _{max} at 600 feet (dBA)
Concrete Saw	20	90	68
Concrete Mixer Truck	40	79	57
Backhoe	40	78	56
Dozer	40	82	60
Grader	40	85	63
Truck	40	88	66
Paver	50	77	55
Roller	20	80	58
Tractor	40	84	62

Note:

1. Acoustical Use Factor (percent): Estimates the fraction of time each piece of construction equipment is operating at full power (i.e., its loudest condition) during a construction operation.

Source: Federal Highway Administration, *Roadway Construction Noise Model (FHWA-HEP-05-054)*, January 2006 and Federal Transit Administration, *Transit Noise and Vibration Impact Assessment*, 2006.

Section 9.52.020 of the County's Noise Regulation ordinance indicates that noise associated with any private construction activity located within one-quarter of a mile from an inhabited dwelling is considered exempt between the hours of 6:00 a.m. and 6:00 p.m., during the months of June through September, and 7:00 a.m. and 6:00 p.m., during the months of October through May. The County does not establish numeric thresholds for construction noise levels. Construction projects located more than one-quarter of a mile from an inhabited dwelling are exempt from the County noise ordinance.

As noted above, the sensitive receptor closest to the project site is the Hampton Inn located 600 feet north of the construction area. Maximum equipment noise levels at 600 feet would range from 55 dBA L_{max} to 68 dBA L_{max} and this sensitive receptor is not anticipated to be exposed to elevated noise levels during project construction. Potential cemetery receptors would be located 300 feet or more from the construction area. Additionally, construction noise would be acoustically dispersed throughout the construction zone of the storm drain alignment and would not be concentrated in one area near surrounding sensitive uses or other receivers. It should be noted that L_{max} levels shown in Table N-3 are considered worst-case and these noise levels would be lower when averaged over the daily construction period. Construction-related activities would temporarily increase ambient noise levels in the project vicinity. However, noise levels at and near the project site would fluctuate depending on the level and type of construction activity on a given day. Based on the distance to sensitive receptors as well as the distance to cemetery receivers, these receptors would not be exposed to significant construction noise levels over an extended period of time. Construction activities are assumed to occur approximately eight hours on Monday through Friday and would not occur outside of allowable hours pursuant to the County's Noise Regulation ordinance. In addition, project construction would occur over a six-month timeframe, and would cease to generate heavy-duty equipment noise after completion. Temporary construction activities would be relatively minor and noise would not exceed noise regulations. Thus, due to the temporary and intermittent nature of the impacts as well as the distance to the receptors, construction noise impacts would be less than significant.

Operational Noise

Operational activities associated with the proposed project would occur within the existing 40-foot sanitary sewer and storm drain easement and would include maintenance and inspections as determined by the RCFD. Once constructed, the subsurface storm drain would operate as an unstaffed facility. The storm drain is a planned infrastructure improvement intended to remedy an existing deficiency within the Meridian Specific Plan area. The capacity of the storm drain has been sized to serve the existing and planned development within the Meridian Specific Plan area. The proposed project would not generate new vehicle trips other than limited trips for inspection and maintenance. Nor would it or introduce any new uses or stationary sources that would result in an increase of operational noise levels. After construction, operations would return to similar conditions as the current baseline. Therefore, no long-term noise impacts would result with implementation of the proposed project.

- b) Generation of excessive groundborne vibration or groundborne noise levels? ***Less Than Significant Impact.***

Project construction can generate varying degrees of groundborne vibration, depending on the construction procedure and the construction equipment used. Operation of construction equipment generates vibrations that spread through the ground and diminish in amplitude with distance from the source. The effect on buildings located near the construction site often varies depending on soil type, ground strata, and construction characteristics of the receiver buildings. The results from vibration can range from no perceptible effects at the lowest vibration levels, to low rumbling sounds and perceptible vibration at moderate levels, to slight damage at the highest levels. Groundborne vibrations from construction activities rarely reach levels that damage structures.

The Federal Transit Administration (FTA) has published standard vibration velocities for construction equipment operations. In general, the FTA architectural damage criterion for continuous vibrations (i.e., 0.20 inch/second) appears to be conservative. The types of construction vibration impact include human annoyance and building damage. Human annoyance occurs when construction vibration rises significantly above the threshold of human perception for extended periods of time. Building damage can be cosmetic or structural. Typical vibration levels produced by construction equipment is identified in **Table N-4: Typical Vibration Levels for Construction Equipment.**

Table N-4: Typical Vibration Levels for Construction Equipment

Equipment	Approximate peak particle velocity at 25 feet (inches/second) ¹	Approximate peak particle velocity at 600 feet (inches/second) ²
Large bulldozer	0.089	0.0008
Loaded trucks	0.076	0.0006
Small bulldozer	0.003	0.0000
Vibratory compactor/roller	0.210	0.0018

Notes:

1. Peak particle ground velocity measured at 25 feet per Federal Transit Administration, *Transit Noise and Vibration Impact Assessment Guidelines*, May 2006, Table 12-2.
2. Calculated using the following formula:

$$PPV_{equip} = PPV_{ref} \times (25/D)^{1.5}$$
 where:
 PPV (equip) = the peak particle velocity in in/sec of the equipment adjusted for the distance
 PPV (ref) = the reference vibration level in in/sec from Table 12-2 of the FTA *Transit Noise and Vibration Impact Assessment Guidelines* (2006).
 D = the distance from the equipment to the receiver.

Source: Federal Transit Administration, *Transit Noise and Vibration Impact Assessment Guidelines*, May 2006.

Groundborne vibration decreases rapidly with distance. As indicated in Table N-4, based on the FTA data, vibration velocities from typical heavy construction equipment operations that would be used during project construction range from 0.003 to 0.210 inches per second peak particle velocity (in/sec PPV) at 25 feet from the source of activity. The closest structure to the construction area is a hotel use (Hampton Inn), located approximately 600 feet to the north. At this distance, vibration from construction at the nearest structure would range between 0.000 and 0.0018 in/sec PPV, which is below the 0.20 in/sec PPV significance threshold. Therefore, a less than significant impact would occur.

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

Refer to Threshold (a), above. Operationally, the project proposes to improve the existing storm drainage system by constructing a new 6-foot by 4-foot RCB. The new underground storm drain line would extend from an existing RCB at Van Buren Boulevard and extend approximately 2,350 linear feet south to connect to existing dual 48-inch RCP's at the RCTC railroad right-of-way. The proposed project would not generate any vehicle trips other than limited trips for maintenance and inspections, nor would it generate any other permanent noise sources that would affect ambient levels in the project vicinity. As the project would not result in a traffic-related noise increase or new stationary noise source, potential impacts associated with operational noise would not occur. As the proposed uses would be consistent with the existing uses and would not include noise sources prohibited by the County's Noise Ordinance, impacts would be less than significant.

Mitigation Measures:

No mitigation is necessary.

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XIV. POPULATION AND HOUSING.				
Would the project:				
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of road or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

- a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of road or other infrastructure)? ***Less Than Significant Impact.***

The project does not propose the development of housing or businesses, and therefore would not directly induce unplanned population growth. The proposed project would include the development of a storm drain line to support uses identified in the Meridian Specific Plan, which includes largely industrial and commercial uses. The proposed project consists of a master planned storm drain improvement to remedy an existing storm drain deficiency within the Meridian Specific Plan area and would serve existing and planned development within the Meridian Specific Plan area. Although, short-term, construction-related jobs would be generated during project construction, it is anticipated that these jobs would come primarily from the local labor pool. The storm drain line is being sized to support buildout of the Meridian Specific Plan and does not include the capacity for other development. As such, the project would not indirectly induce substantial population growth, planned or unplanned. Less than significant impacts would occur.

- b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere? ***No Impact.***

No existing residential or other structures are located on the project site, and therefore, implementation of the proposed project would not displace existing people or housing. No impacts would occur.

Mitigation Measures:

No mitigation is necessary.

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XV. PUBLIC SERVICES. Would the project:				
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

i) Fire protection? **No Impact.**

Fire protection and emergency services for the project area are provided by the Riverside County Fire Department. The closest fire stations are the Riverside County Fire/Moreno Valley Station 65 located approximately 2.5 miles west of the project site at 15111 Indian Street in Moreno Valley and the Towngate Fire Station No. 6 located approximately 3.2 miles north of the project site at 22250 Eucalyptus Avenue. Per the Development Agreement with the Master Developer for the Meridian Specific Plan, a fire station is proposed to be built on a two-acre site on the northeast corner of Meridian Parkway and Opportunity Way within the Meridian Specific Plan. As discussed in Section XIV, *Population and Housing*, the proposed project would serve existing and planned uses and would not result in an unplanned increase in population. Therefore, no impact to fire protection services would occur.

ii) Police protection? **No Impact.**

The Riverside County Sheriff's Department provides law enforcement services for the adjacent Meridian Specific Plan area that would be served by the proposed project. The Riverside County Sheriff's Department also provides police services for the City of Moreno Valley, City of Perris and adjacent unincorporated areas of Riverside County. The Sheriff's Department serves the project site from the Moreno Valley Station, located at 22850 Calle San Juan De Los Lagos in the City of Moreno Valley. This station is approximately 1.9 miles northeast of the project site. The March JPA contracts with the Riverside County Sheriff's Department to provide supplemental Sheriff Patrols to the March JPA Planning area. As discussed in Section XIV, *Population and Housing*, the proposed project would serve existing and planned uses and would not result in an increase in population. Therefore, no impact to police protection services would occur.

iii) Schools? ***No Impact.***

The project would not create a demand for additional school facilities. Implementation of the proposed project would include the construction of storm drain facilities to serve existing and planned uses in the Meridian Specific Plan area, which include largely industrial and commercial uses. Implementation of the proposed project would remedy an existing storm drain deficiency and would not induce unplanned growth that could result in the need for new or physically altered school facilities. As such, school services would not be impacted since there is no increase in population connected with implementation of the project. No impact would occur.

iv) Parks? ***No Impact.***

The proposed master planned storm drain facilities would not cause an increase in population that would require additional or expanded parks or recreational services. No impact would occur.

v) Other public facilities? ***No Impact.***

The closest medical facility to the project site is the Kaiser Permanente Meridian Medical Offices located in the Meridian Specific Plan area, north of the project site. Implementation of the proposed project would remedy an existing storm drain deficiency in the Meridian Specific Plan area and would not induce unplanned growth that could result in the need for new or physically altered medical facilities. The proposed storm drain facilities would not cause an increase in population that would require additional or expanded public facilities, including medical facilities. No impact would occur.

Mitigation Measures:

No mitigation is necessary.

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVI. RECREATION. Would the project:				
a) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

- a) 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 Impact.**

The proposed storm drain connection does not involve residential development or increase demand on parks and recreational trail systems as it is a planned infrastructure improvement project. As discussed in Section XIV, *Population and Housing*, the proposed project would serve existing and planned uses in the Meridian Specific Plan area, which include largely industrial and commercial uses. Implementation of the proposed project would remedy an existing storm drain deficiency and would not induce unplanned growth that could 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. Thus, the proposed project would not directly or indirectly increase the population and therefore would not increase the demand on neighborhood and regional parks. No impacts would occur, and no mitigation is required.

- b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which have an adverse physical effect on the environment? **No Impact.**

The proposed project does not include the development of recreational facilities or uses that would require the construction or expansion of recreational facilities. No impacts would occur and no mitigation is required.

Mitigation Measures:

No mitigation is necessary.

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVII. TRANSPORTATION / TRAFFIC. Would the project:				
a) Conflict with an program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion:

- a) Conflict with an program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities? ***Less than Significant Impact.***

The proposed project would allow for the construction and operation of a master planned storm drain improvement project south of Van Buren Boulevard, east of I-215, and west of the Riverside National Cemetery. The proposed project is located on property owned by the federal government, specifically the VA, which manages the Riverside National Cemetery. The project is within an easement granted to the March JPA. The development of utilities within this easement is considered compatible and is identified as an acceptable use in the Deed of Easement for the project site (included as **Appendix H**), which states that the easement is granted for sanitary and storm sewer line work. The property is also located within Airport Compatibility Use Zone B2 of the 2014 March Air Reserve Base/ Inland Port Airport Land Use Compatibility Plan. Certain land use restrictions are applicable to projects within this zone, such as building heights. Underground infrastructure improvements, such as the proposed project, are not prohibited uses within Zone B2 and do not conflict with height regulations or other regulations governing the utility easement.

Short-term construction trips would include the transfer of construction equipment, construction worker trips, and hauling trips for construction materials. The project would be constructed over approximately six months and is not expected to require road closures. Long-term operational activities associated with the proposed project would occur within the existing 40-foot sanitary sewer and storm drain easement and would include maintenance and inspections as determined by the RCFD. The ongoing inspections and maintenance for the proposed project would generate minimal vehicle trips, thus the project would not adversely affect the circulation system. Further, the storm drain would be placed under ground and would not require the removal of vehicular lanes such that capacity would be reduced, or that would affect transit service, or that would require changes to lane widths. Therefore, a less than significant impact would occur and no mitigation is required.

- b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)? ***No Impact.***

Senate Bill 743 (SB 743) was passed by the California State Legislature and signed into law by Governor Brown in 2013. SB 743 required the Office of Planning and Research and the California Natural Resources Agency to develop alternative methods of measuring transportation impacts under the California Environmental Quality Act

(CEQA). In December 2018, the California Natural Resources Agency finalized updates to the CEQA Guidelines, which included SB 743. CEQA Guidelines Section 15064.3 provides that transportation impacts of projects are, in general, best measured by evaluating the project's vehicle miles traveled (VMT).

The project is a master planned storm drain line infrastructure improvement proposed to serve the Meridian Specific Plan area. The storm drain line would generate minimal operational traffic and minimal construction traffic. Construction related truck trips could increase traffic on the roadways in the project area; however, impacts in this regard would be temporary in nature and would cease upon project completion. Long-term operational activities associated with the proposed project would occur within the existing 40-foot sanitary sewer and storm drain easement and would include maintenance and inspections as determined by the RCFD. Because the project would generate very minimal construction or operational traffic and is not a land use that is associated with generating traffic, the project would not create the potential for additional traffic and therefore would not conflict with CEQA Guidelines section 15064.3, subdivision (b). No impacts would occur and no mitigation is required.

- c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? **No Impact.**

As noted above, the project would allow for the construction and operation of a storm drain. Due to the nature of the project, this underground infrastructure improvement would not cause roadway hazards. No impacts would occur and no mitigation is required.

- d) Result in inadequate emergency access? **Less Than Significant Impact.**

The storm drain alignment would extend southerly from the Van Buren Boulevard. A traffic control plan would be prepared as a part of the project to address any potential roadway or partial roadway closures necessary during construction. Therefore, impacts to an emergency response plan would be less than significant and no mitigation is required.

Mitigation Measures:

No mitigation is necessary.

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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XVIII. TRIBAL CULTURAL RESOURCES.

Would the project:

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) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe. | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Discussion:

- a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)? ***Less Than Significant Impact With Mitigation Incorporated.***

Tribal cultural resources as defined in Public Resources Code section 5020.1(k) have not been previously identified within the project area and are considered unlikely to be present given the previously disturbed nature of the project area. The project site is undeveloped, does not contain above ground structures, and does not contain any existing structures or extant historical tribal cultural resources with the potential for inclusion on the California Register of Historical Resources or a local register. Nonetheless, **Mitigation Measures CUL-1** through **CUL-3** have been included with the project to ensure construction monitoring occurs during excavation and ground disturbing activities and ensure that the proposed project protects tribal cultural resources in the same manner as other development in the surrounding area and that potential impacts would be less than significant. As such, potential impacts on historic tribal cultural resources are considered less than significant.

- b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe. ***Less Than Significant Impact With Mitigation Incorporated.***

No tribal cultural resources, as identified in Public Resources Code section 5024.1 have been previously identified on the site and are considered unlikely to be present given the previously disturbed nature of the project area. A Cultural Resources Technical Report was prepared by ASM Affiliates in July 2022 for the proposed project and is provided as **Appendix C**.

As of July 1, 2015, Assembly Bill 52 (AB 52), signed into law in 2014, amends CEQA and establishes new requirements for tribal consultation. The law applies to all projects that have a notice of preparation or notice of negative declaration/mitigated negative declaration. It also broadly defines a new resource category of "tribal cultural resource" and establishes a more robust process for meaningful consultation that includes:

- Prescribed notification and response timelines
- Consultation on alternatives, resource identification, significance determinations, impact evaluation, and mitigation measures
- Documentation of all consultation efforts to support CEQA findings
- March JPA, as lead agency, is required to coordinate with Native American tribes through the Assembly Bill 52 Tribal Consultation process.

Per the March JPA's standard practice and in accordance with AB 52, including Section 21080.3.1(d), March JPA circulated letters on August 25, 2022, to the Agua Caliente Band of Cahuilla Indians, the Pechanga Band of Luiseno Indians, and the Soboba Band of Luiseno Indians to request comments and input on the proposed project and the potential to affect tribal and cultural resources.

The City received two response letters dated September 28, 2022, from the Agua Caliente Band of Cahuilla Indians (ACBCI) and September 26, 2022 from the Soboba Band of Luiseno Indians (SBLI). The ACBCI identified that the project site is not located within the boundaries of the ACBCI Reservation. However, the project site is within the Tribe's Traditional Use Area. For this reason, the ACBCI requested a copy of the records search with associated survey reports and site records from the information center, updates or a status report of the project as it progresses, and to be informed if there are changes to the scope of the proposed project. The March JPA has provided the ACBCI with the requested information and will continue to update the ACBCI as the project progresses. The SBLI identified that the project site is not located within the boundaries of the SBLI Reservation. However, it is within the Tribe's Traditional Use Area. For this reason, the SBLI requested formal consultation with the March Joint Powers Authority and consultation is ongoing.

Mitigation Measures:

The analysis did not identify any cultural or historical impacts associated with the project, however, per the March JPA, the **Mitigation Measures CUL-1, CUL-2, and CUL-3** are required to ensure consistency with surrounding development and reduce any potential impacts to a less than significant level.

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XIX. UTILITIES AND SERVICE SYSTEMS. Would the project:				
a) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion:

- a) 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? ***Less Than Significant Impact.***

The proposed project is within the jurisdiction of the Santa Ana Regional Water Quality Control Board (RWQCB), which administers the NPDES stormwater permitting program and regulates stormwater within the Meridian Specific Plan area, including the project site. As discussed in Section X, *Hydrology and Water Quality*, the proposed project would be required to implement a SWPPP pursuant to the statewide Construction General NPDES Permit that would require the use of BMPs to minimize the release of construction-related pollutants to the maximum

extent practicable Effective implementation of these measures, designed by a Qualified SWPPP Developer (QSD) and implemented onsite by a Qualified SWPPP Practitioner (QSP) would meet the requirement that storm water flowing from the project site would not result in an exceedance of water quality standards of the Santa Ana RWQCB. Through implementation of existing regulations for construction-related erosion control, impacts in this regard would be considered less than significant.

The proposed project would also be required to implement erosion control measures and BMPs per standard engineering practices and March JPA requirements (i.e., Development Code Section 9.08.080). Implementation of construction and post-construction BMPs would minimize the transport of sediment and other contaminants into the stormwater runoff. Thus, runoff from the project is not expected to violate water quality standards. Impacts relating to sedimentation during construction would be temporary and less than significant.

The proposed project would include the alignment of an underground 6-foot by 4-foot RCB. The subsurface storm drain line would not include the addition of new above-ground impervious area, thus would not significantly alter the existing surface flows within the project area, thus would not result in a need for new or expanded storm water facilities.

The proposed storm drain line is a master planned infrastructure improvement which would serve the Meridian Specific Plan area and would not generate wastewater. The implementation of the proposed project would not increase wastewater flows, beyond the minimal additional wastewater production during the temporary, short-term construction phase; therefore, impacts from wastewater generation would be less than significant and mitigation is not required.

Implementation of the proposed project would be expected to generate nominal additional water demand during the temporary, short-term construction phase, and ongoing operations would not be expected to increase the demand for water. Although the storm drain line would convey runoff from future developments within the Meridian Specific Plan area, per Mitigation Measure IV.G-4-1 of the 2010 SEIR, individual developments would be required to coordinate with March JPA and WMWD to obtain the water demand for each proposed development and consistency with the water budget and Water Supply Assessment for the Meridian Specific Plan area. Demand for water beyond the water budget or the volume defined in the WSA by future developments may necessitate further CEQA review and the need for additional water treatment facilities would be determined at that time. Thus, the proposed project can be served by the existing water treatment facilities and no new or expanded water treatment facilities would be required. Impacts would be less than significant and no mitigation is required.

- b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years? ***Less Than Significant Impact.***

The proposed project would not include design features that would generate additional water demand. Furthermore, although the storm drain line would serve existing and planned developments within the Meridian Specific Plan area, per Mitigation Measure IV.G-4-1 of the 2010 SEIR, future individual developments would be required to coordinate with March JPA and WMWD to obtain the water demand for each proposed future development and assure that individual developments are consistent with the water budget and Water Supply Assessment for the Meridian Specific Plan area. Therefore, although the proposed storm drain line would provide more reliable storm drain function and increased capacity, the proposed project would not increase the demand for water within the Meridian Specific Plan area or as a result of the project's construction or operations. Thus, the proposed project can be served by the existing entitlements and resources and no new or expanded water entitlements would be required. Impacts would be less than significant and no mitigation is required.

- c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? ***No Impact.***

As discussed above, the proposed storm drain line is a master planned infrastructure improvement which would serve the Meridian Specific Plan area and would not generate wastewater. Future development projects would still be required to meet the criteria described in Mitigation Measure IV.G-2-2 of the 2010 SEIR. Implementation of the proposed project would be expected to generate nominal additional wastewater production during the temporary, short-term construction phase, and ongoing operations would not be expected to increase wastewater production because the project is unmanned. Thus, the proposed project can be served by the existing water treatment facilities and no new or expanded water treatment facilities would be required. Impacts would not occur and mitigation is not required.

- d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals? **No Impact.**

Implementation of the proposed project would not be expected to generate additional solid waste during the operational phase. The project would generate solid waste during construction. The El Sobrante, Badlands, and Lamb Canyon landfills were identified in the 2003 Focused EIR as potential solid waste disposal sites for the Meridian Specific Plan area. Accordingly, the El Sobrante Landfill currently receives solid waste from the Meridian Specific Plan area. The El Sobrante Landfill is located approximately 13.5 miles southwest of the project site and has a maximum permitted capacity of 209,910,000 cubic yards. The landfill has the capacity to process up to 112,400 tons of solid waste per week and has permitted capacity until 2051.¹⁸ The Lamb Canyon Sanitary Landfill has a maximum permitted daily throughput of 5,000 tons/day and an estimated closure year of 2032¹⁹ while the Badlands Landfill has a maximum permitted daily throughput of 4,800 tons/day and an estimated closure year of 2026.²⁰ The rate of solid waste generated by the proposed project is not expected to be a significant impact since generation of solid waste would be minor and would only be required during the temporary, short-term construction period. Furthermore, county long-term landfill capacity is available well beyond the project construction period without the need for additional solid waste disposal facilities. This nominal incremental increase in solid waste disposal at the El Sobrante Landfill would not be considered cumulatively considerable. Therefore, due to the type of construction, the short-term temporary impacts, and the available capacity in the receiving landfills, landfill capacity impacts would be less than significant and no mitigation is required.

- e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste? **Less Than Significant Impact.**

The El Sobrante, Badlands, and Lamb Canyon landfills have been constructed to meet all required local, State, and federal rules and regulations. The proposed project would not compromise the JPA's compliance with federal, State and local statutes and regulations related to solid waste. Impacts would be less than significant and no mitigation is required.

Mitigation Measures:

No mitigation is necessary.

¹⁸ California Department of Resources Recycling and Recovery (CalRecycle). Available at <https://www2.calrecycle.ca.gov/SolidWaste/Site/Search>. <https://www2.calrecycle.ca.gov/SolidWaste/Site/Search>. Accessed June 21, 2022.

¹⁹ Ibid.

²⁰ Ibid.

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XX. WILDFIRE. Would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion:

- a) Substantially impair an adopted emergency response plan or emergency evacuation plan? ***Less than Significant Impact.***

The March JPA adopted the March Area Emergency Resource Guide in 2008. The Guide provides a list of resources and contact information for emergency resources in the area, including local hospitals, animal disaster resources, law enforcement, fire protection, airports/air services, emergency services for the March Inland Port, mass transportation information, nearby health care clinics, utilities providers, pharmacies, and ambulance resources. The proposed project would not result in any changes to the resources identified in the March Area Emergency Resource Guide. The proposed project would be constructed over approximately six months and would prepare a traffic control plan to address potential any potential roadway or partial roadway closures. The traffic control plan would be subject to March JPA review and approval. Primary access to Avenue A and Van Buren Boulevard would be maintained during construction of the proposed project. Therefore, the construction and operation of the storm drain would not result in a physical interference with emergency routes. Thus, a less than significant impact would occur. The project would be constructed over approximately six months and would prepare a traffic control plan to address potential any potential roadway or partial roadway closures. Therefore, the proposed project would not impair or physically interfere with an adopted emergency response or evacuation plan. Thus, a less than significant impact would occur.

- b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire? ***Less Than Significant Impact.***

The project site mapped in a very high fire hazard severity zone (VHFHSZ).²¹ The closest VHFHSZ is approximately 3.4 miles south of the project site. The project site is a relatively flat area that is primarily dominated by disturbed habitat and developed land. Surrounding land uses include roads, industrial and residential development, a cemetery, and disturbed land. According to wind rose data for the project area, wind generally travels to the west and southwest and has an average speed of 3.7 mph.²² Therefore, in general wind is traveling away from the project area. The surrounding area is largely developed and does not include large areas of vacant or open space areas, thus minimizing the likelihood of an uncontrolled spread of wildfire emanating from the project site. In addition, the project site does not include any steep slopes, which would exacerbate the spread of wildfires. Impacts would be less than significant.

- c) 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? ***Less than Significant Impact.***

The construction and maintenance operations of the project would not result in the installation or maintenance of new roads, fuel breaks, emergency water sources, or power lines. Additionally, the project would not include the installation of above ground utilities or power lines that could exacerbate the fire risk. Thus, the fire risk associated with the project is less than significant.

- d) 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? ***Less than Significant Impact.***

As described in Section X, *Hydrology and Water Quality*, Threshold (c) above, potential hazards related to downstream flooding are less than significant. The storm drain would be constructed underground and the project area would be restored to its pre-project condition. The project is being constructed to address existing flooding problems in the area as a result of upstream stormwater drainage system capacity issues. The project would improve drainage patterns and alleviate existing flooding concerns that impact the adjacent railroad and I-215 during storm events. As discussed in Section VII, *Geology and Soils*, Threshold (a), the project site is not located within an area susceptible to landslides. The proposed project will be constructed in accordance with the Uniform Building Code (UBC) and California Building Code (CBC), as well as the Geotechnical Engineering Investigation conducted for the project and the grading requirements contained within Title 15 of the City's Development Code. Thus, impacts would be less than significant.

Mitigation Measures:

No mitigation is necessary.

²¹ California Department of Forestry and Fire Protection. (2022). Riverside County State Responsibility Area Fire Hazard Severity Zones. Retrieved from https://osfm.fire.ca.gov/media/uk1pvwva/fhsz_county_sra_11x17_2022_riverside_ada.pdf. Accessed February 8, 2023.

²² Iowa State University. (2022). Iowa Environmental Mesonet. Retrieved from https://mesonet.agron.iastate.edu/sites/windrose.phtml?station=SNA&network=CA_ASOS. Accessed July 26, 2022.

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XXI. MANDATORY FINDINGS OF SIGNIFICANCE				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion:

- a) Have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? ***Less Than Significant Impact With Mitigation Incorporated.***

All impacts to the environment, including impacts to habitat for fish and wildlife species, fish and wildlife populations, plant and animal communities, rare and endangered plants and animals, and historical and pre-historical resources were evaluated as part of this Draft IS/MND. Impacts to Biological, Cultural, and Tribal cultural resources were determined to be potentially significant and mitigation measures have been proposed to reduce those impacts to less than significant levels. Accordingly, with incorporation of the mitigation measures recommended throughout this IS/MND, the project would not substantially degrade the quality of the environment and impacts would be less than significant.

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

Implementation of the project has the potential to result in effects to the environment that are individually limited and may be cumulatively considerable in specific areas. In all instances where the proposed project has the potential to contribute to a cumulatively considerable impact to the environment, mitigation measures have been imposed to reduce potential effects to less than significant levels. The proposed project would not exceed SCAQMD thresholds. As a result, emissions associated with the proposed project would not result in a cumulatively considerable contribution to significant cumulative air quality impacts. The project would not conflict with any GHG reduction plans. Therefore, the project's cumulative contribution of GHG emissions would be less than significant and the project's cumulative GHG impacts would also be less than cumulatively considerable. The proposed project would not result in operational impacts to traffic or transportation. Therefore, taken in sum with past, present, and reasonably foreseeable projects, no cumulative impacts on traffic or transportation would result from implementation of the proposed project. The project is not considered growth-inducing, as defined by State CEQA Guidelines (<http://ceres.ca.gov/ceqa/guidelines/>). The potential cumulative environmental effects of implementing the project would be less than considerable and thus, less than significant.

- c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? ***Less Than Significant Impact.***

The project's potential to result in environmental effects that could adversely affect human beings, either directly or indirectly, has been discussed throughout this Draft IS/MND. In instances where the project has potential to result in direct or indirect adverse effects to human beings, including air quality and hazard and hazardous materials, appropriate mitigation measures have been incorporated to reduce the impact levels to less than significance. With required implementation of mitigation measures identified in this Draft IS/MND, construction and operation of the project would not involve any activities that would result in environmental effects which would cause substantial adverse effects on human beings, either directly or indirectly.

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