Gilman Springs Shoulder and Median Widening Project

RIVERSIDE COUNTY, CALIFORNIA

08– RIV – Gilman Springs Road
Federal Project Number: HSIPL-5956(263)

Initial Study with Mitigated Negative Declaration

Prepared by the County of Riverside

August 2022

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MITIGATED NEGATIVE DECLARATION

Pursuant to: Division 13, Public Resources Code

Project Description

The County of Riverside Transportation Department (County), in cooperation with the California Department of Transportation (Caltrans), proposes to widen the median and shoulders along Gilman Springs Road, from approximately 1.29 miles north of Jack Rabbit Trail to approximately one mile south of Bridge Street, and add a passing lane in the northbound direction. The project would reconstruct the existing roadway to a configuration that includes five-foot graded shoulders, five-foot paved shoulders with rumble strips, a 12-foot lane in each direction, and a four-foot, double-yellow-striped median with rumble stripes and impact-resistant channelizers in the median. The project would also include one approximately 6,900-foot-long passing lane in the northbound direction, from approximately 1,350 feet north of Bridge Street to approximately 1,200 feet north of Eden Hot Springs Road. Additionally, the project would replace the existing reinforced-concrete box culvert near the Gilman Springs Road/Bridge Street intersection with a large span reinforced-concrete box culvert that would be used to create a wildlife crossing. An eight-foot-high wildlife fence, which would also extend an additional two feet below grade, would be installed at the same location, and jumpouts would be integrated into the fencing to allow wildlife to escape from the right of way. Three retaining walls, approximately 10 to 16 feet high and approximately 100 to 320 feet long, are proposed to prevent grading into an adjacent channel.

Determination

An Initial Study (IS) has been prepared for this project; the County expects to determine from this study that the project would not have a significant effect on the environment for the following reasons:

The project would have no effect on:

- Cultural Resources, Mineral Resources, Population and Housing, and Tribal Cultural Resources.

The project would have a less-than-significant effect on:

- Aesthetics, Air Quality, Agricultural and Forestry Resources, Energy, Geology, Soils, and Paleontological Resources, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Hydrology and Water Quality, Noise, Land Use and Planning, and Recreation, Public Services, Transportation, Utilities and Service Systems, and Wildfire.

The project would have less-than-significant effects with mitigation for Biological Resources. Mitigation measures (MMs) for impacts on this resource area are on the following page.

MM BIO-11: Compensate for Permanent Impacts

Compensation for permanent impacts on Public/Quasi Public (P/QP) lands and riparian/riverine resources will occur at a minimum 1:1 ratio for P/QP lands, minimum 3:1 ratio for riparian resources, and minimum 3:1 ratio for riverine resources. The compensation can be a combination of enhancement, restoration, or creation, as long as there is no net loss of either P/QP lands/functions and values or riparian/riverine resources, as applicable. The remaining compensation can occur as enhancement or restoration or as directed in the project permits. Compensation for permanent impacts to riparian/riverine and jurisdictional resources would occur through the purchase of mitigation bank credits through the Riverpark Mitigation Bank, permittee responsible mitigation, or other approved mitigation provider. The temporary impacts may be replaced through in-kind restoration at their current locations at no less than a 1:1 ratio. Temporal losses will be addressed through a replacement ratio of 0.5:1 offsite.

MM BIO-18: Compensate for Permanent Loss of CDFW-owned Conserved Lands

Compensation for permanent loss of conserved lands owned by the California Department of Fish and Wildlife (CDFW) (for both P/QP and Western Riverside County Multiple Species Habitat Conservation Plan [WRC MSHCP] Additional Reserve Lands [ARL]) within the San Jacinto Wildlife Area (SJWA) and ARL owned by Western Riverside County Regional Conservation Authority (WRCRCA) will be accomplished through the acquisition of replacement lands at a minimum 1:1 ratio. These lands will be contiguous to the existing conservation area and would not occur within lands that are already described for WRC MSHCP conservation. The Habitat Mitigation and Monitoring Plan (HMMP) (**AMM BIO-17**) will provide the detail for the restoration, creation, or enhancement that would occur on the selected site, if applicable. Acquisition lands must, at a minimum, provide equivalent habitat value to the lands which are affected. This will ensure that the SJWA remains whole and complete, and WRCRCA ARL outside the 128-foot take allowance are replaced. The County will coordinate with CDFW and/or WRCRCA to identify suitable properties and ensure the criteria identified in this measure are met.

Signature:

_____ _____

Jan Bulinski Date
Environmental Project Manager
Riverside County Transportation Department

Project Information

Pursuant to: Division 13, Public Resources Code

Project Proponent:	County of Riverside Transportation Department 3525 14th Street, Riverside, California 92501
Project Title:	Gilman Springs Shoulder and Median Widening Project
Project Location:	The project is in the County of Riverside, California, within the San Jacinto Valley, at the base of the San Timoteo Badlands mountain range, and on Lakeview 7.5-minute topographic maps. The project is located on Gilman Springs Road, from approximately 1.29 miles north of Jack Rabbit Trail to approximately one mile south of Bridge Street. The project includes the existing right of way on both sides of Gilman Springs Road and a mix of vacant and agricultural land on adjoining parcels.
Project Description:	The County of Riverside Transportation Department (County), in cooperation with the California Department of Transportation (Caltrans), proposes to widen the median and shoulders along Gilman Springs Road, from approximately 1.29 miles north of Jack Rabbit Trail to approximately one mile south of Bridge Street. The project is in the County of Riverside, California, and covers a distance of approximately 4.4 miles. Gilman Springs Road is a two-lane, undivided road with one 11.5-foot lane in each direction and shoulder widths varying from one to three and a half.
Findings	Pursuant to the provisions of the California Environmental Quality Act (CEQA), the County has determined that the project would not have a significant effect on the environment. Following an Initial Study (IS) and assessment of possible adverse impacts, the project was determined not to have a significant impact on the environment with the inclusion of mitigation measures (MMs), which would reduce potential adverse impacts to less-than-significant levels. Therefore, the County has prepared a Mitigated Negative Declaration (MND) in accordance with the provisions of CEQA.
Mitigation Measures:	Refer to Sections 2.1 through 2.20 of this Initial Study and to Appendix C, *Mitigation Monitoring and Reporting Program*.

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Chapter 1 Introduction and Project Description

1.1 Introduction

The County of Riverside Transportation Department (County), in cooperation with the California Department of Transportation (Caltrans), proposes to widen the median and shoulders along Gilman Springs Road, from approximately 1.29 miles north of Jack Rabbit Trail to approximately one mile south of Bridge Street, and to add an approximately 6,900-foot-long passing lane in the northbound direction, referred to in this document as the Gilman Springs Shoulder and Median Widening Project (project). Figure 1.1-1 shows the project vicinity, and Figure 1.1-2 shows the project location. Caltrans is the lead agency under the National Environmental Policy Act (NEPA), and the County is the lead agency under the California Environmental Quality Act (CEQA).

1.2 Environmental Setting

The project is along the existing Gilman Springs Road within unincorporated Riverside County, California. The project extends for approximately 4.4 miles, from 1.29 miles north of Jack Rabbit Trail to one mile south of Bridge Street. The project is within the San Jacinto Valley, at the base of the San Timoteo Badlands mountain range, a northwest-trending area of hills with moderate to steep relief. The area is underlain by the San Timoteo Formation, a deposit of clays, gravels, and sands that extends from the San Jacinto Mountains northward for approximately 20 miles.

Nearby geography consists of the southern end of the Badlands region as it terminates at Gilman Springs Road, as well as primarily agricultural lands and grasslands associated with the California Department of Fish and Wildlife's (CDFW's) San Jacinto Wildlife Area (SJWA) and local farms. The topography within the Study Area consists of foothills associated with the Badlands to the north and east of the Study Area and the relatively flat lands to the south and west of the project that are associated with the ephemeral Mystic Lake and various agricultural practices. Developed land cover exists throughout the Study Area in several forms, including paved and dirt roadways with associated road shoulders, paved and dirt parking lots, agricultural buildings, cattle lots, vacant fields, commercial buildings, and ornamental landscaping. Various drainage features originate from the Badlands and drain toward Gilman Springs Road, west across Gilman Springs Road through culverts, and then toward Mystic Lake or the San Jacinto River; Mystic Lake discharges to San Jacinto River. The project is entirely within the Plan Area of the Western Riverside County (WRC) Multiple Species Habitat Conservation Plan (MSHCP). The project is in the *Reche Canyon/Badlands Area Plan* and the *San Jacinto Valley Area Plan*.

1.3 Project Description

The project is on Gilman Springs Road, running from approximately 1.29 miles north of Jack Rabbit Trail to approximately one mile south of Bridge Street. The project would reconstruct the existing roadway to a configuration that includes five-foot graded shoulders, five-foot paved shoulders with rumble strips, a 12-foot lane in each direction, and a four-foot, double-yellow-striped median with rumble stripes and impact-resistant channelizers in the median. The project would also include one approximately 6,900-foot-long passing lane in the northbound direction, from approximately 1,350 feet north of Bridge Street to approximately 1,200 feet north of Eden Hot Springs Road. Additionally, the project would replace the existing reinforced-concrete box culvert near the Gilman Springs Road/Bridge Street intersection with a large span reinforced-concrete box culvert that would be used to create a wildlife crossing. An eight-foot-high wildlife fence, which would also extend an additional two feet below grade, would be installed at the same location, and jumpouts would be integrated into the fencing to allow wildlife to escape from the right of way. Three retaining walls, approximately 10 to 16 feet high and approximately 100 to 320 feet long, are proposed to prevent grading into an adjacent channel.

The work would include vegetation and tree removal, grading along adjacent properties, reconstructing driveway and street tie-ins, and other associated work, as needed. The existing culvert crossings and drainage structures would be extended and or reconstructed. Traffic devices, such as striping, reflective markers, and signage, would be relocated to the new roadway configuration. One streetlight would be relocated, and safety lighting would be added at the Chandler Aggregates Driveway. In addition, another safety light would be added at Jack Rabbit Trail. Utility relocations and adjustments would be made to power poles, gas valves, and any other utilities determined to be present. Any affected utilities would be relocated in accordance with State law and regulations and County policies. In addition, geotechnical borings would be conducted within the project's limits of disturbance (LOD), as needed, for design of the project. Permanent acquisition of right of way, along with temporary construction easements, are expected to be necessary at various locations along the project.

The project is included in Southern California Association of Governments (SCAG) financially constrained 2021 Federal Transportation Improvement Program (FTIP) as project ID FTIP No. SCAG015. This project ID is for grouped projects for safety improvements. Within that listing, the project has the unique project ID H8-08-021.

1.3.1 Project Objectives

The objectives of the project are to:

- Improve safety and traffic operations by eliminating the hazards associated with narrow, undivided roadways on Gilman Springs Road.
- Improve driver awareness on Gilman Springs Road.

The current roadway configuration on Gilman Springs Road consists of two lanes of undivided traffic and narrow shoulders, which present safety risks for both directions of traffic and those

intending to turn onto the road from Kennedy Hills Materials, Eden Hot Springs Road/Central Avenue, and Jack Rabbit Trail/Curtis Street/Knoch Road.

1.4 Purpose of this Initial Study with Proposed Mitigated Negative Declaration

CEQA was enacted in 1970 for the purpose of providing decision-makers and the public with information regarding environmental effects of projects, identifying means of avoiding environmental damage, and disclosing to the public the reasons behind a project's approval, even if it leads to environmental damage. As the CEQA Lead Agency, the County has determined that the project is subject to CEQA, and no exemptions apply. Therefore, preparation of an Initial Study (IS) is required.

An IS is a preliminary analysis conducted by the Lead Agency, in consultation with other agencies (i.e., responsible or trustee agencies, as applicable), to determine whether there is substantial evidence that a project may have a significant effect on the environment. This IS has been prepared in accordance with CEQA (Public Resources Code [PRC] § 21000 *et seq*.) and the State CEQA Guidelines (Title 14, California Code of Regulations § 15000 *et seq*.).

The County prepared an IS with Proposed Mitigated Negative Declaration (MND) for the Gilman Springs Shoulder and Median Widening Project in March 2022. The document explains why the project is being proposed and how the existing environment could be affected by the project, and identifies any avoidance, minimization, and/or mitigation measures. The IS/Proposed MND was circulated to the public for 30 days between March 11, 2022, and April 12, 2022. A Notice of Availability and Intent to Adopt the MND was published in the local newspapers, the Riverside Press-Enterprise on March 11, 2022, and the Spanish-language La Prensa on March 11, 2022. In addition, notices regarding the availability of the IS/Proposed MND were sent to residents and property owners within a 500-foot radius, elected officials, and government agencies. Comments received during this period are included in Appendix G. Elsewhere throughout this document, a vertical line in the margin indicates a change made since the IS/Proposed MND document circulation. After consideration of the information contained in this IS and the comments received on the IS/Proposed MND, the County has determined that, with incorporation of the mitigation measures included herein, the project would have a less-than-significant impact on the environment.

1.5 Permits and Approvals Needed

The following permits, reviews, and approvals would be required for project construction.

Table 1-1. Permits, Reviews, and Approvals

Agency	Permit/Approval	Status
California Department of Fish and Wildlife (CDFW)	Section 1602 Streambed Alteration Agreement	Application to be submitted after approval of the Environmental Document.
	Western Riverside County Multi-Species Habitat Conservation Plan (WRC MSHCP) Consistency Review for Biological Resources	Obtained CDFW approval January 2022.
Regional Water Quality Control Board (RWQCB)	Clean Water Act (CWA) Section 401 Water Quality Certification	Application to be submitted after approval of the Environmental Document.
U.S. Army Corps of Engineers (USACE)	CWA Section 404 Nationwide Permit 14	Permit application to be submitted after approval of Environmental Document.
Regional Conservation Authority (RCA)	WRC MSHCP Consistency Review for Biological Resources	Obtained RCA approval January 2022.
U.S. Fish and Wildlife Service (USFWS)	WRC MSHCP Consistency Review for Biological Resources	Obtained USFWS approval January 2022.

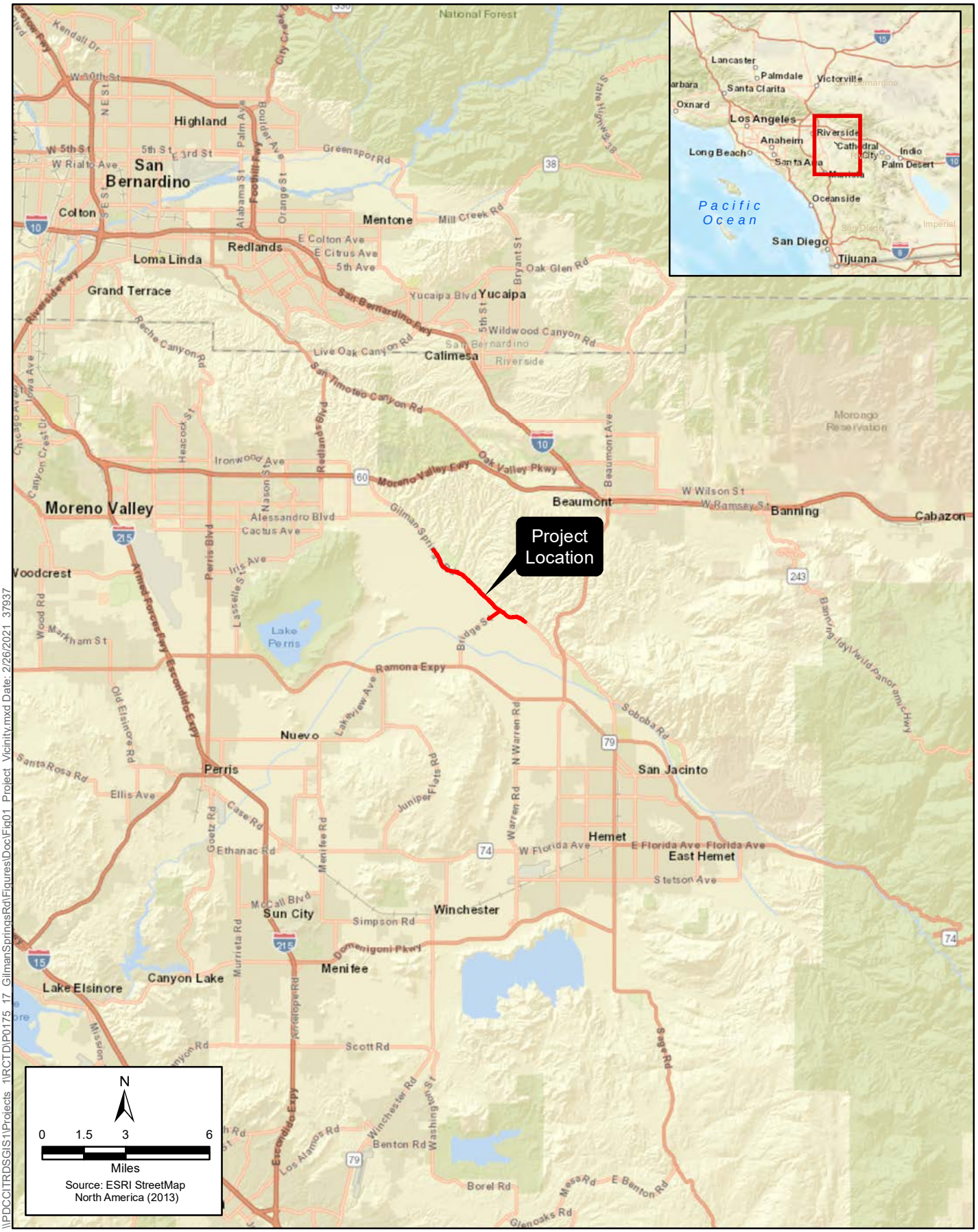

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Figure 1.1-1
Regional Vicinity Map
Gilman Springs Shoulder and Median Widening Project

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Figure 1.1-2
Project Location
Gilman Springs Shoulder and Median Widening Project

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Chapter 2 CEQA Checklist

Environmental Factors Potentially Affected

The environmental factor(s) checked below would be potentially affected by the project, but impacts would be mitigated to a less-than-significant level as indicated in the Initial Study.

	Aesthetics		Agriculture Resources		Air Quality
X	Biological Resources		Cultural Resources		Paleontological Resources
	Geology/Soils		Greenhouse Gas Emissions		Hazards & Hazardous Materials
	Hydrology/Water Quality		Land Use/Planning		Mineral Resources
	Noise		Population/Housing		Public Services
	Recreation		Transportation/Traffic		Tribal Cultural Resources
	Utilities/Service Systems		Mandatory Findings of Significance		

Determination

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 impact" 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 the earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed on the proposed project, nothing further is required.

_____ Signature Jan Bulinski Environmental Project Manager Riverside County Transportation Department	_____ Date

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2.1 Aesthetics

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
I. AESTHETICS: Except as provided in Public Resources Code Section 21099, would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☒	☐
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 a 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?	☐	☐	☒	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

2.1.1 Regulatory Setting

CEQA establishes that it is the policy of the State to take all action necessary to provide the people of the State "with…enjoyment of *aesthetic*, natural, scenic and historic environmental qualities" (PRC § 21001(b)).

County of Riverside

Riverside County General Plan

Multipurpose Open Space Element

The County recognizes the importance of scenic resources, including scenic corridors, as quality-of-life components for residents of the County of Riverside. The *Riverside County General Plan – Multipurpose Open Space Element* (County of Riverside 2015a) contains the following policies relevant to visual resources.

- **OS 21.1** Identify and conserve the skylines, view corridors, and outstanding scenic vistas within Riverside County. (AI 79).
- **OS 22.2** Study potential scenic highway corridors for possible inclusion in the Caltrans Scenic Highways Plan.
- **OS 22.3** Encourage joint efforts among federal, state, and county agencies, and citizen groups to ensure compatible development within scenic corridors.

Land Use Element

The County contains diverse and natural scenic views and corridors, many of which are viewed often along Riverside County's many roadways. As such, the County has officially recognized several roadways as either Designated or Eligible State or County Scenic Highways. The *Riverside County General Plan – Land Use Element* (County of Riverside 2017) contains policies relevant to visual resources.

- **LU 14.1** Preserve and protect outstanding scenic vistas and visual features for the enjoyment of the traveling public. (AI 32, 79)
- **LU 14.2** Incorporate riding, hiking, and bicycle trails and other compatible public recreational facilities within scenic corridors. (AI 33, 41)
- **LU 14.3** Ensure that the design and appearance of new landscaping, structures, equipment, signs, or grading within Designated and Eligible State and County scenic highway corridors are compatible with the surrounding scenic setting or environment. (AI 3, 32, 39)
- **LU 14.4** Maintain an appropriate setback from the edge of the right of way for new development adjacent to Designated and Eligible State and County Scenic Highways based on local surrounding development, topography, and other conditions. (AI 3)
- **LU 14.5** Require new or relocated electric or communication distribution lines, which would be visible from Designated and Eligible State and County Scenic Highways, to be placed underground. (AI 3, 32)
- **LU 14.6** Prohibit offsite outdoor advertising displays that are visible from Designated and Eligible State and County Scenic Highways. (AI 3,79)
- **LU 14.7** Require that the size, height, and type of on-premises signs visible from Designated and Eligible State and County Scenic Highways be the minimum necessary for identification. The design, materials, color, and location of the signs shall blend with the environment, utilizing natural materials where possible. (AI 3)
- **LU 14.8** Avoid the blocking of public views by solid walls. (AI 3)

2.1.2 Discussion of Environmental Evaluation Question 2.1 – Aesthetics

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

Less-than-Significant Impact.

The project lies in a sparsely developed and rural area of unincorporated Riverside County. The landscape varies throughout the project area, which is characterized by the rolling foothills to the east and flatter topographical areas with light undulation that comprise agricultural and vacant land/open space. The landscape in the immediate project area is characterized by gently sloping and relatively flat terrain with distant views of the San Jacinto Mountain Range, depending on the position, speed, and angle of the viewer. To the west, open space and agricultural views dominate the landscape. Power lines and intermittent landscape vegetation and trees are present immediately adjacent to the existing roadway.

Construction activities would introduce heavy equipment and associated vehicles into the viewshed of all viewer groups. The project's general construction activities, construction staging/stockpiling, storage of construction materials, presence of construction equipment, and temporary traffic barricades would result in temporary construction impacts by altering the composition of the viewsheds throughout the project corridor. However, construction activities would be minor, temporary in duration, and governed by local, State, and federal regulations and standards designed to minimize the potential of those activities to affect adjacent sensitive uses in negative ways.

The project would not obstruct more distant views (i.e., in the middleground and background of any given viewshed) to the surrounding mountain ranges and hills or any other visual resources within the project corridor. Although the project may alter the visual composition of views within the project corridor slightly by adding new or altered visible elements, the changes would be minor because the project is along an existing roadway. Therefore, the project would have a ***less-than-significant impact*** on a scenic vista.

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

Less-than-Significant Impact.

No roadways in the project area are designated officially by State plans as a scenic highway or route worthy of protection for maintaining and enhancing scenic viewsheds. No other protected resources, historic or otherwise, have been found to occur throughout the project alignment.

The project would not damage scenic resources along a State scenic highway; however, Gilman Springs Road is a County Eligible scenic roadway because of its close proximity to the Badlands, SJWA, and Mystic Lake. The key visual resources in the setting are views of the mountain ridgelines and open space. The project would not affect such views. The project may alter the visual composition of views within the project corridor slightly by adding new or altered visible elements, removing existing vegetation, and relocating utilities, but these proposed improvements would introduce minimal visual changes to the existing conditions because the improvements are altering an existing roadway. The visual quality on Gilman Springs may be expected to decrease slightly for drivers along the road with removal of the vegetation and construction of larger hard surfaces (i.e., retaining walls and shoulder expansion). However, the project improvements would be compatible with the existing roadway condition and likely would not affect the views of the key visual resources, such as the Badlands, SJWA, and Mystic Lake. In addition, the project would be consistent with applicable regulations, standards, and policies outlined in guidance documents, such as the *Riverside County General Plan*. Therefore, the project would result in ***less-than-significant impacts*** on scenic resources.

c) Would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings in non-urbanized areas? Would the project conflict with applicable zoning and other regulations governing scenic quality in urbanized areas?

Less-than-Significant Impact.

As discussed above, the project area lies in a sparsely developed and rural area of unincorporated Riverside County; however, the project would reconstruct an existing roadway. The project construction activities, including staging/stockpiling, storage of construction materials, presence of construction equipment, and temporary traffic barricades, would result in temporary construction impacts by altering the composition of the viewsheds throughout the project corridor. However, construction activities would be minor, temporary in duration, and governed by local, State, and federal regulations and standards designed to minimize their potential to affect adjacent sensitive uses in negative ways.

The widened roadway would require vegetation removal and the relocation of existing utility lines. Although these activities would be required, the project would not change the visual character of the area substantially because the project is along an existing roadway. In addition, the work on Gilman Springs Road—where the shoulders of the roadway would be widened and the passing lane and larger hard surfaces (i.e., retaining walls, adding a passing lane, widening the median and expanding the shoulders) constructed—might slightly degrade the visual quality, but this slight decrease is anticipated to be minor in nature because the project is along an existing roadway, and the improvements would be in character with the existing conditions. Although vegetation would be removed during construction, the project includes post-construction hydroseeding with a native seed mix that the Western Riverside County Regional Conservation Authority (WRCRCA) and/or other regulatory agencies have approved; thus, the project area would be revegetated. Because the proposed modifications are in keeping with the existing visual character of the project area as an existing roadway, project activities would not represent a major visual resource change. Therefore, the project would result in a ***less-than-significant impact*** on the visual character and quality of the surrounding area.

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

Less-than-Significant Impact.

The project would not create a new source of substantial light or glare that negatively would affect daytime or nighttime views in the area. One streetlight would be relocated, and safety lighting would be added at the Chandler Aggregates Driveway and at Jack Rabbit Trail. Standard Measure (**SM**) **AES-1** would apply minimum lighting standards to lessen light and glare impacts caused by project lighting, which is a standard measure incorporated into all County projects, as applicable. As described in **AMM BIO-13**, the lighting would be directed downward and incorporate baffles, as feasible, to reduce excess light from shining out the sides and spilling into adjacent areas. The project would result in a ***less-than-significant impact*** on the day or nighttime views in the surrounding area as a result of new lighting or glare.

2.1.3 Avoidance, Minimization, and Mitigation Measures

The following SM and AMM would be implemented to minimize lighting and glare.

SM AES-1: Apply Minimum Lighting Standards.

All artificial outdoor lighting will be limited to safety and security requirements, designed using Illuminating Engineering Society design guidelines and in compliance with International Dark-Sky Association-approved fixtures. All lighting will be designed to have minimum impact on the surrounding environment and will use downcast, cut-off type fixtures that direct the light only toward objects requiring illumination. Shielding will be utilized, where needed, to ensure light pollution is minimized. Therefore, lights will be installed at the lowest allowable height and cast low-angle illumination while minimizing incidental light spill onto adjacent properties, open spaces, or backscatter into the nighttime sky. The lowest allowable illuminance level will be used for all lighted areas and the number of nighttime lights needed to light an area will be minimized to the highest degree possible. Light fixtures will have non-glare finishes that will not cause reflective daytime glare. Lighting will be designed for energy efficiency and have daylight sensors or be timed with an on/off program. Lights will provide good color rendering with natural light qualities with the minimum intensity feasible for security, safety, and personnel access. Lighting, including light color rendering and fixture types, will be designed to be aesthetically pleasing. LED lighting will avoid the use of blue-rich white light lamps and use a correlated color temperature that is no higher than 3,000 Kelvin (International Dark-Sky Association 2010a, 2010b, 2015). Wherever possible and pragmatic, the County will use fixtures and lighting control systems that conform to the International Dark-Sky Association's Fixture Seal of Approval program. In addition, LED lights will use shielding to ensure that nuisance glare and light spill do not affect sensitive residential viewers.

AMM BIO-13: Incorporate Shielding in Project Design to Ensure Ambient Lighting.

The WRC MSHCP requires that shielding be incorporated in project designs to ensure ambient lighting in WRC MSHCP conservation areas is not increased (WRC MSHCP Volume I § 6.1.4). Night lighting will be directed away from natural lands within existing and proposed WRC MSHCP conservation areas in order to support potential linkage and core functions during construction. This is intended to protect species within existing and proposed WRC MSHCP conservation areas from direct night lighting during construction, if activities occur at night. Lights would consist of low-pressure sodium bulbs or equivalent type.

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2.2 Agricultural and Forestry Resources

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
II. AGRICULTURE AND FORESTRY RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by 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 the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☒	☐
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☒	☐
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☒	☐

2.2.1 Regulatory Setting

Federal

CEQA requires analysis of a project to determine whether it would convert agricultural land, Williamson Act contract land, and forest land to other uses. The main purposes of the Williamson Act are to preserve agricultural land and encourage open space preservation and efficient urban growth. The Williamson Act provides incentives to landowners through reduced

property taxes to discourage the early conversion of agricultural and open space lands to other uses.

Farmland Protection Policy Act

Congress established the Farmland Protection Policy Act (FPPA) in 1981 to minimize the extent to which federal actions contribute to the unnecessary and irreversible conversion of farmland to nonagricultural uses. FPPA ensures that federal programs are compatible with state and local governments and private programs and policies to protect farmland. The Natural Resources Conservation Service (NRCS) of the U.S. Department of Agriculture (USDA) is the primary agency responsible for implementing and administering the FPPA.

The Farm and Ranch Lands Protection Program (FRPP) and a corresponding rating system (Land Evaluation and Site Assessment) are part of the FPPA. Land Evaluation and Site Assessment is used as a tool to determine agricultural suitability of land compared to demands created by nonagricultural uses of the land. The FRPP is a voluntary program that provides funding to state, local, and tribal government entities and nongovernmental organizations with existing farmland protection programs to purchase conservation easements. A minimum 30-year term is required for conservation easements, of which the NRCS provides up to 50 percent of the fair market value of the easements. Participating agencies and organizations agree to keep their land designated as agricultural use and retain all property rights for future agricultural use. The requirements of the FRPP would apply if the project resulted in the conversion of farmland.

State

Farmland Mapping and Monitoring Program

The California Department of Conservation established the Farmland Mapping and Monitoring Program (FMMP) in 1982 to provide a consistent and impartial analysis of agricultural land use and land use conversion throughout the State of California. The FMMP identifies farmlands in the State based on current land use information and soil survey data on soil characteristics that best support crop production as USDA and NRCS have compiled.

The Department of Conservation maintains the FMMP and monitors the conversion of farmland to and from agricultural use through its Important Farmland Inventory System. Farmlands are divided into the following categories based on their suitability for agriculture.

- **Prime Farmland**: This land has the best combination of physical and chemical characteristics (e.g., soil quality, growing season, moisture supply) for the long-term production of crops in high yields. This land also must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.
- **Farmland of Statewide Importance**: This land does not meet the criteria for Prime Farmland, but has a good combination of physical and chemical characteristics, albeit with minor shortcomings, such as greater slopes or reduced ability to store moisture. This land must also have been under irrigated production during the prior mapping date. Per

the *Riverside County General Plan*, this category can include forest land, crop land, pastureland, rangeland, and other lands that are not urban or water.

- **Unique Farmland**: This is land other than the above categories that is currently used for the production of specific high-value food and fiber crops, such as citrus, avocados, and vegetables. This land may have lesser-quality soils, but still has the combination of traits needed to produce high-quality or high yields of specific crops. This category may include nonirrigated orchards or vineyards and olives, avocados, or grapes, among others. The land must also have been cropped at some time during the prior mapping date.
- **Farmland of Local Importance**: This land generally does not qualify for any of the above categories, but has been deemed locally important by the Riverside County Board of Supervisors. This land may also have been suitable for Prime or Statewide Importance designations, but for the lack of available irrigation water. The category can include lands in production of major, but not unique, crops, as well as dairy lands and agricultural zones (including contract lands and those in jojoba production).
- **Grazing Land**: This includes lands with existing vegetation that are suited for grazing livestock.
- **Other Land**: This refers to land not included in any other category. Commonly, this includes low-density rural developments (with five subcategories), brush and timberlands, wetlands and riparian areas, confined livestock, poultry, or aquaculture facilities, and/or strip mines. Also included are water bodies covering fewer than 40 acres and agricultural lands of fewer than 40 acres when surrounded by urban uses.

Regional and Local

County of Riverside

Riverside County General Plan

Multipurpose Open Space Element

The County recognizes the high socioeconomic value that agriculture has within the County of Riverside. The two major conservation rationales noted in the *Riverside County General Plan* are to maintain the viability of the agricultural industry and preserve the resource represented by farmland—its productive soils and its secondary role as an open space amenity. The *Riverside County General Plan – Multipurpose Open Space Element* (County of Riverside 2015a) contains policies relevant to agricultural resources.

- **OS 7.2**: In cooperation with individual farmers, farming organizations, and farmland conservation organizations, the County of Riverside shall employ a variety of agricultural land conservation programs to improve the viability of farms and ranches and thereby ensure the long-term conservation of viable agricultural operations within Riverside County. The County of Riverside shall seek out available funding for farmland conservation. Examples of programs which may be employed include: land trusts; conservation easements (under certain circumstances, these may also provide federal and state tax benefits to farmers); dedication incentives; Land Conservation Contracts; Farmland Security Act contracts; the Agricultural

Land Stewardship Program Fund; agricultural education programs; transfer and purchase of development rights; providing adequate incentives (e.g. clustering and density bonuses) to encourage conservation of productive agricultural land in Riverside County's Incentive Program; and providing various resource incentives to landowners (e.g. establish a reliable and/or less costly supply of irrigation water). (AI 78)

The County of Riverside shall establish a Farmland Protection and Stewardship Committee and the Board of Supervisors shall appoint its members. The Committee shall include members of the farming community as well as other individuals and organizations committed to farmland protections and stewardship. The Committee shall develop a strategy to preserve agricultural land within Riverside County and shall identify and prioritize agricultural lands for conservation. This strategy shall not only address the preservation of agricultural land but shall also promote sustainable agriculture within Riverside County. In developing its strategy, the Committee shall consider an array of proven techniques and, where necessary, adapt these techniques to address the unique conditions faced by the farming community within Riverside County. Riverside County staff shall assist the Committee in accomplishing its task. Riverside County Departments, that may be called upon to assist the Committee, include, but are not limited to the following: the Agricultural Commissioner, Planning Department, Assessor's Office and County Counsel. In developing its strategy, the Committee shall consult government and private organizations with expertise in farmland protection. These organizations may include, but are not limited to, the following: USDA Natural Resources Conservation Service; State Department of Conservation and its Division of Land Resource Protection; University of California Sustainable Agriculture Research and Education Program; the University of California Cooperative Extension; The Nature Conservancy; American Farmland Trust; The Conservation Fund; the Trust for Public Land; and the Land Trust Alliance.

The Committee shall, from time to time, recommend to the Board of Supervisors the adoption of policies and/or regulation that it finds will further the goals of the farmland protection and stewardship. The Committee shall also advise the Board of Supervisors regarding proposed policies that curb urban sprawl and the accompanying conversion of agricultural land to urban development, and that support and sustain continued agriculture. Planning policies that may benefit farmland conservation and fall within the purview of the Committee for review include measures to promote efficient development in and around existing communities including clustering, incentive programs, transfer of development rights, and other planning tools.

- **OS 7.3**: Encourage conservation of productive agricultural lands and preservation of prime agricultural lands.
- **OS 7.4:** Encourage landowners to participate in programs that reduce soil erosion, improve soil quality, and address issues that relate to pest management. To this end, the County shall promote coordination between the Natural Resources Conservation Service, Resource Conservation Districts, UC Cooperative Extension, and other agencies and organizations.
- **OS 7.5:** Encourage the combination of agriculture with other compatible open space uses in order to provide an economic advantage to agriculture. Allow by right, in areas designated Agriculture, activities related to the production of food and fiber, and support uses incidental and secondary to the on-site agricultural operation.

Land Use Element

The County considers widespread and diverse agriculture lands to be one of the most important land uses in terms of historic character and economic strength. The *Riverside County General Plan – Land Use Element* (County of Riverside 2017) contains policies relevant to agricultural resources.

- **LU 20.1:** Encourage retaining agriculturally designated lands where agricultural activity can be sustained at an operational scale, where it accommodates lifestyle choice, and in locations where impacts to and from potentially incompatible uses, such as residential uses, are minimized, through incentives such as tax credits.
- **LU 20.2:** Protect agricultural uses, including those with industrial characteristics (dairies, poultry, hog farms, etc.) by discouraging inappropriate land division in the immediate proximity and allowing only uses and intensities that are compatible with agricultural uses.
- **Policy LU 20.4:** Encourage conservation of productive agricultural lands. Preserve prime agricultural lands for high-value crop production.
- **Policy LU 20.5:** Continue to participate in the California Land Conservation Act (the Williamson Act) of 1965.
- **Policy LU 20.6:** Require consideration of state agricultural land classification specifications when a 2.5-year Agriculture Foundation amendment to the General Plan is reviewed that would result in a shift from an agricultural to a non-agricultural use.
- **Policy LU 20.7:** Adhere to Riverside County's Right-to-Farm Ordinance.
- **Policy LU 20.8:** Encourage educational and incentive programs in coordination with the Riverside County Agricultural Commissioner's Office, the University of California Cooperative Extension Service, and the Riverside County Farm Bureau, that convey the importance of conserving watercourses and their associated habitat, as well as protective buffers for domestic and farm livestock grazing.

San Jacinto Valley Area Plan

The *Riverside County General Plan – San Jacinto Valley Area Plan* (County of Riverside 2014) recognizes that agriculture has long been established in the San Jacinto Valley area. In limiting intense forms of urban development, the *San Jacinto Valley Area Plan* seeks to recognize existing and future agricultural activities as important and vital components of the land use pattern. Additionally, it is the intent of the *San Jacinto Valley Area Plan* to recognize agriculture as an important economic activity in the region and accommodate those agricultural owners who wish to continue their operations in the future.

- **SJVAP 6.1:** Maintain particular attention to the Foundation Component designation and Certainty System procedures/findings with respect to the agricultural designations in the lower San Jacinto Valley. Reference the Agriculture section of the General Plan Land Use Element and the Agricultural Resources section of the Multipurpose Open Space Element.

Reche Canyon/Badlands Area Plan

The *Riverside County General Plan – Reche Canyon/Badlands Area Plan* (County of Riverside 2015b) recognizes that agriculture has long been established in the San Jacinto Valley area. In limiting intense forms of urban development, the *Reche Canyon/Badlands Area Plan* seeks to recognize existing and future agricultural activities as important and vital components of the land use pattern. Additionally, it is the intent of the *Reche Canyon/Badlands Area Plan* to recognize agriculture as an important economic activity in the region and accommodate those agricultural owners who wish to continue their operations in the future.

- **RCBAP 3.1:** Preserve the viability of agriculture in the region through adherence to policies found in the Agriculture Area Plan Designation section of the General Plan Land Use Element, and policies located in the Agricultural Resources section of the Multipurpose Open Space Element.

County of Riverside Ordinances

Ordinance No. 509 (Establishing Agricultural Preserves)

Agricultural preserves are lands identified for, and devoted to, agricultural and compatible uses, and are established through resolutions adopted by the Riverside County Board of Supervisors. The purpose of this ordinance is to ensure that incompatible uses are not allowed within established agricultural preserves. The ordinance sets forth the powers of the County of Riverside in establishing and administering agricultural preserves pursuant to the California Land Conservation Act of 1965 (California Government Code § 51200, *et seq*.). The ordinance also establishes uniform rules for the agricultural and compatible uses allowed in an agricultural preserve. Land uses not covered in the ordinance are prohibited within agricultural preserves.

Ordinance No. 625 (Right to Farm)

The purpose of this ordinance is to "conserve, protect and encourage the development, improvement and continued viability of agricultural land and industries for the long-term production of food and other agricultural products, and for the economic well-being of the county's residents." It seeks to "balance the rights of farmers to produce food and other agricultural products with the rights of nonfarmers who own, occupy or use land within or adjacent to agricultural areas." Consequently, the ordinance includes regulations for reducing the loss of agricultural resources in the County of Riverside by limiting the circumstances under which agricultural operations may be deemed a "nuisance." It states that an agricultural activity that has been operating for more than three years on a site (assuming it was not a nuisance at the time it began) cannot be later classed as a public or private nuisance due to "any changed condition in or about the locality." This prevents, for example, existing dairies from being targeted by odor complaints from residents of housing units constructed in the surrounding area three or more years after the dairy use began. Furthermore, it requires buyers of properties within 300 feet of any land zoned primarily for agricultural purposes to be given notice of the preexisting agricultural use and its right to continue.

Resolution No. 84-526 (Riverside County Rules and Regulations Governing Agricultural Preserves)

These rules and regulations were adopted pursuant to California Government Code Section 51231 to govern agricultural preserve procedures within Riverside County and to aid in implementation of the Williamson Act. The rules and regulations address procedures for the initiation, establishment, enlargement, disestablishment, and diminishment of agricultural preserves. To protect existing agricultural lands and agricultural preserves within the County of Riverside, Division VI of the rules require a Comprehensive Agricultural Preserve Technical Advisory Committee (CAPTAC) to review and report on land use proposals and applications related to agricultural preserves and advise the Riverside County Board of Supervisors on the administration of agricultural preserves, as well as Williamson Act contract-related matters. In particular, CAPTAC is charged with reviewing any proposals for the diminishment or disestablishment of an agricultural preserve and providing its recommendations to the Board of Supervisors. Regarding diminishments and disestablishments, CAPTAC reviews the following findings:

- Whether a notice of nonrenewal has been served pursuant to the Williamson Act, Section 401 of these rules
- Whether the cancellation is likely to result in the removal of adjacent lands from agricultural use
- Whether the proposed alternative use of land is consistent with the provisions of the *Riverside County General Plan*
- Whether the cancellation will result in discontiguous patterns of urban development
- Whether there is proximate noncontracted land that is both available and suitable for the use for which the contracted land is being proposed
- Whether the development of the contracted land would provide more contiguous patterns of urban development than that of proximate noncontracted land

2.2.2 Discussion of Environmental Evaluation Question 2.2 – Agricultural Resources

The analysis in this section is based on information provided in the *Riverside County General Plan* and the California Important Farmland Finder website[1] of the California Department of Conservation.

[1] maps.conservation.ca.gov/dlrp/ciff

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

Less-than-Significant Impact.

The State of California Department of Conservation FMMP identifies Farmland of Local Importance, Grazing Land, and Prime Farmland within and immediately adjacent to the project site. Table 2-1 demonstrates the amount of Important Farmland, separated by designation, within the 0.25-mile Study Area.

Table 2-1. FMMP Designated Land and Williamson Act Land within Study Area

Categories	Total in Study Area (acres)
Prime Farmland	119.43
Farmland of Statewide Importance	2.20
Farmland of Local Importance	675.15
Unique Farmland	3.05
Grazing Land	29.12
Other Lands	786.07
Waterbodies	40.31
Total FMMP	**1,655.33**
Total Important Farmland	**799.83**
Williamson Act Land	**73.4**

Source: Developed from the USDA Farmland Conversion Impact Rating Form 2019 (see Appendix D)
FMMP = Farmland Mapping and Monitoring Program

Impacts on mapped farmland were evaluated using the USDA Farmland Conversion Impact Rating form (Form CPA 106, see Appendix D of this IS), which was completed in conjunction with NRCS. Form CPA 106 helps determine the impact the project may have on farmlands within the Study Area. NRCS and Caltrans, as the lead federal agency, review criteria for projects including, but not limited to, soil productivity, water conditions, proximity to other urban and rural land uses, impacts on remaining farmland after the conversion, and indirect or secondary effects of the project on agricultural and other local factors. NRCS must complete the land evaluation part of the form, and Caltrans completes the site assessment portion. Up to 100 points for relative value and 160 points for the site assessment are possible, for a combined total score of up to 260 points. Project sites receiving a total score of less than 160 need not be given further consideration for protection, and no further evaluation is required under the FPPA (Code of Federal Regulations [CFR] 658.4[c][2]).

NRCS reviewed and completed Parts II, IV, and V of the form on January 18, 2018; the completed Form CPA 106 for the project is provided in Appendix D of this IS. The total site assessment rating for the project is 70, below the threshold score of 160, largely due to the location of the acquisition on each parcel and the small amount of project encroachment relative

to the overall parcel. As shown on Figure 2.2-1, the Study Area contains Prime Farmland, Farmland of Local Importance, and Unique Farmland. Currently, none of the Important Farmland within the Study Area is being farmed actively. The project improvements would involve temporary construction disturbance and easements and temporary and permanent right of way and easements affecting lands within the Study Area that the FMMP maps have designated FMMP Prime Farmland and Unique Farmland. The project would result in the permanent conversion of 0.50 acres of Unique Farmland, which is less than 0.005 percent of total farmland within the County of Riverside. In addition, there are 1,655.33 acres of FMMP land in the Study Area, and the permanent conversion of 0.50 acres of Unique Farmland would be less than 0.03 percent of the total farmland in the Study Area. Given the small percentage of FMMP Important Farmland that would be converted within the County of Riverside and the Study Area, the project would result in ***less-than-significant impacts*** on FMMP Important Farmland. Additionally, implementation of **AMM AG-1** (refer to Section 2.2.3, *Avoidance, Minimization, and Mitigation Measures*) would ensure that any farmlands temporarily affected during construction activities are returned to conditions that allow for their continued use and function.

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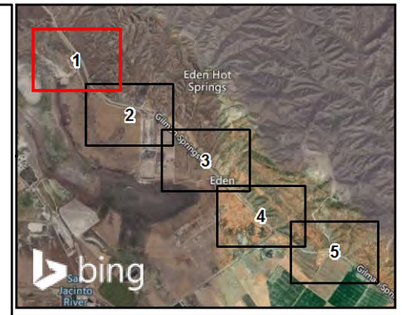

Legend

- Proposed Right of Way
- Reche Canyon/Badlands Area Plan/San Jacinto Valley Area Plan Arterial
- Existing Right of Way
- Permanent Impact
- Temporary Impact
- Roadway

FMMP Farmland Designation

- Grazing Land
- Farmland of Local Importance
- Other Land
- Prime Farmland
- Unique Farmland
- Waterbodies

N

0 200 400 Feet

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Figure 2.2-1 (Sheet 1)
Farmland Impacts
Gilman Springs Median and Shoulder Improvements Project

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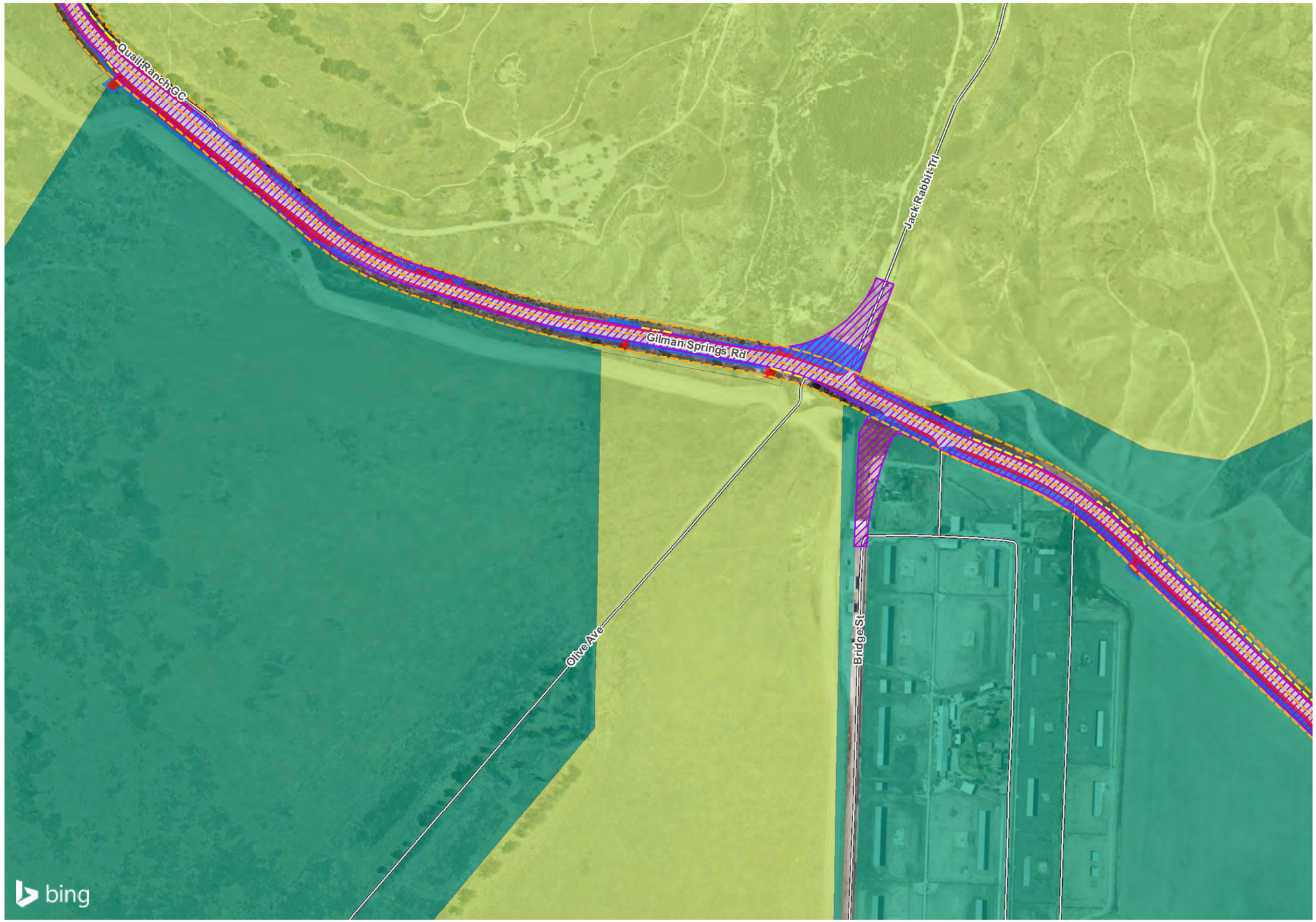

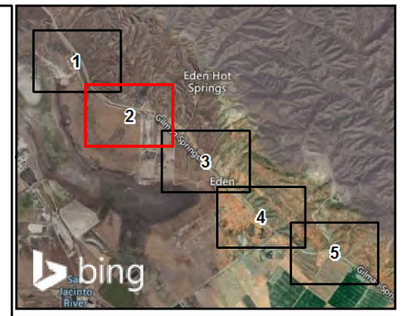

Legend

- Proposed Right of Way
- Reche Canyon/Badlands Area Plan/San Jacinto Valley Area Plan Arterial
- Existing Right of Way
- Permanent Impact
- Temporary Impact
- Roadway

FMMP Farmland Designation

- Grazing Land
- Farmland of Local Importance
- Other Land
- Prime Farmland
- Unique Farmland
- Waterbodies

N

0 200 400 Feet

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Figure 2.2-1 (Sheet 2)
Farmland Impacts
Gilman Springs Median and Shoulder Improvements Project

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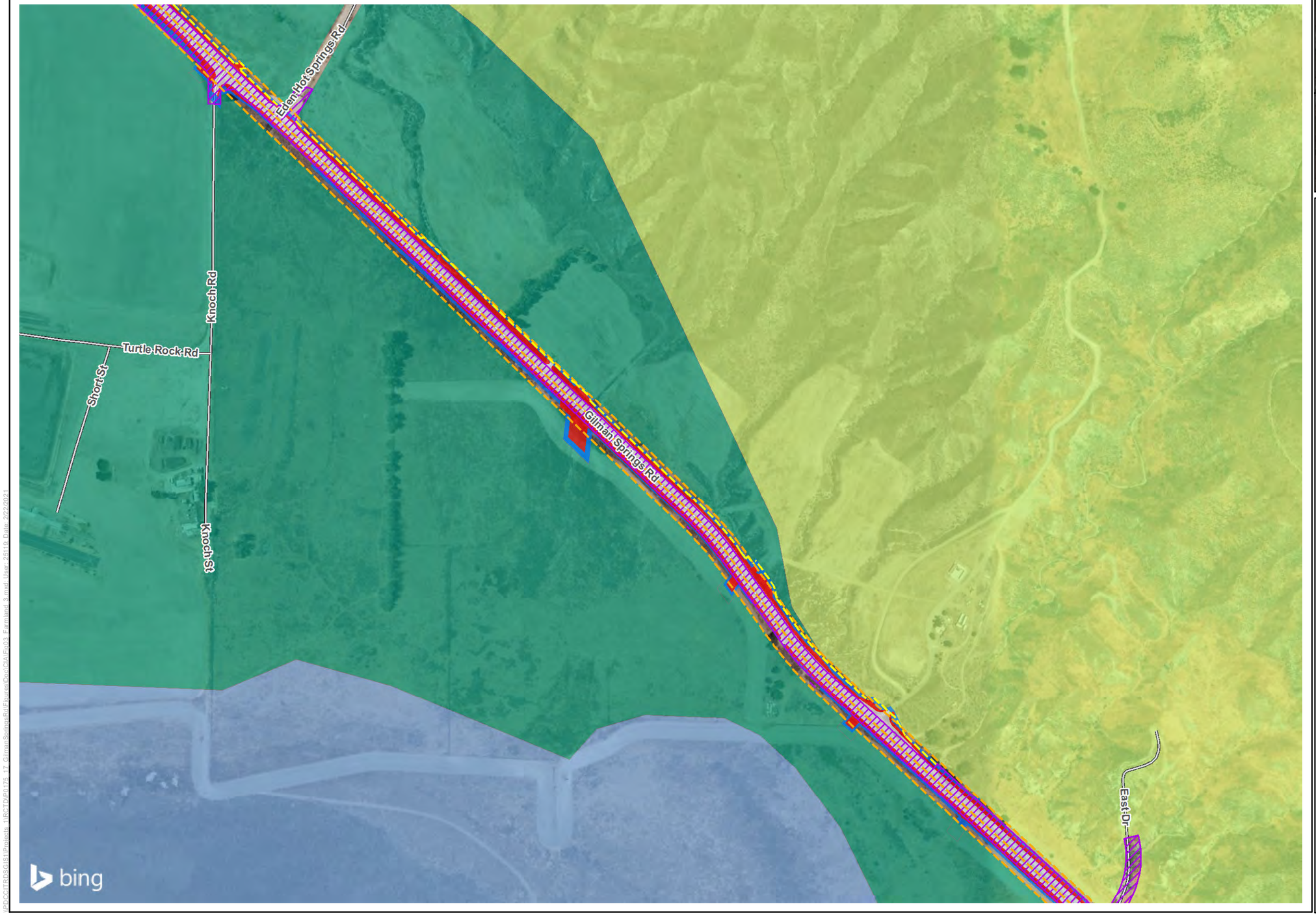

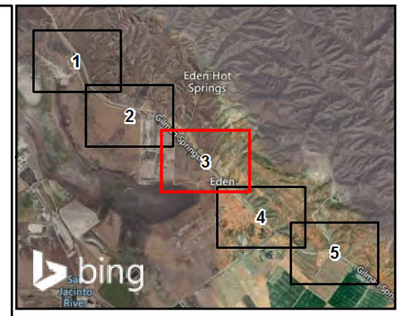

Legend

- Proposed Right of Way
- Reche Canyon/Badlands Area Plan/San Jacinto Valley Area Plan Arterial
- Existing Right of Way
- Permanent Impact
- Temporary Impact
- Roadway

FMMP Farmland Designation

- Grazing Land
- Farmland of Local Importance
- Other Land
- Prime Farmland
- Unique Farmland
- Waterbodies

N

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Figure 2.2-1 (Sheet 3)
Farmland Impacts
Gilman Springs Median and Shoulder Improvements Project

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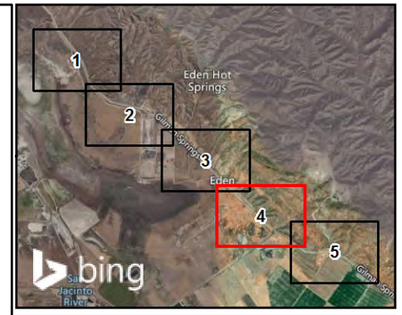

Legend

- Proposed Right of Way
- Reche Canyon/Badlands Area Plan/San Jacinto Valley Area Plan Arterial
- Existing Right of Way
- Permanent Impact
- Temporary Impact
- Roadway

FMMP Farmland Designation

- Grazing Land
- Farmland of Local Importance
- Other Land
- Prime Farmland
- Unique Farmland
- Waterbodies

N

0 200 400 Feet

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Figure 2.2-1 (Sheet 4)
Farmland Impacts
Gilman Springs Median and Shoulder Improvements Project

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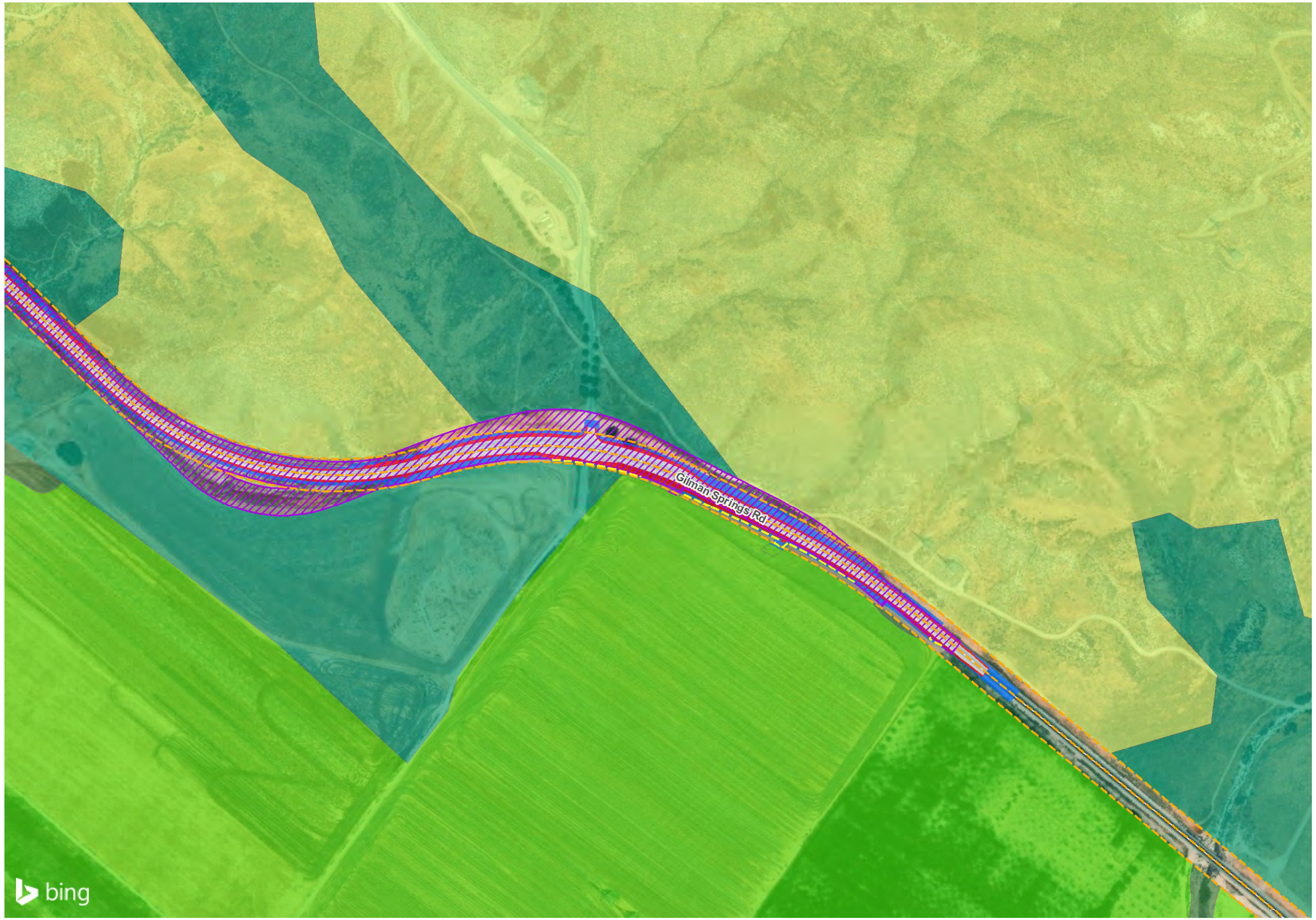

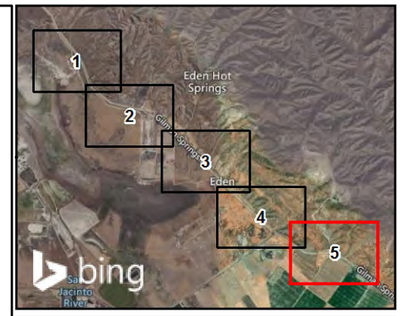

Legend

- Proposed Right of Way
- Reche Canyon/Badlands Area Plan/San Jacinto Valley Area Plan Arterial
- Existing Right of Way
- Permanent Impact
- Temporary Impact
- Roadway

FMMP Farmland Designation

- Grazing Land
- Farmland of Local Importance
- Other Land
- Prime Farmland
- Unique Farmland
- Waterbodies

N

0 200 400 Feet

1:4,800

Figure 2.2-1 (Sheet 5)
Farmland Impacts
Gilman Springs Median and Shoulder Improvements Project

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f) Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?

Less-than-Significant Impact.

The project is anticipated to result in a minor conflict with areas of land directly adjacent to Gilman Springs Road that is zoned as Heavy Agriculture (A-2) or Residential Agricultural (R-A) (see Section 2.11, *Land Use and Planning*, Figure 2.11-2). It should be noted that a large area along the west side of Gilman Springs Road is zoned as Heavy Agriculture (A-2), however, that land is within the WRC MSHCP conservation area and is not agricultural land. Gilman Springs Road is included in the *Riverside County General Plan – Circulation Element* as a 128-foot arterial road (County of Riverside 2020). Additionally, the *Riverside County General Plan* includes policies that support circulation system improvements such as Policy C 3.18 which states that the County of Riverside will "align right of way dedications with existing dedications along adjacent parcels and maintain widths consistent with the ultimate design standard of the road, including required turning lanes" (County of Riverside 2015c). Although there are some areas zoned as agricultural that would be incorporated into the Gilman Springs Road right of way, this change is consistent with the Riverside County General Plan because the road is planned as a 128-foot arterial. The project would help to fulfill the policies and objectives of the *Riverside County General Plan,* therefore, impacts to existing agricultural zoning would be considered ***less than significant***.

As discussed under Section 2.2(a), above, the project would result in the permanent conversion of 0.5 acre of Unique Farmland, which is less than 0.005 percent of total farmland within the County of Riverside. In addition, there are 1,655.33 acres of FMMP land in the Study Area, and the permanent conversion of 0.50 acre of Unique Farmland would be less than 0.03 percent of the total farmland in the Study Area. The project would not result in any other conflicts with existing Riverside County Agricultural Preserve program lands designated for agricultural use. As shown on Figure 2.2-2, approximately 73.4 acres of land that lies within the project Study Area are enrolled in a Williamson Act contract under the Riverside County Agricultural Preserve program. However, this land would remain under Williamson Act contract as part of the project, and no additional right of way is proposed within this area. Therefore, the project would not affect any ongoing farmland operations or Williamson Act land, and impacts would be ***less than significant***.

g) Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?

No Impact.

There is no forest land or timberland within the project LOD. Therefore, there would be ***no impact***.

h) Would the project result in the loss of forest land or conversion of forest land to non-forest use?

No Impact.

The project would not result in the loss or conversion of forest land because there is no forest land within the LOD. Therefore, there would be ***no impact***.

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

Less-than-Significant Impact.

The project would include transportation facility improvements and widening of the median and shoulders. No additional impacts involving farmland resources beyond those discussed under Section 2.2(a) and Section 2.2(b), above, would be anticipated. Therefore, impacts would be ***less than significant***.

2.2.3 Avoidance, Minimization, and Mitigation Measures

The following AMM would be implemented to reduce potential impacts on agricultural resources.

AMM AG-1

Farmland temporarily affected during construction activities will be returned to conditions that allow for continued use and function.

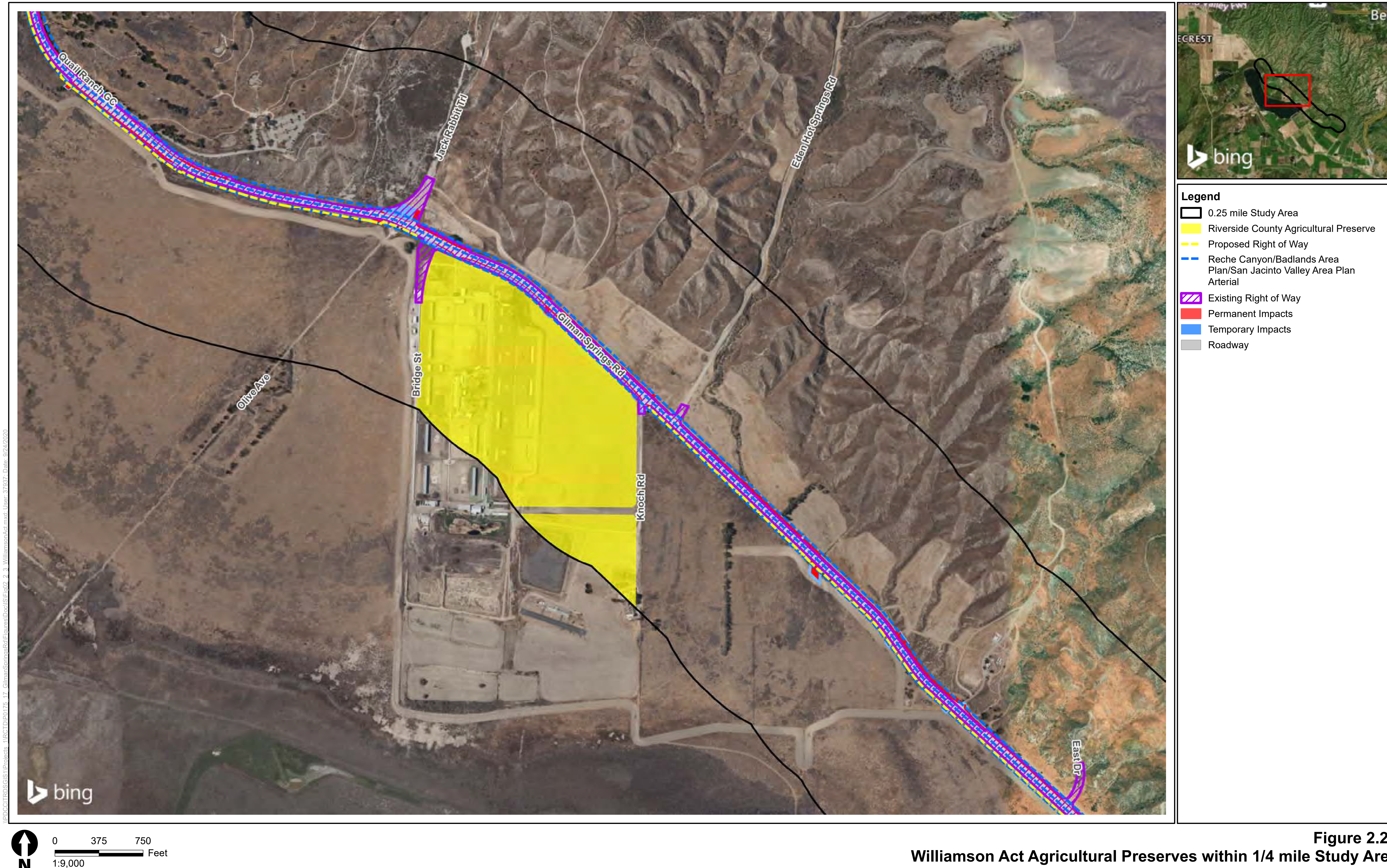

Figure 2.2-2
Williamson Act Agricultural Preserves within 1/4 mile Study Area
Gilman Springs Median and Shoulder Improvements Project

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2.3 Air Quality

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒
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?	☐	☐	☒	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

2.3.1 Regulatory Setting

Federal

The Clean Air Act (CAA) was first enacted in 1963, but has been amended numerous times in subsequent years (i.e., 1967, 1970, 1977, and 1990). The CAA establishes National Ambient Air Quality Standards (NAAQS) and specifies future dates for achieving compliance. The CAA also mandates that the states submit and implement a State Implementation Plan (SIP) for local areas not meeting those standards. The plans must include pollution control measures that demonstrate how the standards would be met. The project area is within a basin that is designated as a nonattainment area for ozone (O_3) and particulate matter 2.5 micrometers or less in diameter ($PM_{2.5}$) and a maintenance area for carbon monoxide (CO), particulate matter 10 micrometers or less in diameter (PM_{10}), and nitrogen dioxide under the CAA.

The 1990 amendments to the CAA identify specific emission-reduction goals for areas not meeting NAAQS. These amendments require both a demonstration of reasonable further progress toward attainment and the incorporation of additional sanctions for failure to attain or meet interim milestones. The sections of the CAA that would most substantially affect development of the project include Title I (Nonattainment Provisions) and Title II (Mobile-Source Provisions).

Title I provisions were established with the goal of attaining the NAAQS for criteria pollutants. The Riverside County portion of the South Coast Air Basin (Basin), in which the project is located, fails to meet national standards for O_3 and $PM_{2.5}$, and therefore is considered a federal nonattainment area for those pollutants.

State

The California Clean Air Act, signed into law in 1988, requires all areas of the state to achieve and maintain the California Ambient Air Quality Standards (CAAQS) by the earliest practical date. CAAQS incorporate additional standards for most criteria pollutants and set standards for other pollutants that the State recognizes. In general, State of California standards are more health-protective than the corresponding NAAQS. The State has also set standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. The Basin is in attainment with these California standards for sulfates, hydrogen sulfide, visibility-reducing particles, and vinyl chloride, but is a nonattainment area for O_3, PM_{10}, and $PM_{2.5}$.

Local

The project lies within the Riverside County portion of the Basin, which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). SCAQMD has jurisdiction over an area of approximately 10,743 square miles, including all of Orange County, Los Angeles County (except for Antelope Valley), the non-desert portion of western San Bernardino County, and the western and Coachella Valley portions of Riverside County; the Basin is a subregion of SCAQMD jurisdiction. Although air quality in this area has improved, the Basin requires continued diligence to meet air quality standards.

SCAQMD has adopted a series of air quality management plans (AQMPs) to meet CAAQS and NAAQS. These plans require, among other emissions-reducing activities, control technology for existing sources, control programs for area sources and indirect sources, an SCAQMD permitting system designed to allow no net increase in emissions from any new or modified (i.e., previously permitted) emission sources, and transportation-control measures. The 2016 AQMP is the most recent plan that the SCAQMD Governing Board adopted (March 3, 2017). The 2016 AQMP includes the integrated strategies and measures needed to meet NAAQS and demonstrates future attainment of one-hour and eight-hour O_3 NAAQS, as well as the latest 24-hour and annual $PM_{2.5}$ standards.

In addition to the air quality efforts of SCAQMD, SCAG, which serves as the Metropolitan Planning Organization (MPO) for the six-county southern California region, is mandated to comply with federal and State transportation and air quality regulations. Federal transportation law requires that SCAG develop a Regional Transportation Plan (RTP) for a 20-year minimum period. SCAG must also develop an FTIP that allocates monies over a four-year period to implement the RTP. The FTIP must be consistent with the RTP (e.g., projects, scope, implementation schedules). In addition, in the federal nonattainment or maintenance areas, the RTP and FTIP must comply with the transportation conformity requirements of the U.S. Environmental Protection Agency's (EPA) Transportation Conformity Regulations.

To comply with the CAA in achieving NAAQS, SIPs are required to be developed for federal nonattainment and maintenance areas. In California, SIP development is a joint effort of the local air agencies and the California Air Resources Board (CARB) working with federal, State, and local agencies (including the MPOs). Local AQMPs are prepared in response to federal and State requirements.

The SIP may include two important components relative to transportation conformity requirements—emissions budgets (for all criteria pollutant SIPs) and transportation control measures (TCMs) (for O_3 and CO SIPs only). Emissions budgets set an upper limit, which transportation activities (for SIP purposes motor vehicles are also known as *on-road mobile sources*) are permitted to emit. TCMs, required for "serious and above" O_3 nonattainment areas and "serious" CO nonattainment areas, are strategies to reduce emissions from on-road mobile sources. SCAG's 2020–2045 Regional Transportation Plan (RTP)/Sustainable Communities Strategy (SCS). SCAG's 2020–2045 RTP/SCS) must conform to the applicable SIPs (i.e., emissions budgets and TCMs) in the SCAG region.

2.3.2 Discussion of Environmental Evaluation Question 2.3 – Air Quality

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

No Impact.

The State of California is divided geographically into 15 air basins for the purpose of managing the State's air resources on a regional basis. Each air basin generally has similar meteorological and geographic conditions throughout. Local districts are responsible for preparing the portion of the SIP applicable within their boundaries for achieving attainment of ambient air quality standards, as required under the federal CAA. The project is in the South Coast Air Basin; SCAQMD has responsibility for managing the Basin's air resources and is responsible for bringing the Basin into attainment for federal and State air quality standards. To achieve this goal, each agency must prepare plans for the attainment of air quality standards, as well as plans for maintenance of those standards, once achieved.

On-road emissions budgets are developed based on the regional transportation planning documents that SCAG prepares. The project is included in the 2020–2045 RTP/SCS as a grouped project for safety improvements under Project ID SCAG015. The project has been incorporated into the SCAG 2021 FTIP under project ID H8-08-021 as part of the Highway Safety Improvement Program back-up list. The 2020–2045 RTP/SCS was found by the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) to be in conformity with the SIP on June 5, 2020.

Because the project is listed, as currently proposed, in the region's conforming 2020–2045 RTP/SCS and 2021 FTIP regional transportation planning documents, project emissions are consistent with applicable air quality plans. Therefore, there would be ***no impact***.

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

Less-than-Significant Impact.

Construction

During construction, short-term degradation of air quality may occur due to the release of particulate emissions (i.e., airborne dust) generated by excavation, grading, hauling, and other construction-related activities. Emissions from construction equipment also are expected and would include CO, nitrogen oxides (NO_X), volatile organic compounds (VOCs), directly emitted particulate matter (PM_{10} and $PM_{2.5}$), and toxic air contaminants such as diesel exhaust particulate matter. O_3 is a regional pollutant derived from NO_X and VOCs in the presence of sunlight and heat.

Site preparation and roadway construction typically involve clearing, cut-and-fill activities, grading, removing, or improving existing roadways, and paving roadway surfaces. Construction-related effects on air quality from most highway projects would be greatest during the site preparation phase because most engine emissions are associated with the excavation, handling, and transportation of soils to and from the site. These activities could temporarily generate enough PM_{10}, $PM_{2.5}$, and small amounts of CO, sulfur dioxide (SO_2), NO_X, and VOCs to be of concern, and is known as *fugitive dust*[2]. Sources of fugitive dust would include disturbed soils at the construction site and trucks carrying uncovered loads of soils. Unless properly controlled, vehicles leaving the site could deposit mud on local streets, which could be an added source of airborne dust after it dries. PM_{10} emissions would vary from day to day, depending on the nature and magnitude of construction activity and local weather conditions. PM_{10} emissions would depend on soil moisture, silt content of soil, wind speed, and the amount of equipment in operation. Larger dust particles would settle near the source, whereas fine particles would be dispersed over greater distances from the construction site.

Table 2-2 shows the estimates of pollutants that would be generated during the construction period. As shown therein, emissions would be greatest during the Grading/Excavation period, with anticipated daily emissions of six pounds of VOC, 72 pounds of NO_X, 50 pounds of CO, 13 pounds of PM_{10}, and five pounds of $PM_{2.5}$. Emissions were estimated using the Road Construction Emissions Model (RCEM) (version 9.0.0) that the Sacramento Metropolitan Air Quality Management District developed using project-specific parameters that the project design team provided. Although RCEM was developed for the Sacramento Metropolitan Air Quality Management District, the model includes emission factors applicable statewide and is therefore recognized as a tool for analyzing air quality in other air districts.

[2] *Fugitive dust* is PM suspended in the air primarily from soil that has been disturbed by wind or other activities.

Table 2-2. Construction-Period Regional Mass Emissions (pounds per day)

	ROG [a]	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Construction Phase						
Grubbing/Land Clearing	1[b]	13	11	< 1	11	3
Grading/Excavation	6	72	50	< 1	13	5
Drainage/Utilities/Sub-Grade	4	38	32	< 1	12	4
Paving	2	18	19	< 1	1	1
Maximum Daily Emissions	6	72	50	< 1	13	5
SCAQMD Regional Construction Threshold[c]	75	100	550	150	150	55

Source: Emissions estimates conducted by ICF using the Road Construction Emissions Model version 9.0.0. Model assumes no overlap between Project phases. See Appendix E.
[a] The terms VOCs and ROG are used interchangeably. ROG is used in this table based on the Road Construction Emissions Model.
[b] Values are rounded to the nearest whole number.
[c] Lead is not emitted from construction equipment and vehicles due to the use of unleaded fuels.
CO = carbon monoxide; NO_X = nitrous oxides; $PM_{2.5}$ = particulate matter 2.5 microns or less in diameter; PM_{10} = particulate matter 10 microns or less in diameter; ROG = reactive organic gases; SCAQMD = South Coast Air Quality Management District; SO_X = sulfur oxides; VOCs = volatile organic compounds

EPA estimates that construction activities for large development projects add 1.2 tons of fugitive dust per acre of soil disturbed per month of activity. If water or other soil stabilizers are used to control dust, then emissions can be reduced by up to 50 percent. SCAQMD Rule 403, which requires the use of water or dust palliative compounds, would reduce potential fugitive dust emissions during construction.

In addition to dust-related PM_{10} emissions, heavy-duty trucks and construction equipment powered by gasoline and diesel engines would generate CO, SO_2, NO_X, VOCs, and some soot particulate (i.e., PM_{10} and $PM_{2.5}$) in exhaust emissions. If construction activities were to increase traffic congestion in the area, CO and other traffic emissions would increase slightly while those vehicles are delayed. These emissions would be temporary and limited to the immediate area surrounding the construction site. The only sensitive land uses in the project vicinity are a small number of residences adjacent to the central and southern portions of the project alignment. Total onsite emissions from construction equipment were estimated using RCEM to determine the extent to which local receptors would be affected, as shown in Table 2-3, to follow.

Table 2-3. Construction-Period Localized Emissions (pounds per day

	CO	NO_X	PM_{10}	$PM_{2.5}$
Construction Phase				
Grubbing/Land Clearing	9.0	12.3	0.5	0.5
Grading/Excavation	45.4	67.8	2.9	2.7
Drainage/Utilities/Sub-Grade	28.5	35.6	1.7	1.6
Paving	16.1	15.4	0.9	0.8
Maximum Daily On-Site Emissions	45.4	67.8	2.9	2.7
SCAQMD Localized Significance Threshold for Construction [a]	1,965.0	371.0	13.0	11.0

Source: Emissions estimates conducted by ICF using the Road Construction Emissions Model version 9.0.0. See Appendix E.
[a] A five-acre site and 25-meter receptor distances in Source Receptor Area 28 Hemet/San Jacinto Valley was used; no Localized Significance Thresholds have been established for VOC and SO_X.
CO = carbon monoxide; NO_X = nitrous oxides; $PM_{2.5}$ = particulate matter 2.5 microns or less in diameter; PM_{10} = particulate matter 10 microns or less in diameter; SCAQMD = South Coast Air Quality Management District; SO_X = sulfur oxides; VOCs = volatile organic compounds

SO_2 is generated by oxidation during the combustion of organic sulfur compounds contained in diesel fuel. Under California State law and CARB regulations, off-road diesel fuel used in the State of California must meet the same sulfur and other standards as on-road diesel fuel (i.e., not more than 15 parts per million of sulfur), so SO_2-related issues due to diesel exhaust would be minimal.

Most of the construction impacts on air quality would be short term in duration and, therefore, would not result in long-term adverse conditions. Implementation of the standardized measures, such as compliance with SCAQMD Rule 403 to reduce onsite fugitive dust, would reduce any air quality impacts resulting from construction activities to a ***less-than-significant*** level.

Operation

Because the project would not increase the number of travel lanes on Gilman Springs Road, no increase in vehicle miles traveled (VMT) would occur as result of project implementation, and traffic volumes would be the same with and without implementation of the project. Therefore, the project would not increase emissions of criteria pollutants and their precursors following the construction period. There would be ***no operational impact*** related to violation of air quality standards.

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

Less-than-Significant Impact.

Sensitive land uses adjacent to the project site include residences adjacent to the central portion of the project alignment. See Figure 2.3-1, to follow, for the location of these residences near the project alignment. As discussed above, the project would generate pollutant emissions during the construction period, which would be temporary and limited to the immediate area surrounding the construction activities. Based on the short-term duration and the fact that construction at any

given location along the project alignment would be limited to approximately one week before construction would proceed on another project segment, impacts related to exposing sensitive receptors to substantial pollutant concentrations would be ***less than significant***.

All criteria pollutants are associated with some form of health risk, such as asthma and other respiratory conditions. However, negative health effects associated with criteria pollutant emissions are highly dependent on a multitude of interconnected variables (e.g., cumulative concentrations, local meteorology and atmospheric conditions, the number and character of exposed individuals [e.g., age, health, gender]). In particular, O_3 can be formed through complex chemical reactions over long distances. Directly emitted particulate matter also does not always equate to a specific localized impact because emissions can be transported and dispersed. Given the factors that influence the formation and transport of pollution, quantifying specific health consequences from the project's construction emissions is not feasible because the models designed to evaluate future O_3 and particulate matter levels and resulting health effects are based on regional or national conditions. In other words, the minor increases in air pollution from the project's construction activities would not result in material changes to ambient air quality or human health.

As shown above in Table 2-2, the project's estimated regional construction emissions would not exceed any of SCAQMD's regional significance thresholds for criteria pollutants. Additionally, given that the project's regional emissions of VOC and NO_X would not exceed 10 tons per year for either pollutant, the project would represent a relatively small project for which it would not be feasible to directly correlate its emissions of VOC or NO_X with specific health impacts from O_3. Accordingly, an analysis correlating the relatively minor emissions generated by the project with specific levels of health impacts would not yield reliable or accurate results and has therefore not been conducted.

Furthermore, it should be noted that NAAQS and CAAQS are health-protective standards and define the maximum amount of ambient pollution that can be present without harming public health. SCAQMD's Localized Significance Thresholds (LSTs) represent the level of pollutant emissions from onsite sources from a project that would not exceed the most stringent applicable federal or State ambient air quality standards. As such, projects with emissions below the applicable LSTs would not be in violation of NAAQS or CAAQS, and, thus, EPA's and CARB's health-protective standards. As shown in Table 2-3, above, the maximum daily onsite emissions are not projected to exceed the applicable LSTs. Therefore, there would be no violations of the health-protective CAAQS or NAAQS, and impacts would be ***less than significant***.

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

Less-than-Significant Impact.

Construction

Some phases of construction, particularly asphalt paving, would result in emissions that may cause short-term odors in the immediate area of each paving site. Such odors would be quickly

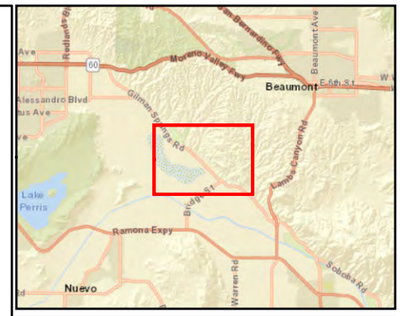
dispersed below detectable thresholds as distance from the site increases. Impacts from objectionable odors would be ***less than significant***.

Operation

Project operation is not anticipated to create objectionable odors. During construction, the project may create objectionable odors, but they would be short in duration and dissipate quickly. Impacts from objectionable odors would be ***less than significant***.

2.3.3 Avoidance, Minimization, and Mitigation Measures

No avoidance, minimization, or mitigation measures are required. The project would implement all applicable required rules related to air quality, including SCAQMD Rule 403.



Legend

- Sensitive Receptor
- Limits of Disturbance

Source: RCTD (2021); ESRI (2017)

0 1,000 2,000 Feet

1:20,000

N

Figure 2.3-1
Sensitive Receptors Located within 500-ft of the Project Site
Gilman Springs Median and Shoulder Improvements Project

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2.4 Biological Resources

	Potentially Significant Impact	Less Than Significant with Mitigation	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 Wildlife or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
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 Wildlife or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
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?	☐	☒	☐	☐
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?	☐	☐	☒	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
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?	☐	☒	☐	☐

2.4.1 Regulatory Setting

Wetlands and Other Waters

Wetlands and other waters are protected under a number of laws and regulations. At the federal level, the Federal Water Pollution Control Act, more commonly referred to as the Clean Water Act (CWA) (33 United States Code [U.S.C.] 1344), is the primary law regulating wetlands and surface waters. One purpose of the CWA is to regulate the discharge of dredged or fill material into waters of the United States, including wetlands. Waters of the United States include navigable waters, interstate waters, territorial seas, and other waters that may be used in interstate or foreign commerce. To classify wetlands for the purposes of the CWA, a three-parameter approach is used that includes the presence of 1) hydrophytic (i.e., water-loving) vegetation; 2) wetland hydrology; and 3) hydric soils (i.e., soils formed during saturation or

inundation). All three parameters must be present, under normal circumstances, for an area to be designated as a *jurisdictional wetland* under the CWA.

CWA Section 404 establishes a regulatory program that provides that discharge of dredged or fill material cannot be permitted if a practicable alternative exists that is less damaging to the aquatic environment or if the nation's waters would be significantly degraded. The Section 404 permit program is run by the U.S. Army Corps of Engineers (USACE), with oversight by EPA.

USACE issues two types of Section 404 permits: General and Standard. There are two types of General permits: Regional permits and Nationwide permits. *Regional permits* are issued for a general category of activities when they are similar in nature and cause minimal environmental impacts. *Nationwide permits* are issued to allow a variety of minor project activities with no more than minimal effects. Ordinarily, projects that do not meet the criteria for a Nationwide permit may be permitted under one of USACE's Standard permits. There are two types of Standard permits: Individual permits and Letters of Permission. For *Standard permits*, USACE's decision to approve is based on compliance with EPA's Section 404(b)(1) Guidelines (40 CFR), and whether permit approval is in the public interest. EPA developed Section 404 (b)(1) Guidelines in conjunction with USACE; these guidelines allow the discharge of dredged or fill material into the aquatic system (i.e., waters of the United States) only if there is no practicable alternative that would have fewer adverse effects. Section 404 (b)(1) Guidelines state that USACE may not issue a permit if there is a least environmentally damaging practicable alternative to the proposed discharge that would have lesser effects on waters of the United States and not have any other significant adverse environmental consequences.

The Executive Order (EO) for the Protection of Wetlands (EO 11990) also regulates the activities of federal agencies with regard to wetlands. Essentially, this EO states that a federal agency, such as FHWA or Caltrans, as assigned, cannot undertake or provide assistance for new construction in wetlands unless the head of the agency finds: (1) that there is no practicable alternative to the construction; and (2) the project includes all practicable measures to minimize harm.

At the State level, the State Water Resources Control Board (SWRCB), the Regional Water Quality Control Boards (RWQCBs) and the CDFW primarily regulate wetlands and waters. In certain circumstances, the California Coastal Commission (or Bay Conservation and Development Commission or Tahoe Regional Planning Agency) may also be involved. Sections 1600–1607 of the California Fish and Game Code require any agency that proposes a project that would substantially divert or obstruct the natural flow of or substantially change the bed or bank of a river, stream, or lake to notify CDFW before beginning construction. If CDFW determines that the project may substantially and adversely affect fish or wildlife resources, a Lake or Streambed Alteration Agreement would be required. CDFW jurisdictional limits are usually defined by the tops of the stream or lake banks or the outer edge of riparian vegetation, whichever is wider. Wetlands under jurisdiction of USACE may or may not be included in the area covered by a Streambed Alteration Agreement obtained from CDFW.

The RWQCBs were established under the Porter–Cologne Water Quality Control Act (Porter–Cologne) to oversee water quality. Discharges under Porter–Cologne are permitted by Waste

Discharge Requirements and may be required even when the discharge is already permitted or exempt under the CWA. In compliance with CWA Section 401, the RWQCBs also issue water quality certifications for activities that may result in a discharge to waters of the United States. This is required most frequently in tandem with a Section 404 permit request. Please see Section 2.10, *Hydrology and Water Quality*, for additional details.

Plant Species

The U.S. Fish and Wildlife Service (USFWS) and CDFW have regulatory responsibility for the protection of special-status plant species. *Special-status* is a general term for species that are provided varying levels of regulatory protection. *Special-status species* are selected for protection because they are rare or subject to population and habitat declines. The highest level of protection is given to threatened and endangered species; these are species that are formally listed or proposed for listing as Endangered or Threatened under the Federal Endangered Species Act (FESA) or the California Endangered Species Act (CESA).

The regulatory requirements for FESA can be found at U.S.C. 16, Section 1531, *et seq*; see also 50 CFR Part 402. The regulatory requirements for CESA can be found at California Fish and Game Code, Section 2050, *et seq*. The project is also subject to the Native Plant Protection Act, found at California Fish and Game Code, Section 1900–1913, and CEQA, California PRC, Sections 2100–21177.

Animal Species

Many State and federal laws regulate impacts on wildlife. USFWS, the National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NOAA Fisheries Service), and CDFW are responsible for implementing these laws. This section discusses potential impacts and permit requirements associated with animals not listed or proposed for listing under FESA or CESA. Species listed or proposed for listing as threatened or endangered are discussed in the *Threatened and Endangered Species* section, below. All other special-status animal species are discussed here, including CDFW fully protected species and Species of Special Concern and USFWS or NOAA Fisheries Service candidate species.

Federal laws and regulations relevant to wildlife include the following:

- NEPA
- Migratory Bird Treaty Act (MBTA)
- Fish and Wildlife Coordination Act

State laws and regulations relevant to wildlife include the following:

- CEQA
- California Fish and Game Code Sections 1600–1603
- California Fish and Game Code Sections 4150 and 4152

Threatened and Endangered Species

The primary federal law protecting threatened and endangered species is FESA: 16 U.S.C. Section 1531, *et seq*. See also 50 CFR Part 402. This act and later amendments provide for the conservation of endangered and threatened species and the ecosystems on which they depend. Under FESA Section 7, federal agencies, such as FHWA, are required to consult with USFWS and NOAA Fisheries Service to ensure that they are not undertaking, funding, permitting, or authorizing actions likely to jeopardize the continued existence of listed species or destroy or adversely modify designated critical habitat. *Critical habitat* is defined as geographic locations critical to the existence of a threatened or endangered species. The outcome of consultation under Section 7 may include a Biological Opinion with an Incidental Take statement, a Letter of Concurrence, or documentation of a No Effect finding. FESA Section 3 defines *take* as to "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect or any attempt at such conduct."

The State of California has enacted a similar law at the state level: CESA, California Fish and Game Code Section 2050, *et seq*. CESA emphasizes early consultation to avoid potential impacts on rare, endangered, and threatened species and develop appropriate planning to offset project-caused losses of listed species populations and their essential habitats. CDFW is the agency responsible for implementing CESA. Fish and Game Code Section 2081 prohibits take of any species determined to be an endangered or threatened species. *Take* is defined in Fish and Game Code Section 86 as to "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." CESA allows for take incidental to otherwise lawful development projects; for these actions, CDFW issues an incidental take permit. For species listed under both FESA and CESA that require a Biological Opinion under FESA Section 7, CDFW may also authorize impacts on CESA species by issuing a Consistency Determination under California Fish and Game Code Section 2080.1.

Local

Western Riverside Multiple Species Habitat Conservation Plan

The WRC MSHCP, a comprehensive regional Habitat Conservation Plan, was adopted in June 2003. Major participants in the regional planning effort included, but were not limited to, Caltrans, CDFW, USFWS, the County of Riverside, Riverside County Transportation Commission, 14 cities, and interested individuals and groups. The purpose of the WRC MSHCP is to develop methods and procedures that provide for development, while protecting environmental resources in the western Riverside County area over a 75-year period.

The WRC MSHCP, among other things, provides impact mitigation for future County projects on existing routes in the covered area of western Riverside County. County participation is intended to streamline the environmental process for future transportation projects in western Riverside County (e.g., through pre-mitigation) and save money over the long term.

The project is a safety operations and maintenance project of an existing facility and therefore is a Covered Activity within the WRC MSHCP boundaries. Due to the potential presence of

sensitive biological resources, adjacency to conserved lands, and importance of the area for wildlife movement (as described in the WRC MSHCP), the County has incorporated siting and design criteria and general avoidance guidelines (WRC MSHCP Volume I §§ 7.5.1 and 7.5.2, § 7.5.3, and Appendix C) to the project. The project is in the *Reche Canyon/Badlands Area Plan* and the *San Jacinto Valley Area Plan* and is in Criteria Cells 1478, 1584, 1652, 1666, 1762, 1763, 1880, 1881, 1882, 1977, 1978, 1979, and 1982.

Portions of the project would occur in the following WRC MSHCP survey areas:

- Burrowing Owl (BUOW) Survey Area
- San Bernardino Kangaroo Rat Survey Area
- Los Angeles Pocket Mouse Survey Area
- WRC MSHCP Survey Area, Criteria Area 3: San Jacinto Valley Crownscale (*Atriplex coronata* var. *notatior*), Parish's Brittlescale (*Atriplex parishii*), Davidson's Saltscale (*Atriplex serenana* var. *davidsonii*), Thread-leaved Brodiaea (*Brodiaea filifolia*), Smooth Tarplant (*Centromadia pungens* ssp. *laevis*), Coulter's Goldfields (*Lasthenia glabrata* ssp. *coulteri*), Little Mousetail (*Myosurus minimus* ssp. *apus*, and Mud Nama (*Nama stenocarpa*).
- WRC MSCHP Survey Area, Narrow Endemic Plant Survey Area 3: Munz's onion (*Allium munzii*), San Diego ambrosia (*Ambrosia pumila*), many-stemmed dudleya (*Dudleya multicaulis*), spreading navarretia (*Navarretia fossalis*), California Orcutt grass (*Orcuttia californica*), and Wright's trichocoronis (*Trichocoronis wrightii* var. *wrightii*).

Although the WRC MSHCP does not provide survey areas for least Bell's vireo (*Vireo bellii pusillus*), southwestern willow flycatcher (*Empidonax traillii extimus*), and western yellow-billed cuckoo (*Coccyzus americanus occidentalis*), if potential habitat were present and potential direct or indirect effects could occur, then focused surveys would be necessary. The WRC MSHCP also requires a full review of potential riparian/riverine and vernal pool resources.

A consistency review by the wildlife agencies (i.e., USFWS and CDFW) would be performed to ensure that the project is consistent with the requirements of the WRC MSHCP. A WRC MSHCP Consistency Analysis has been prepared in tandem with the Determination of Biologically Equivalent or Superior Preservation Report (ICF 2021) for RCA and wildlife agency review. Because there is a federal nexus for the project, the consistency review would result in a streamlined Biological Opinion from USFWS. Take would be provided through the WRC MSHCP.

2.4.2 Discussion of Environmental Evaluation Question 2.4 – Biological Resources

Information used in this section is from the *Natural Environment Study (Minimal Impacts)* (NESMI) (March 2021) (Caltrans 2021a) and *Jurisdictional Delineation* (March 2021) (Caltrans 2021b).

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

Less-than-Significant Impact with Mitigation.

Special-status Plant Species

A literature review determined that 82 special-status plant species may occur within the biological Study Area (BSA). The BSA for focused rare plant surveys included a 100-foot buffer from the edge of the proposed permanent LOD determined from the preliminary engineering design (Figure 2.4-1, Rare Plant Surveys and Results). Focused studies were performed within the BSA in May and June 2017 for Gilman Springs Road. Subsequent surveys were conducted in May and July 2021, when the BSA was expanded in the vicinity of Bridge Street.

Special-status Federally and State-listed Plant Species

Ten of these special-status plant species are federally or State-listed endangered, threatened, or candidate species. Of the 10, the following five were determined to potentially occur within the BSA, based on species requirements and BSA conditions: San Jacinto Valley crownscale, Nevin's barberry (*Berberis nevinii*), thread-leaved brodiaea, slender-horned spineflower (*Dodecahema leptoceras*), and Santa Ana River woollystar (*Eriastrum densifolium* ssp. *sanctorum*). Suitable habitat is not present within the BSA for San Diego ambrosia, Coachella Valley milk-vetch (*Astragalus lentiginosus* var. *coachellae*), salt marsh bird's-beak (*Chloropyron maritimum* ssp. *maritimum*), Mojave tarplant (*Deinandra mohavensis*), or spreading navarretia. These five latter species are not discussed further. Twenty-five non-listed special-status plant species were determined to have suitable habitat present within the BSA.

San Jacinto Valley Crownscale

USFWS lists the San Jacinto Valley crownscale as an endangered species. Although USFWS has designated critical habitat for this species, it is not located anywhere near the project vicinity. Suitable habitat for San Jacinto Valley crownscale occurs in the BSA in mesic and alkaline areas both east and west of Gilman Springs Road, particularly anywhere fourwing saltbush scrub and disturbed fourwing saltbush scrub are already growing. This species was not detected during the 2017 or 2021 focused rare plant surveys, so it is considered absent from the BSA. No direct or indirect impacts from the project are anticipated; therefore, it is Caltrans' determination, as the federal NEPA Lead Agency for the project, that the project would have ***no effect*** on San Jacinto Valley crownscale; thus, avoidance, minimization, or mitigation measures are not needed.

Nevin's Barberry

CDFW and USFWS have listed Nevin's barberry as an endangered species. Although USFWS has designated critical habitat for this species, it is not located anywhere near the project vicinity. Suitable habitat for Nevin's barberry occurs in the BSA on the slopes to the east and in the

ephemeral washes passing through the BSA. This conspicuous perennial plant was not detected during the 2017 or 2021 focused rare plant surveys. Because it is perennial, it is easily distinguished from other plant species, and was not detected during focused surveys, it is considered absent from the BSA. No direct or indirect impacts from the project are anticipated; therefore, it is Caltrans' determination, as the federal NEPA Lead Agency for the project, that the project would have ***no effect*** on Nevin's barberry; thus, avoidance, minimization, or mitigation measures are not needed.

Thread-leaved Brodiaea

The thread-leaved brodiaea is listed as a threatened species by CDFW and as an endangered species by USFWS. Although USFWS has designated critical habitat for this species, it is approximately three miles southwest of the BSA (Subunit 11a: San Jacinto Wildlife Area). Suitable habitat for thread-leaved brodiaea occurs in the BSA in areas of scrub vegetation, particularly where heavier, clay soils are present. This perennial plant was not detected during the 2017 or 2021 focused rare plant surveys. Because it is perennial and was not detected during focused surveys, it is considered absent from the BSA. No direct or indirect impacts from the project are anticipated; therefore, it is Caltrans' determination, as the federal NEPA Lead Agency for the project, that the project would have ***no effect*** on thread-leaved brodiaea; thus, avoidance, minimization, or mitigation measures are not needed.

Slender-horned Spineflower

CDFW and USFWS both list slender-horned spineflower as an endangered species. USFWS has not designated any critical habitat for this species. Suitable habitat for slender-horned spineflower occurs in the ephemeral drainages passing through the BSA. This species is annual and small and difficult to detect, but nearby reference populations were visited prior to the surveys to ensure that the species was blooming. This species was not detected during the 2017 or 2021 focused rare plant surveys, so it is considered absent from the BSA. No direct or indirect impacts from the project are anticipated; therefore, it is Caltrans' determination, as the federal NEPA Lead Agency for the project that the project would have ***no effect*** on slender-horned spineflower; thus, avoidance, minimization, or mitigation measures are not needed.

Santa Ana River Woollystar

CDFW and USFWS both list Santa Ana River woollystar as an endangered species. USFWS has not designated any critical habitat for this species. Marginal habitat for Santa Ana River woollystar occurs in the BSA along the floodplain terraces of larger drainages. However, suitable Riversidian alluvial fan sage scrub habitats and alluvial terraces in which this species is usually found generally do not exist within the BSA, so this species is unlikely to occur. This highly conspicuous perennial plant was not detected during the 2017 or 2021 focused rare plant surveys, so it is considered absent from the BSA. No direct or indirect impacts from the project are anticipated; therefore, it is Caltrans' determination, as the federal NEPA lead agency for the project, that the project would have ***no effect*** on Santa Ana River woollystar; thus, avoidance, minimization, or mitigation measures are not needed.

Non-listed Special-status Plant Species

Twenty-five non-listed special-status plant species were determined to have suitable habitat present in the BSA: chaparral sand-verbena (*Abronia villosa* var. *aurita*), San Diego sagewort (*Artemisia palmeri*), Jaeger's milk-vetch (*Astragalus pachypus* var. *jaegeri*), round-leaved filaree (*California macrophylla*), Plummer's mariposa lily (*Calochortus plummerae*), Payson's jewelflower (*Caulanthus simulans*), smooth tarplant, peninsular spineflower (*Chorizanthe leptotheca*), Parry's spineflower (*Chorizanthe parryi* var. *parryi*), long-spined spineflower (*Chorizanthe polygonoides* var. *longispina*), small-flowered morning-glory (*Convolvulus simulans*), paniculate tarplant (*Deinandra paniculata*), vernal barley (*Hordeum intercedens*), mesa horkelia (*Horkelia cuneata* ssp. *puberula*), California satintail (*Imperata brevifolia*), Southern California black walnut (*Juglans californica*), Robinson's pepper-grass (*Lepidium virginicum* var. *robinsonii*), ocellated Humboldt lily (*Lilium humboldtii* ssp. *ocellatum*), Parish's bush-mallow (*Malacothamnus parishii*), little mousetail, white rabbit-tobacco (*Pseudognaphalium leucocephalum*), San Gabriel ragwort (*Senecio astephanus*), Salt Spring checkerbloom (*Sidalcea neomexicana*), San Bernardino aster (*Symphyotrichum defoliatum*), and California screw moss (*Tortula californica*).

Only one of these species was observed during the May and June 2017 focused rare plant surveys: smooth tarplant. A total of 355 smooth tarplant individuals were recorded within the 100-foot BSA, as shown on Figure 2.4-1. None were observed during the 2021 surveys. The remaining 24 species are considered absent from the BSA. No direct or indirect impacts from the project are anticipated for the species that are absent; therefore, no further analysis, avoidance, minimization, or mitigation measures are needed for these species.

The WRC MSHCP covers smooth tarplant, with take conditions applicable where it is found within designated survey areas. However, all smooth tarplant were found outside of the designated WRC MSHCP Narrow Endemic survey areas; thus, take restrictions are not applicable. Regardless, this species is covered for take under the WRC MSHCP. There would be an impact on approximately 150 individuals of smooth tarplant, with some individuals located on Public/Quasi-Public (P/QP) lands [see discussion under CEQA Threshold 2.4(f)]). Because the P/QP lands that would be affected would be replaced with lands of equivalent value, and because there is a larger population within conserved lands west of the project footprint, the impacts on smooth tarplant are not expected to contribute to a decrease in the long-term conservation value for this species; thus, no avoidance, minimization, or mitigation measures are needed, and impacts on special-status plants would not be significant.

Special-status Federally and State-listed Wildlife Species

A literature review determined that 56 special-status wildlife species may occur within the BSA. The BSA included a 500-foot buffer that was used for general habitat assessments for special-status wildlife species and protocol surveys for BUOW and a 300-foot buffer that was used for small mammal trapping; identified buffers were applied to the BSA around the project LOD. Twelve of these special-status wildlife species are federally or State-listed endangered, threatened, or candidate species. Of the 12, the following four were determined to occur or potentially occur within the BSA, based on species requirements and BSA conditions:

Swainson's hawk (*Buteo swainsoni*), coastal California gnatcatcher (*Polioptila californica californica*), San Bernardino kangaroo rat (*Dipodomys merriami parvus*), and Stephens' kangaroo rat (*Dipodomys stephensi*).

Suitable habitat is not present within the BSA for vernal pool fairy shrimp (*Branchinecta lynchi*), Riverside fairy shrimp (*Streptocephalus woottoni*), southern mountain yellow-legged frog (*Rana muscosa*), western yellow-billed cuckoo, tricolored blackbird (*Agelaius tricolor*), southwestern willow flycatcher, or least Bell's vireo. These species are not discussed further. In addition, Swainson's hawk was only observed onsite as an overnighting migrant on the way to its northern breeding grounds; there is no breeding habitat in, or in the vicinity of, the BSA, and this species is only known to breed in two locations in all of southern California: in Los Angeles and Orange Counties. Although observed onsite, Swainson's hawk also will not be discussed further because it has no potential to nest within the BSA.

Coastal California Gnatcatcher

Coastal California gnatcatcher is listed as a threatened species by USFWS and a State Species of Special Concern by CDFW. It is also a fully Covered Species under the WRC MSHCP. The BSA used to fall within or adjacent to designated critical habitat Unit 10, but this critical habitat was excluded in the 2007 critical habitat determination because the area is now covered under the WRC MSHCP.

In the BSA, potentially suitable habitat for coastal California gnatcatcher is in discrete patches of brittlebush scrub and fourwing saltbush scrub. Because this is a fully Covered Species under the WRC MSHCP, focused surveys were not conducted. However, this species was observed incidentally in the BSA during multiple field surveys, repeatedly in a patch of disturbed fourwing saltbush scrub immediately northwest of Jack Rabbit Trail, and once on the far-southeastern terminus of the BSA in a patch of scrub underneath the Southern California Edison transmission line. Because this species was observed multiple times and in different areas of the BSA, coastal California gnatcatcher is considered to be present within the BSA.

The project would directly affect coastal California gnatcatcher through permanent and temporary removal and disturbance of suitable habitat, such as brittlebush scrub and fourwing saltbush scrub, all of which likely is unoccupied by this species within the project area due to roadside disturbance and degraded habitat within the existing shoulder. None of the incidental observations of this species from biological studies occurred within the project area. Acreages of anticipated permanent and temporary losses to these habitats are shown below in Table 2-4.

Table 2-4. Impacts on Coastal California Gnatcatcher Habitat

Habitat	Permanent Impact (acre)	Temporary Impact (acre)
Brittle Bush Scrub	0.03	0.26
Disturbed Brittle Bush Scrub	0.03	0.34
Fourwing Saltbush Scrub	0.00	0.17
Disturbed Fourwing Saltbush Scrub	4.50	3.42
Total	**4.56**	**4.19**

Source: Caltrans 2021a.

Based on the known locations of the species within the BSA, there is also a potential for noise from project construction to affect coastal California gnatcatcher temporarily and indirectly. It is important to note that Gilman Springs Road is very busy, with constant high-volume traffic throughout the day, and that birds nesting within the BSA almost certainly are acclimated to a certain degree of ambient noise, although the type and degree of noise intensity would be different between construction activities and commuter traffic. Because of the abundant suitable habitat outside of the project area and the high levels of ambient background noise, it is not expected that any adverse effects on nesting would occur. There may be minor masking effects (i.e., the inability to hear environmental cues and animal signals) that could limit an individual's ability to communicate and receive important cues from the environment and other wildlife, but adverse effects as a result of this are expected to be infrequent as a result of construction distance and ambient noise. If these effects were to occur, depending on the noise levels and duration, birds may also adjust their responses to any masking by adjusting their vocalization height and location, increasing the volume of their vocalizations, and timing vocalizations to be during periods of low noise. Temporal avoidance of disturbed suitable habitat could reduce the availability of suitable nesting and foraging habitat for coastal California gnatcatchers, making successful reproduction more challenging, but actual nest abandonment is unlikely for the aforementioned reasons.

Potential indirect impacts may include edge effects and long-term degradation of scrub habitat as a result of increased litter, fire, introduction of invasive plant species, erosion, sedimentation, chemical spills during construction, and dust and pollutants associated with vehicles and machinery. Because habitat suitability in the BSA is already low, further degradation of habitat through these indirect effects could result in coastal California gnatcatcher currently present in the BSA avoiding foraging or nesting adjacent to the construction footprint in the future.

As required by the WRC MSHCP, implementation of **AMMs BIO-1**, **BIO-4, BIO-5**, **BIO-9**, **BIO-10**, **BIO-12, BIO-13**, and **BIO-15** would avoid or reduce potential impacts on coastal California gnatcatcher. In addition, **AMM BIO-14** would require that a preconstruction survey for nesting birds be completed by an experienced avian biologist if construction commences during the breeding season (March 1 through June 30) to avoid a direct take of the species.

Because there is a potential for direct and indirect effects on coastal California gnatcatcher, it is Caltrans' determination as the federal NEPA lead agency that the project ***may affect, but is not likely to adversely affect*** coastal California gnatcatcher. Therefore, although impacts are not likely to occur to the coastal California gnatcatcher, if the preconstruction surveys find that there

may be a potential impact, then there could possibly be a direct impact. AMMs identified for coastal California gnatcatcher would ensure WRC MSHCP compliance; these measures are described below in Section 2.4.3, *Avoidance, Minimization, and Mitigation Measures*. Impacts to coastal California gnatcatcher would not be significant.

San Bernardino Kangaroo Rat

San Bernardino kangaroo rat is federally endangered and a California Species of Special Concern. The BSA occurs within the WRC MSHCP small mammal survey area for San Bernardino kangaroo rat; therefore, small mammal trapping was performed specifically for this species within suitable habitat. San Bernardino kangaroo rat is found in shrubby habitats with intermediate seral stages of alluvial fan sage scrub. The species was not found during the trapping efforts and is considered absent from the absent. It is Caltrans' determination, as the federal NEPA Lead Agency for the project, that the project would have ***no effect*** on San Bernardino kangaroo rat because the species is absent.

Stephens' Kangaroo Rat

Stephens' kangaroo rat (SKR)is listed as an endangered species by USFWS and a threatened species by CDFW. It is a Covered Species under the WRC MSHCP and SKR HCP; however, the project occurs within and adjacent to the SKR Core Reserve. No critical habitat has been designated for this species by USFWS. In the BSA, potentially suitable habitat for SKR is present in areas of generally open or bare ground, particularly where dirt trails are present, as well as areas of open scrub. Within the BSA, the best habitat and the area most likely to have this species (based on historical trapping data) is within the northwestern portion of the project, particularly on the eastern side of the road, where the habitat is less frequently disked.

No SKR-specific trapping is required under the WRC MSHCP or the SKR HCP; however, some of the San Bernardino kangaroo rat and Los Angeles Pocket Mouse trapping areas overlapped with suitable habitat for SKR. All trapping efforts were negative for SKR however, there is additional suitable habitat that was not trapped as it is not required, as noted above. Therefore, it is possible that SKR is present within the BSA. The project would directly affect suitable habitat for SKR through permanent and temporary removal and disturbance of suitable habitat. If SKR is present, the project could potentially affect this species. Direct effects that may occur during project construction include ground vibrations from equipment, potentially resulting in collapsed burrows, which may in turn result in injury or mortality, and removal of vegetation that could be used for food or shelter. Potential indirect effects may include edge effects, degradation of habitat resulting from introduction of invasive plants, increased risk of fire, dust, pollution, trash, and chemical spills, night-lighting, increased noise, and increased risk of predation or harassment that could lead to behavioral modifications and negative physiological stressors. Behavioral modifications, including habitat avoidance and abandonment of burrows, could result in decreased reproductive success. Physiological stressors could lead to energetic losses and increased stressors to the body, potentially resulting in lowered reproductive performance, increased susceptibility to diseases and predation, inability to successfully forage, and death of adults and young.

Operation of the project is not expected to result in any relevant changes to SKR or their habitat. Individuals that may be present are already acclimated to the level of traffic noise, lighting, and other existing road disturbances; therefore, there would be no appreciable increase in impacts from operation of the project. Although the potential use of existing culverts to move between the eastern and western sides of Gilman Springs Road is already low (due to low openness ratio and debris within the culverts), and there is no known data for SKR culvert use, the increased length of culverts throughout the project would reduce the potential of SKR utilizing culverts even further. However, any direct effects, including take, or indirect effects on SKR are fully covered under the WRC MSHCP through the project's consistency with the WRC MSHCP.

The project would also have direct effects on the San Jacinto–Lake Perris Core Reserve, an SKR Core Reserve, as designated under the SKR HCP. Permanent impacts would occur on 0.78 acre of undeveloped lands in the SKR Core Reserve, and temporary impacts would occur on 0.98 acre of undeveloped lands within the SKR Core Reserve. Under the WRC MSHCP, any permanent impacts within the SKR Core Reserve require equivalent replacement, and temporary impacts would be restored onsite, whether the area being affected is occupied by SKR. It is Caltrans' determination, as the federal NEPA Lead Agency for the project, that the project ***may affect, but is not likely to adversely affect*** SKR.

AMMs BIO-1, **BIO-4, BIO-5**, **BIO-9**, **BIO-10**, **BIO-12, BIO-13**, **BIO-14**, and **BIO-15** would ensure the project is consistent with the WRC MSHCP. **AMMs BIO-16** and **BIO-19** would also benefit SKR by improving culverts and their potential use for the species' movement between the eastern and western sides of Gilman Springs Road. Full replacement of 0.78 acre for permanent impacts on the SKR Core Reserve would be required at a minimum 1:1 (Mitigation Measure [**MM**] **BIO-18**), and restoration of 0.98 acre would occur onsite (**AMM BIO-17**). Replacement would occur adjacent to the existing reserve and requires an equivalency analysis to ensure habitat value is not lost. The replacement would occur in conjunction with mitigation requirements for other conservation lands and would ensure the project is consistent with the WRC MSHCP and SKR HCP.

It is Caltrans' determination, as the federal NEPA Lead Agency for the project, that the project ***may affect, but is not likely to adversely affect*** SKR. The mitigation measure identified for SKR (**MM BIO-18**) would ensure WRC MSHCP and SKR HCP compliance; this measure is described below in Section 2.4.3, *Avoidance, Minimization, and Mitigation Measures*. With the implementation of this measure and compliance with the WRC MSHCP, impacts on SKR would not be significant.

Non-listed Special-status Wildlife Species

Thirty non-listed, special-status animal species were determined to have suitable habitat present in the BSA: Crotch's bumblebee (*Bombus crotchi*), western spadefoot (*Spea hammondii*), Southern California legless lizard (*Anniella stebbinsi*), California glossy snake (*Arizona elegans occidentalis*), orange-throated whiptail (*Aspidoscelis hyperythra*), coastal whiptail (*Aspidoscelis tigris stejnegeri*), red-diamond rattlesnake (*Crotalus ruber*), coast horned lizard (*Phrynosoma blainvillii*), coast patch-nosed snake (*Salvadora hexalepis virgultea*), Cooper's hawk (*Accipiter cooperii*), Southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*), golden

eagle (*Aquila chrysaetos*), Bell's sage sparrow (*Artemisiospiza belli belli*), BUOW (*Athene cunicularia*), ferruginous hawk (*Buteo regalis*), white-tailed kite (*Elanus leucurus*), California horned lark (*Eremophila alpestris actia*), loggerhead shrike (*Lanius ludovicianus*), yellow warbler (*Setophaga petechia*), yellow-headed blackbird (*Xanthocephalus xanthocephalus*), pallid bat (*Antrozous pallidus*), northwestern San Diego pocket mouse (*Chaetodipus fallax fallax*), lesser long-nosed bat (*Leptonycteris yerbabuenae*), Townsend's big-eared bat (*Corynorhinus townsendii*), western mastiff bat (*Eumops perotis*), western yellow bat (*Lasiurus xanthinus*), San Diego black-tailed jackrabbit (*Lepus californicus bennettii*), San Diego desert woodrat (*Neotoma lepida intermedia*), pocketed free-tailed bat (*Nyctinomops femorosaccus*), southern grasshopper mouse (*Onychomys torridus ramona*), and American badger (*Taxidea taxus*). Of these, Cooper's hawk, tricolored blackbird, BUOW, white-tailed kite, California horned lark, loggerhead shrike, yellow warbler, northwestern San Diego pocket mouse, San Diego black-tailed jackrabbit, and San Diego desert woodrat were all found within or immediately outside of the BSA. All nine species that were detected during project surveys are covered for take under the WRC MSHCP, with BUOW having additional conditions for approved take coverage that are met by this project (**AMM BIO-21**).

Of the remaining 21 species that could potentially occur within the BSA, based on presence of suitable vegetation communities, nine are fully covered for take under the WRC MSHCP (orange-throated whiptail, coastal whiptail, red-diamond rattlesnake, coast horned lizard, western spadefoot, Southern California rufous-crowned sparrow, golden eagle, Bell's sage sparrow, and ferruginous hawk. The remaining 12 species (Crotch's bumble bee, Southern California legless lizard, California glossy snake, coast patch-nosed snake, yellow-headed blackbird, pallid bat, Townsend's big-eared bat, western mastiff bat, western yellow bat, pocketed free-tailed bat, southern grasshopper mouse, and American badger) are not covered. Although there is suitable habitat present in the BSA for these species, it is very low quality due to the highly degraded nature and adjacency to the existing roadway. No direct or indirect impacts from the project are anticipated for the non-covered, non-listed species with suitable habitat in the BSA. Any potential direct impacts on these species would be limited to a few individuals, and a preconstruction sweep prior to construction (**AMM BIO-14**) would remove any potential individuals from the construction area prior to the start of work. If an impact were to occur on a non-listed, non-Covered Species, the effects on a few individuals would be less than significant. The implementation of minimization measures and best management practices (BMPs) required under the WRC MSHCP would further reduce the potential impact on these non-covered, nonlisted species, and no further measures would be necessary.

Burrowing Owl

BUOW is a California Species of Special Concern and is not federally or State-listed. It is protected during the nesting season by the MBTA and under the California Fish and Game Code Sections 3503 and 3800. California Fish and Game Code Sections 2503, 3503.5, and 2800 also prohibit the take, possession, or destruction of birds, their nests, or eggs. The species is also a covered under the WRC MSHCP, but is subject to species-specific surveys under the WRC MSHCP (Volume I §6.2.3). All potentially suitable habitat to support BUOW within the WRC MSHCP BUOW Survey Area portions of the BSA was examined during the habitat assessments conducted in September 2017 and February 2018. Following the habitat assessment and burrow

survey, four subsequent protocol BUOW surveys were conducted in March 2018 within areas of the WRC MSHCP BUOW Survey Area portions of the BSA that contained suitable burrows or the potential to support BUOW. Foraging habitat was marginal throughout and generally dense and overgrown, but areas with open vegetation and line-of-sight coverage were prioritized. Very few burrows were found in the BSA, but a concentration of them were found on a vegetated mound between two agricultural fields. This mound also happened to be the only location in the BSA where BUOWs were found, and one owl was present in the same general location for the first three of the four protocol surveys. Because the owl could not be found during the final survey, it was assumed that it was a winter resident and that it had left the BSA for northern breeding grounds. The location where it was found would not experience any direct or indirect effects because it is just inside the 500-foot survey buffer and well away from any construction that would occur on Gilman Springs Road.

An additional habitat assessment and focused surveys following the four-visit WRC MSHCP protocol methods were conducted between June 12 and July 19, 2021, within a project expansion area along Bridge Street. Suitable habitat within the BSA of Bridge Street was also marginal. No BUOW or BUOW sign was found during the focused survey, and it was determined that BUOW are absent within the Bridge Street BSA.

Under the WRC MSHCP, BUOW preconstruction take avoidance surveys are required within 30 days prior to the start of ground disturbance if suitable habitat is present, regardless of any previous focused surveys. **AMM BIO-21**, which includes a preconstruction survey within the BSA, would be implemented within 30 days prior to the start of construction activities to ensure that no BUOWs are present in the BSA prior to construction. If any BUOWs are still present in the BSA prior to the initiation of construction, the project proponent would inform WRCRCA and CDFW immediately and would need to coordinate further with WRCRCA and CDFW, including the possibility of preparing a BUOW Protection and Relocation Plan if the owl(s) is/are within areas that could be affected directly or indirectly. Impacts would be considered ***less than significant***. In addition, **AMM BIO-21** would avoid or reduce any potential impacts on BUOW.

Los Angeles Pocket Mouse

Los Angeles pocket mouse is a California Species of Special Concern and is not federally or State-listed. Focused Los Angeles pocket mouse trapping was conducted over two separate trapping sessions in late September and mid-October 2017 in areas that the WRC MSHCP designated as small-mammal survey areas. The species was not found and is considered absent along Gilman Springs Road.

Additional trapping was conducted along Bridge Street in June 2021. Two trap lines—with the first line comprising 70 traps and the second 55 traps, totaling 125 sequentially numbered 12-inch Sherman live traps—were set approximately 10 meters apart in transects within the most suitable habitat directly adjacent to the proposed LOD, as well as within the 300-foot buffer. All traps used in this survey utilized doors that were modified to minimize potential risk of injury (e.g., tail lacerations or excisions) to kangaroo rats and other small mammals. Mixed birdseed was used as bait. Traps were set and baited from mid-afternoon to the early evening on June 7,

2021. Traps were routinely checked at dawn for captured mammals by ICF biologists Phil Richards (CDFW Scientific Collecting Permit 5625) and Vincent Baker and subsequently rebaited in the evening for five consecutive nights. All traps were removed from the project site on June 12, 2021.

Each captured animal was identified to the species level. For nontarget animals, such as house mice and deer mice, were identified to species and released without regularly documenting sex or other pertinent information. Mammals caught after the first night were marked with a small, blue dot on the belly fur to determine individuals recaptured throughout the remainder of the week. No Los Angeles pocket mice were captured, and the species is considered absent. One California Species of Special Concern, as designated by CDFW, was captured during the five nights of trapping: the San Diego pocket mouse (*Chaetodipus fallax*); however, this species is fully covered under the WRC MSHCP. Also, the project would adhere to WRC MSHCP AMMs. Other small mammal species captured during the survey included deer mouse (*Peromyscus maniculatus*) and house mouse (*Mus musculus*), both of which are common and have no conservation status. Impacts would be considered ***less than significant***.

Special-status Bats

Special-status bats with the potential to occur in the BSA are pallid bat, Townsend's big-eared bat, western mastiff bat, western yellow bat, pocketed free-tailed bat, and long-nosed bat. Roosting habitat is generally marginal within the BSA and mainly includes scattered large trees and buildings. Most culverts within the BSA are small (two to three feet in diameter or less) and most of these are blocked with sediment or debris. There is only one culvert in the BSA that is larger than five feet in diameter, and it did not contain bat roosting habitat. A focused bat habitat assessment was not conducted for this project, but no bats or their sign were observed within the BSA, despite extensive field surveys for other resources, including BUOW surveys that began before dawn. Due to a general lack of suitable roosting habitat, roosting bats are not expected to occur within the project footprint. Impacts would be considered ***less than significant***, and no additional measures would be required.

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

Less-than-Significant Impact with Mitigation.

The BSA for vegetation community and riparian/riverine resources mapping included a 300-foot buffer from the edge of proposed permanent disturbance limits determined from the preliminary engineering design (Figure 2.4-2). Four Natural Communities of Special Concern were identified in the BSA: Goodding's willow–red willow riparian woodland and forest, mule fat thickets, Emory's broom, and Baccharis Scrub. These were mapped in the field using the most appropriate communities listed by Sawyer et al. (2009). Mapping results are shown on Figure 2.4-2. The species composition of these vegetation communities generally matches that of the southern willow scrub, mulefat scrub, and coastal sage scrub communities, respectively, as described by Holland (1986). These communities are classified as sensitive by CDFW because they have

restricted range and cumulative losses throughout the region, and they potentially support a high number of endemic or listed sensitive plant and wildlife species. A total of 18.08 acres of these sensitive vegetation communities occur within the BSA.

Riparian vegetation occurs in small patches in earthen drainages along and under Gilman Springs Road. The riparian vegetation was mixed in with communities that traditionally would be considered riparian, with vegetation or land uses that generally would be considered upland or nonriparian, including developed, disturbed, and disturbed fourwing saltbush scrub. These communities are required to be analyzed under the WRC MSHCP, as further described below, under Sections 2.4(f), and include habitat identified under WRC MSHCP criteria as being either riparian or riverine.

Permanent impacts on riparian and riverine areas in either communities of concern or other non-sensitive communities may include the removal of existing vegetation and encroachment into the plant community. Temporary direct impacts include clearing and grubbing temporary construction work areas, incidental disturbances adjacent to construction areas (i.e., edge effects), equipment staging, and temporary construction access routes. In addition to direct loss of habitat, the direct removal of vegetation constituting a Natural Community of Special Concern would also result in a temporal loss of biological functions and values during project construction and the restoration phase. The temporary and permanent impacts on riparian and riverine habitats are based on conservative preliminary design estimates to allow for flexibility of temporary construction work areas during the final design phase and generally are identified as a worst-case scenario. Any change in impact areas during the design and permitting phase of the project would be provided to WRCRCA, CDFW, and USFWS.

Table 2-5, below, includes direct temporary and permanent impacts on all riparian and riverine habitats in the BSA.

Table 2-5. Impacts on Sensitive Natural Communities and Other Identified Riparian/Riverine Habitats within the BSA

Vegetation Communities[1]	Acreage of Impacts			
	Permanent		Temporary	
	Riparian	Riverine	Riparian	Riverine
Goodding's Willow – Red Willow Riparian Woodland and Forest	0.06	–	0.04	–
Developed	–	0.06	–	0.05
Disturbed	< 0.01	0.04	< 0.01	0.09
Disturbed Brittle Bush Scrub	–	< 0.01	–	0.02
Disturbed Fourwing Saltbush Scrub	<0.01	0.38	0.03	0.39
Fourwing Saltbush Scrub	0.01	–	<0.01	–
Tamarisk Thickets	–	0.02	–	<0.01
Emory's and Broom Baccharis Scrub	<0.01	0.01	<0.01	<0.01
Total[2]	0.08[2]	0.50	0.07	0.55

Source: Caltrans 2021a.

[1] Goodding's willow–red willow riparian woodland and forest and Emory's and baccharis scrub are considered to be Natural Communities of Concern. All other communities or land use types listed in this table are those for which riparian or riverine areas as identified under the WRC MSHCP would be affected.
[2] Due to rounding, the total sum is slightly different than what would be expected by adding the individual acreages above.

Indirect impacts may be caused by construction activities (e.g., dust, increased fire risk, chemical spills, sedimentation, littering) on riparian habitat adjacent to the project area, which could lead to temporary degradation of riparian habitat and water quality (if water is present at the time of construction). The use of construction equipment at the edge of the project area could damage adjacent native vegetation, if present.

Once the project is constructed, there could be continuing indirect impacts in the form of habitat degradation through air pollution, litter, and noise. However, the operation of the project would not be expected to be different substantially from current conditions because it would consist only of widening the shoulders and median, and therefore should not pose much of an increase, if any at all, in these effects from baseline conditions. Furthermore, human disturbance would not be expected to increase from current conditions. The wider roadbed would create a less-permeable surface by increasing the amount of paved roadbed and, thus, could increase surface flows into storm drain facilities and riparian/riverine features. Drainage design and water quality BMPs proposed and required as part of the project would reduce the amount of roadway pollutants entering riparian/riverine areas, as well as federal and State jurisdictional water features.

AMMs BIO-1 and **BIO-4** through **BIO-10** would be incorporated into the project in order to avoid and minimize impacts on riparian habitats and other sensitive vegetation communities, and **MM BIO-11** would compensate fully for any impacts on riparian or riverine habitats. Impacts would be considered less than significant with incorporation of **MM BIO-11**. Implementation of **AMMs BIO-1** and **BIO-4** through **BIO-10**, and consistency with the WRC MSHCP, would ensure that impacts on riparian habitat or other sensitive natural communities would be avoided or reduced. Therefore, there would be ***less-than-significant impacts with mitigation***.

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

Less-than-Significant Impact with Mitigation.

Jurisdictional delineations of aquatic resources were conducted on December 27, 2017, and February 8, 2018. The BSA for the jurisdictional delineation included a 100-foot buffer from the edge of the proposed permanent disturbance limits determined from the preliminary engineering design. For a few locations, an additional area beyond the buffer was reviewed for context. Wetland sample points were evaluated where a dominance of hydrophytic vegetation was present. There were 1.07 acres of USACE/RWQCB non-wetland waters of the United States, 0.06 acre of USACE/RWQCB wetland waters of the United States, 3.60 acres of CDFW streambed, and 0.84 acre of associated riparian vegetation mapped within the BSA (100-foot

buffer for jurisdictional waters). Temporary and permanent impacts on potential USACE, RWQCB, and CDFW jurisdiction are provided in Table 2-6.

No jurisdictional wetlands would be affected by the project. The temporary impacts on aquatic resources are based on conservative preliminary design estimates to allow for flexibility of temporary construction work areas during the final planning phase of the project. The actual temporary impacts on aquatic resources would be refined from those shown in during the permitting phase of the project and the most current federal and State regulatory policy. Figure 2.4-3 and Figure 2.4-4 show the locations and impacts on jurisdictional aquatic resources.

Table 2-6. Impacts on Potential USACE, RWQCB, and CDFW Jurisdictional Waters

	USACE		RWQCB		CDFW			
	Non-Wetland		Non-Wetland		Riparian		Unvegetated Streambed	
Feature	Permanent	Temporary	Permanent	Temporary	Permanent	Temporary	Permanent	Temporary
Feature 1	<0.01/44	0.03/313	<0.01/44	0.03/313	<0.010	0.010	0.02/40	0.06/313
Feature 2	< 0.01/153	< 0.01/135	< 0.01/153	< 0.01/135	0.06	0.04	0.01/153	0.01/135
Feature 3	<0.01/2	0.01/32	<0.01/2	0.01/32	0.01	0.02	0.04/2	0.32/32
Feature 4	–	–	–	–	–	–	–	–
Feature 5[2]	–	–	<0.01/80	<0.01/23	–	–	–	–
Feature 6	0.17/805	0.04/175	0.17/805	0.04/175	0	0.01	0.25/805	0.06/215
Feature 7	< 0.01/16	<0.01/6	< 0.01/16	<0.01/6	–	–	0.01/18	<0.01/6
Feature 7A	0.03/264	–	0.03/264	–	–	–	0.05/263	–
Feature 8[2]	–	–	<0.01/164	<0.01/62	–	–	–	–
Feature 9	0.01/152	<0.01/24	0.01/152	<0.01/24	–	–	0.03/152	<0.01/24
Feature 10	–	–			–	–	–	–
Feature 11	–	–			–	–	–	–
Feature 12[2]	–	–	<0.01/23	<0.01/37	–	–	–	–
Feature 13[2]	–	–	<0.01/8	<0.01/20	–	–	–	–
Feature 14	< 0.01/11	< 0.01/45	< 0.01/11	< 0.01/45	–	–	< 0.01/11	0.01/45
Feature 15	–	< 0.01/28	–	< 0.01/28	–	–	–	< 0.01/27
Feature 16	–	–	–	–	–	–	–	–
Feature 17	0.02/124	0.01/40	0.02/124	0.01/40	–	–	0.09/124	0.03/40
Feature 18	< 0.01/9	0.01/65	< 0.01/9	0.01/65	–	<0.01	< 0.01/9	0.01/65
Feature 19	< 0.01/15	0.02/70	< 0.01/15	0.02/70	–	–	<0.01/15	0.02/71
Feature 20	< 0.01/24	< 0.01/18	< 0.01/24	< 0.01/18	–	–	0.01/24	< 0.01/18
Feature 21	< 0.01/3	–	< 0.01/3	–	–	–	< 0.01/4	–
Feature 22	–	–	–	–	–	–	–	–
Total	0.26/1,623[3]	0.13/952[3]	0.27/1,898[3]	0.14/1,094[3]	0.08[3]	0.07[3]	0.50/1,611[3]	0.55/910[3]

Source: Caltrans 2021a.

[1] No USACE/RWQCB jurisdictional wetlands would be affected by the project.

[2] Features 5, 8, 12, and 13 are swales and are not considered USACE or CDFW jurisdictional as they lack an ordinary high water mark and top of bank. These features would only be potentially RWQCB jurisdictional.

[3] Due to rounding error, the total sum is slightly different than what would be expected by adding the individual acreages.

CDFW = California Department of Fish and Wildlife; RWQCB = Regional Water Quality Control Boards; USACE = U.S. Army Corps of Engineers

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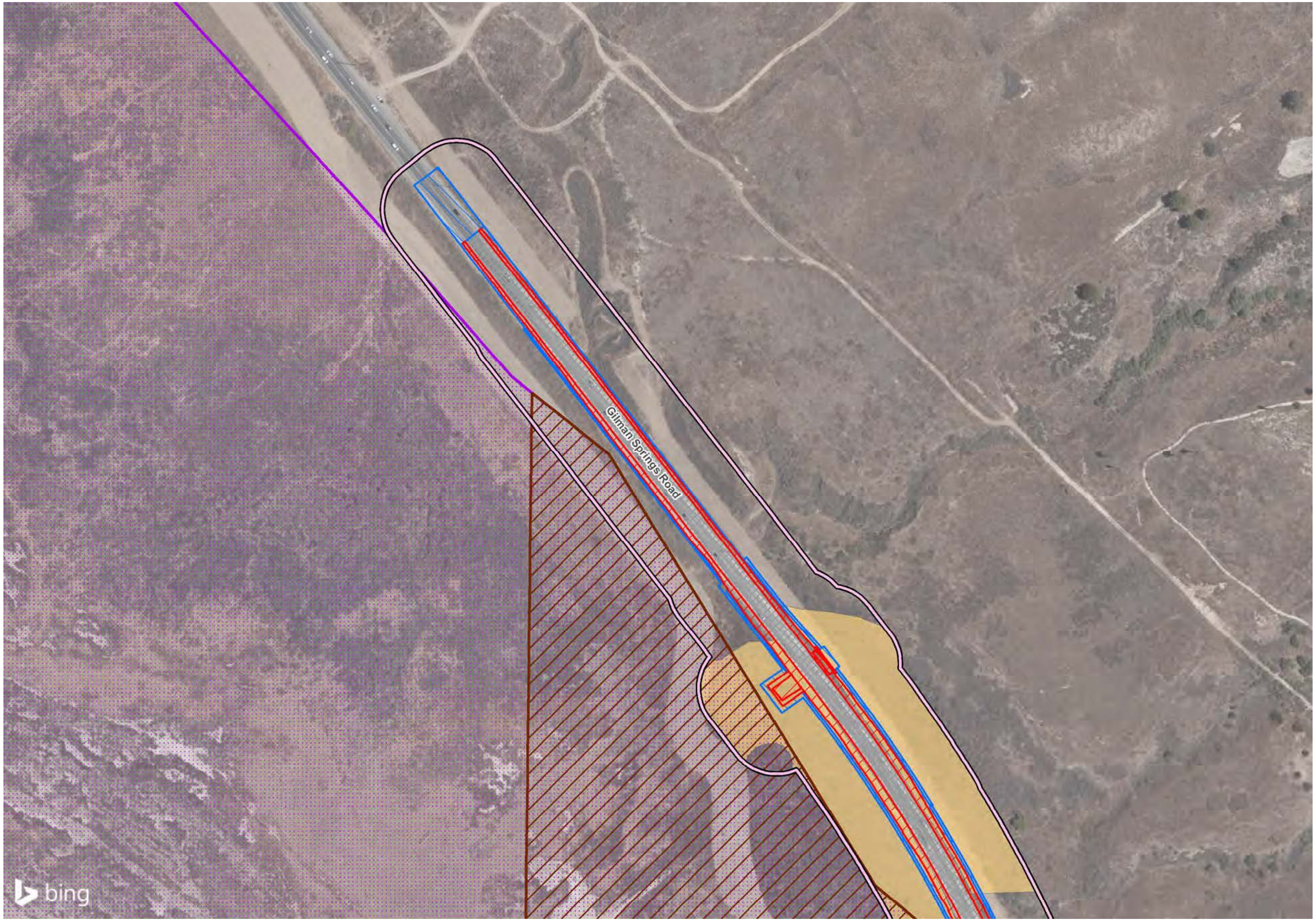

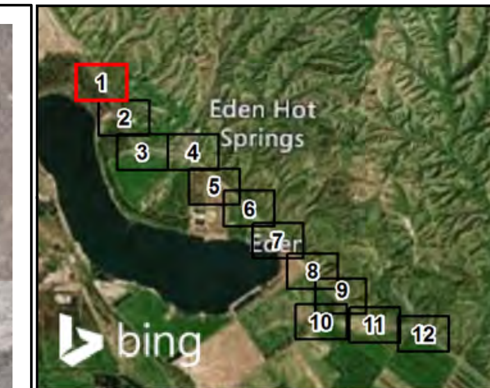

Legend

- Gilman Springs Rd Rare Plant Study Area (100-ft Buffer)
- Bridge St Rare Plant Study Area (100-ft Buffer)*
- Permanent Impacts
- Temporary Impacts
- Roadway
- Special Status Plants Suitable Habitat

Survey Areas

- Narrow Endemic Plants Survey Area
- Criteria Area Plant Survey

Survey Results

- Smooth Tarplant
- Smooth Tarplant

Note: Design changes following initial establishment of the Rare Plant Study Area and completion of field surveys resulted in the Rare Plant Study Area of Bridge Street which has not yet been mapped in the field

Source: RCTD (2021); ESRI (2017)

N

0 100 200 Feet
1:2,400

Figure 2.4-1 - Sheet 1
Rare Plant Surveys and Results
Gilman Springs Median and Shoulder Improvements Project

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Figure 2.4-1 - Sheet 2
Rare Plant Surveys and Results
Gilman Springs Median and Shoulder Improvements Project

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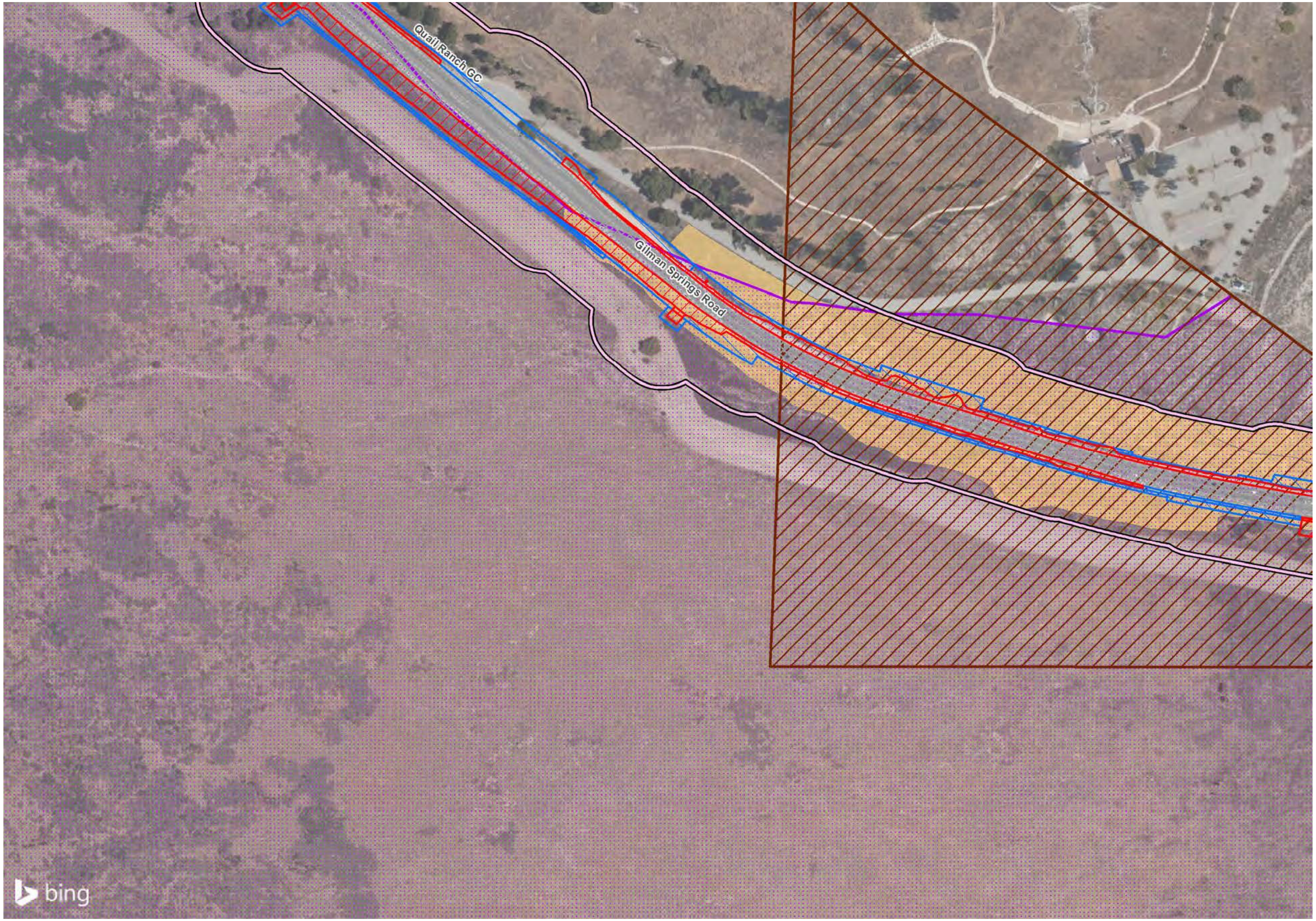

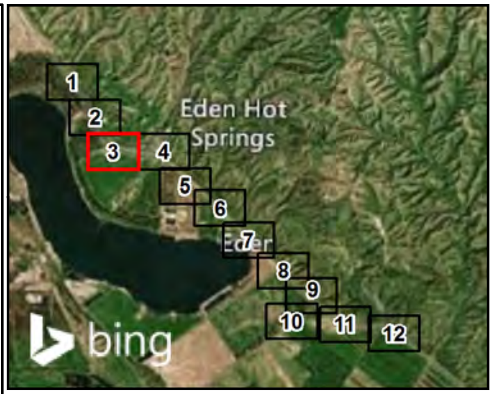

Legend

- Gilman Springs Rd Rare Plant Study Area (100-ft Buffer)
- Bridge St Rare Plant Study Area (100-ft Buffer)*
- Permanent Impacts
- Temporary Impacts
- Roadway
- Special Status Plants Suitable Habitat

Survey Areas

- Narrow Endemic Plants Survey Area
- Criteria Area Plant Survey

Survey Results

- Smooth Tarplant
- Smooth Tarplant

Note: Design changes following initial establishment of the Rare Plant Study Area and completion of field surveys resulted in the Rare Plant Study Area of Bridge Street which has not yet been mapped in the field

Source: RCTD (2021); ESRI (2017)

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Figure 2.4-1 - Sheet 3
Rare Plant Surveys and Results
Gilman Springs Median and Shoulder Improvements Project

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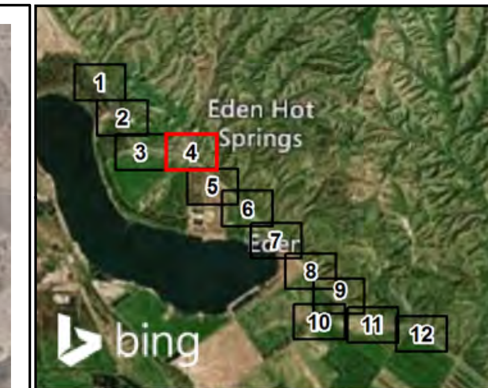

Legend

- Gilman Springs Rd Rare Plant Study Area (100-ft Buffer)
- Bridge St Rare Plant Study Area (100-ft Buffer)*
- Permanent Impacts
- Temporary Impacts
- Roadway
- Special Status Plants Suitable Habitat

Survey Areas

- Narrow Endemic Plants Survey Area
- Criteria Area Plant Survey

Survey Results

- Smooth Tarplant
- Smooth Tarplant

Note: Design changes following initial establishment of the Rare Plant Study Area and completion of field surveys resulted in the Rare Plant Study Area of Bridge Street which has not yet been mapped in the field

Source: RCTD (2021); ESRI (2017)

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Figure 2.4-1 - Sheet 4
Rare Plant Surveys and Results
Gilman Springs Median and Shoulder Improvements Project

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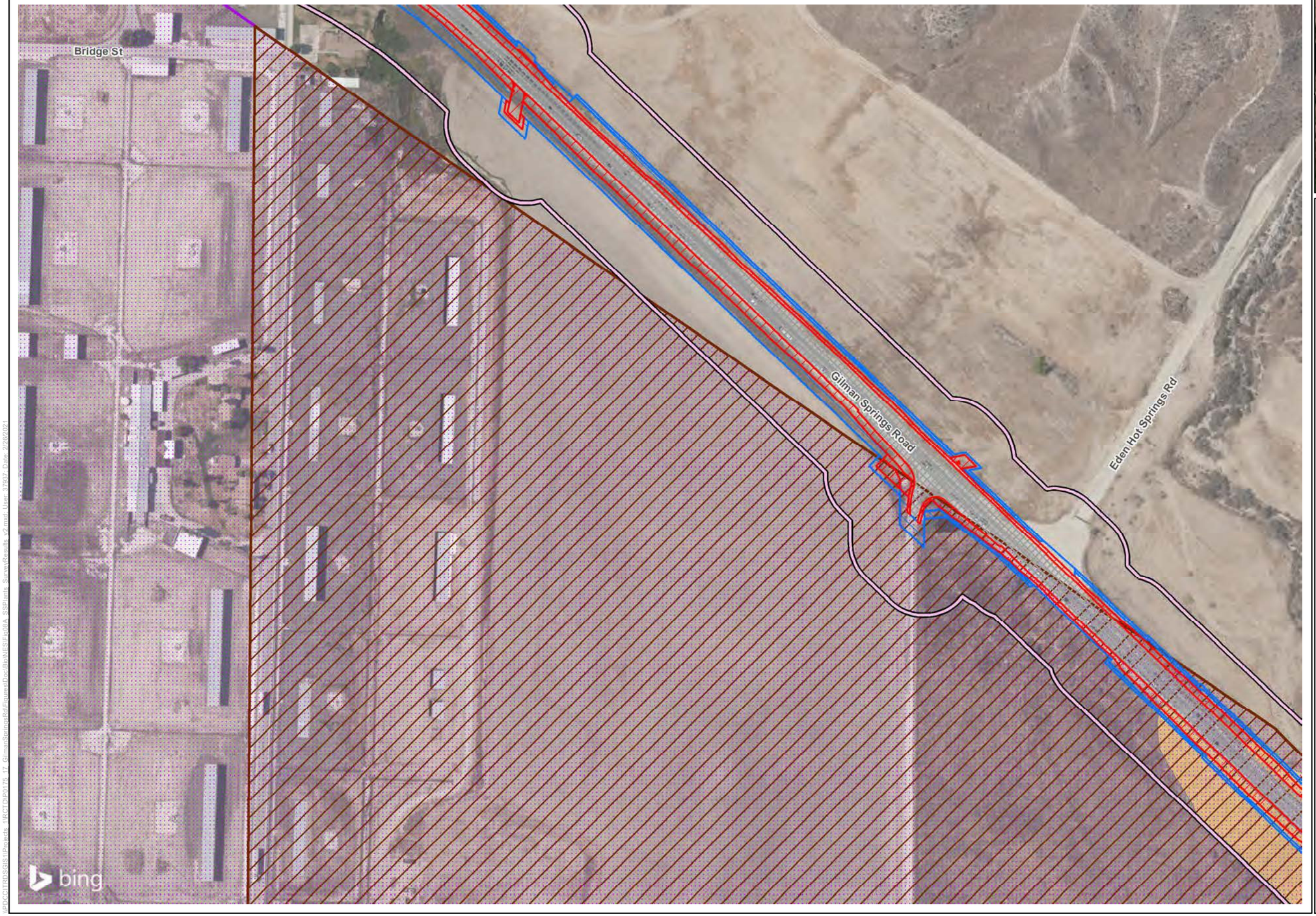

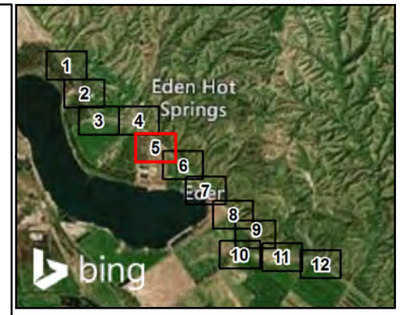

Legend

- Gilman Springs Rd Rare Plant Study Area (100-ft Buffer)
- Bridge St Rare Plant Study Area (100-ft Buffer)*
- Permanent Impacts
- Temporary Impacts
- Roadway
- Special Status Plants Suitable Habitat

Survey Areas

- Narrow Endemic Plants Survey Area
- Criteria Area Plant Survey

Survey Results

- Smooth Tarplant
- Smooth Tarplant

Note: Design changes following initial establishment of the Rare Plant Study Area and completion of field surveys resulted in the Rare Plant Study Area of Bridge Street which has not yet been mapped in the field

Source: RCTD (2021); ESRI (2017)

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Figure 2.4-1 - Sheet 5
Rare Plant Surveys and Results
Gilman Springs Median and Shoulder Improvements Project

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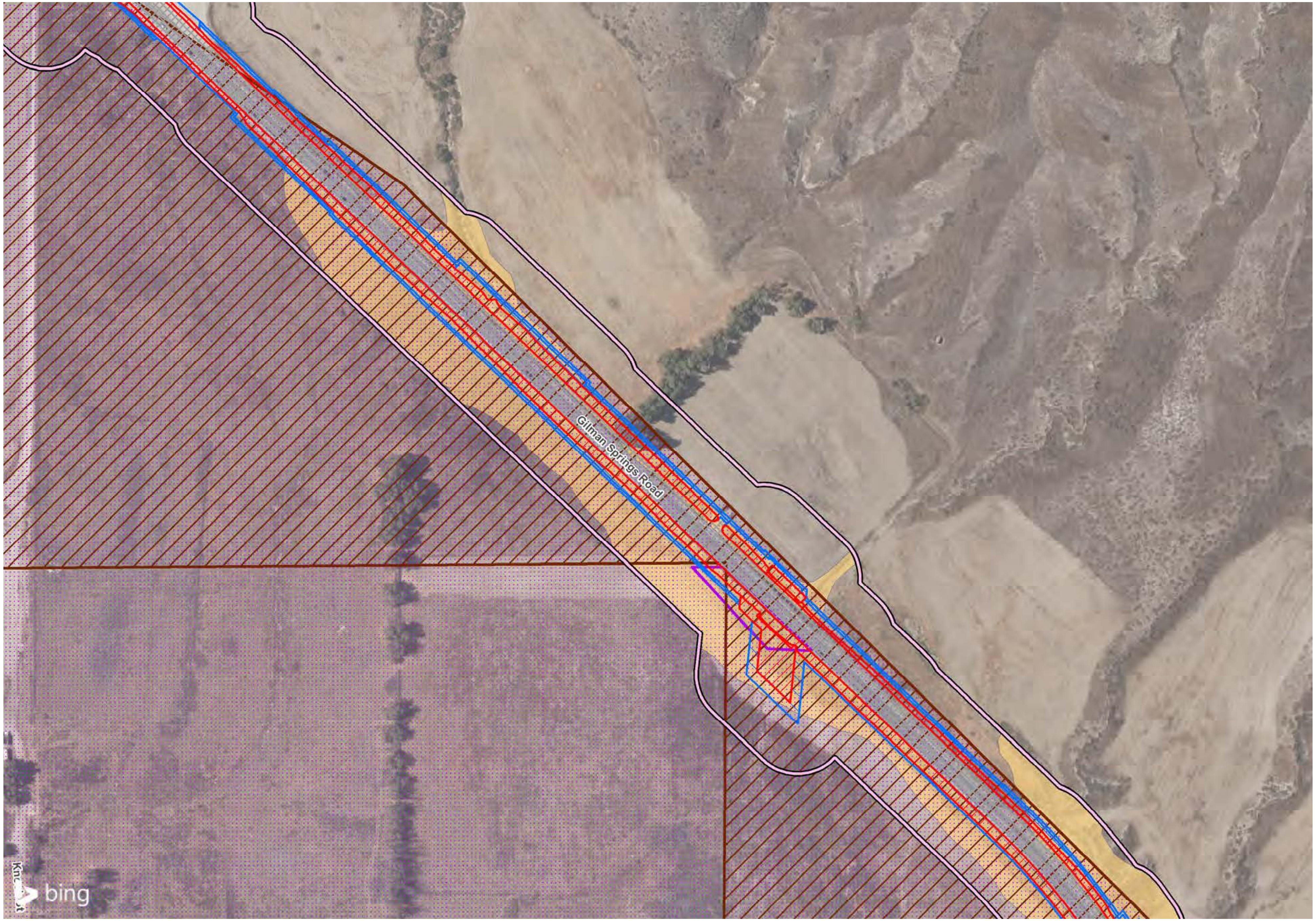

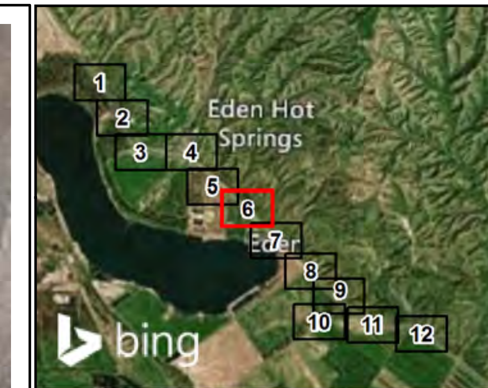

Legend

- Gilman Springs Rd Rare Plant Study Area (100-ft Buffer)
- Bridge St Rare Plant Study Area (100-ft Buffer)*
- Permanent Impacts
- Temporary Impacts
- Roadway
- Special Status Plants Suitable Habitat

Survey Areas

- Narrow Endemic Plants Survey Area
- Criteria Area Plant Survey

Survey Results

- Smooth Tarplant
- Smooth Tarplant

Note: Design changes following initial establishment of the Rare Plant Study Area and completion of field surveys resulted in the Rare Plant Study Area of Bridge Street which has not yet been mapped in the field

Source: RCTD (2021); ESRI (2017)

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Figure 2.4-1 - Sheet 6
Rare Plant Surveys and Results
Gilman Springs Median and Shoulder Improvements Project

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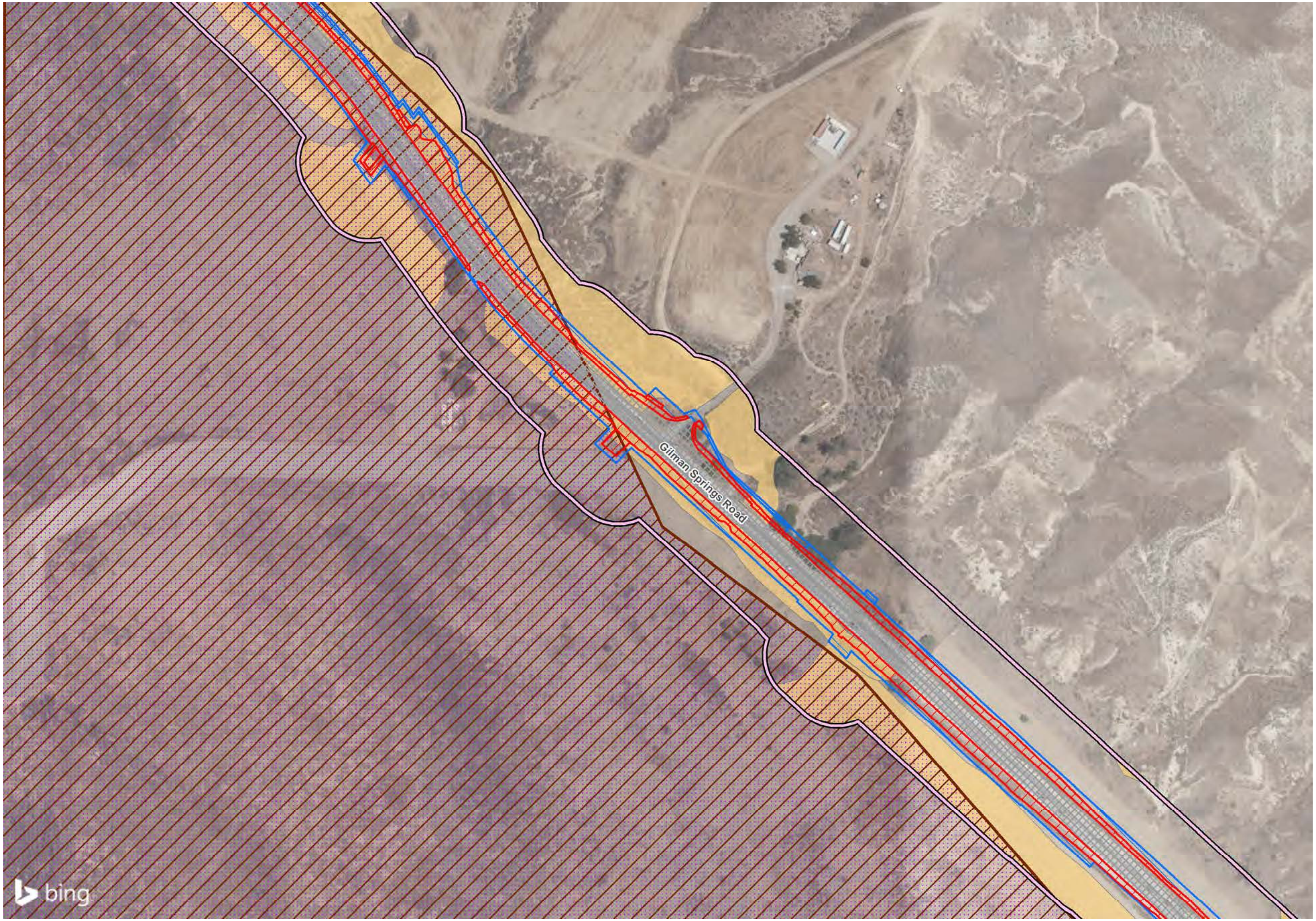

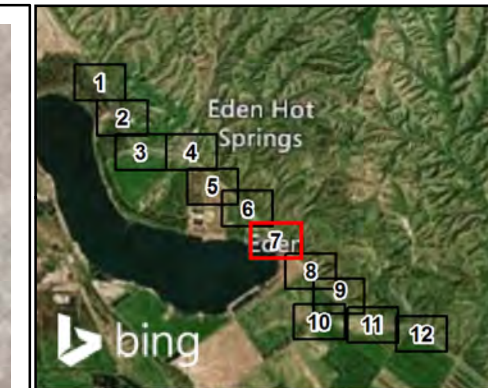

Legend

- Gilman Springs Rd Rare Plant Study Area (100-ft Buffer)
- Bridge St Rare Plant Study Area (100-ft Buffer)*
- Permanent Impacts
- Temporary Impacts
- Roadway
- Special Status Plants Suitable Habitat

Survey Areas

- Narrow Endemic Plants Survey Area
- Criteria Area Plant Survey

Survey Results

- Smooth Tarplant
- Smooth Tarplant

Note: Design changes following initial establishment of the Rare Plant Study Area and completion of field surveys resulted in the Rare Plant Study Area of Bridge Street which has not yet been mapped in the field

Source: RCTD (2021); ESRI (2017)

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Figure 2.4-1- Sheet 7
Rare Plant Surveys and Results
Gilman Springs Median and Shoulder Improvements Project

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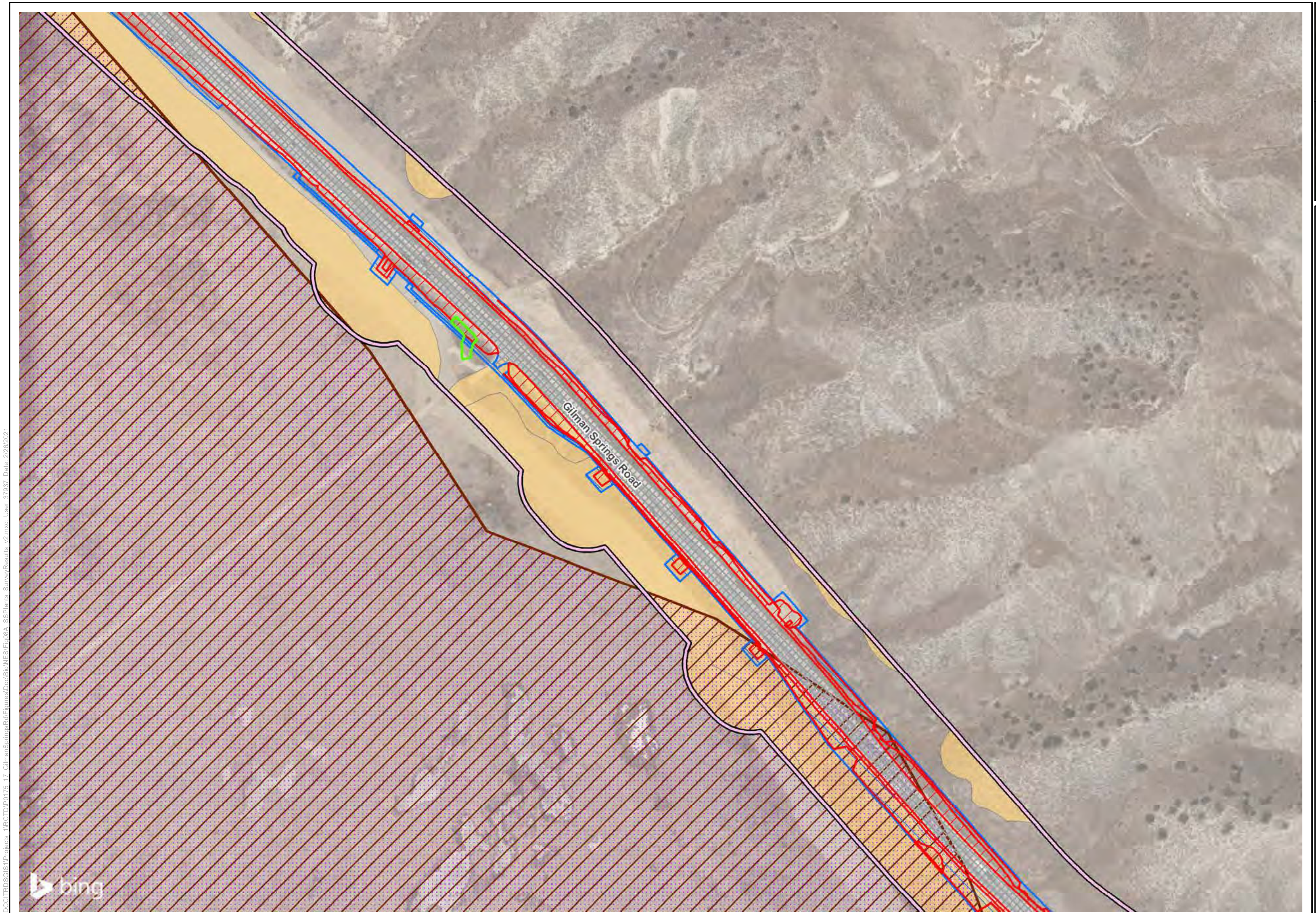

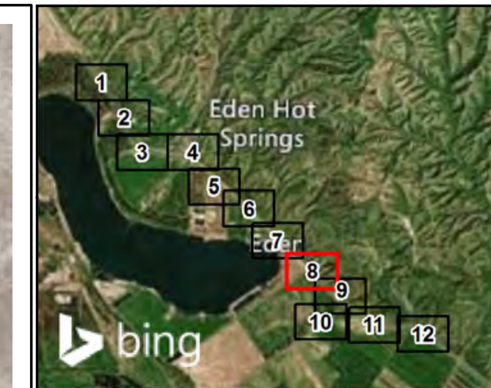

Legend

- Gilman Springs Rd Rare Plant Study Area (100-ft Buffer)
- Bridge St Rare Plant Study Area (100-ft Buffer)*
- Permanent Impacts
- Temporary Impacts
- Roadway
- Special Status Plants Suitable Habitat

Survey Areas

- Narrow Endemic Plants Survey Area
- Criteria Area Plant Survey

Survey Results

- Smooth Tarplant
- Smooth Tarplant

Note: Design changes following initial establishment of the Rare Plant Study Area and completion of field surveys resulted in the Rare Plant Study Area of Bridge Street which has not yet been mapped in the field

Source: RCTD (2021); ESRI (2017)

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Figure 2.4-1 - Sheet 8
Rare Plant Surveys and Results
Gilman Springs Median and Shoulder Improvements Project

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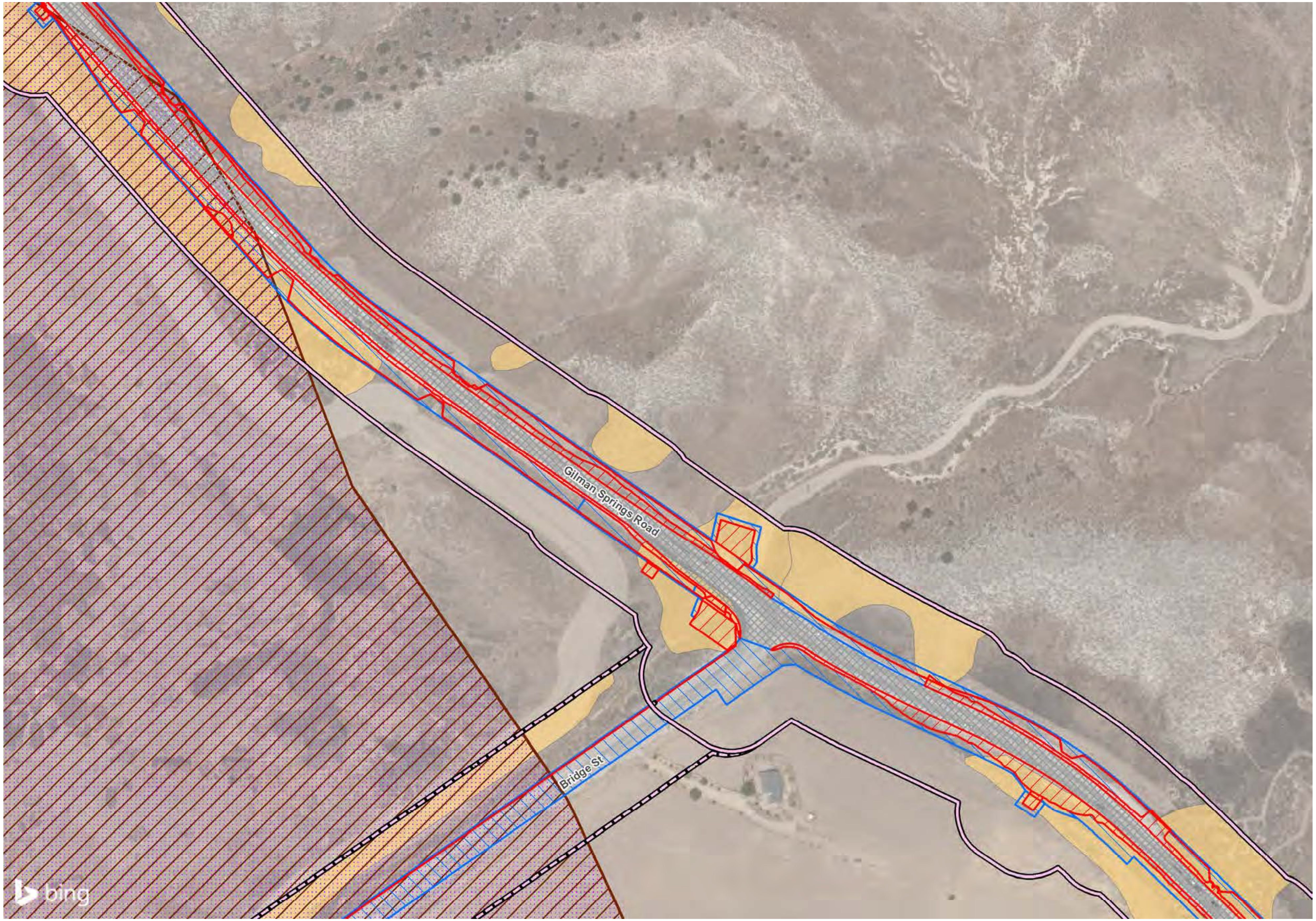

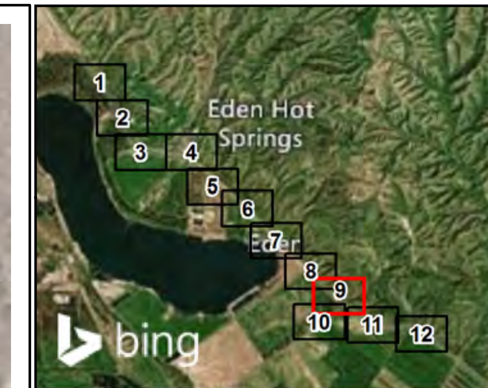

Legend

- Gilman Springs Rd Rare Plant Study Area (100-ft Buffer)
- Bridge St Rare Plant Study Area (100-ft Buffer)*
- Permanent Impacts
- Temporary Impacts
- Roadway
- Special Status Plants Suitable Habitat

Survey Areas

- Narrow Endemic Plants Survey Area
- Criteria Area Plant Survey

Survey Results

- Smooth Tarplant
- Smooth Tarplant

Note: Design changes following initial establishment of the Rare Plant Study Area and completion of field surveys resulted in the Rare Plant Study Area of Bridge Street which has not yet been mapped in the field

Source: RCTD (2021); ESRI (2017)

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Figure 2.4-1 - Sheet 9
Rare Plant Surveys and Results
Gilman Springs Median and Shoulder Improvements Project

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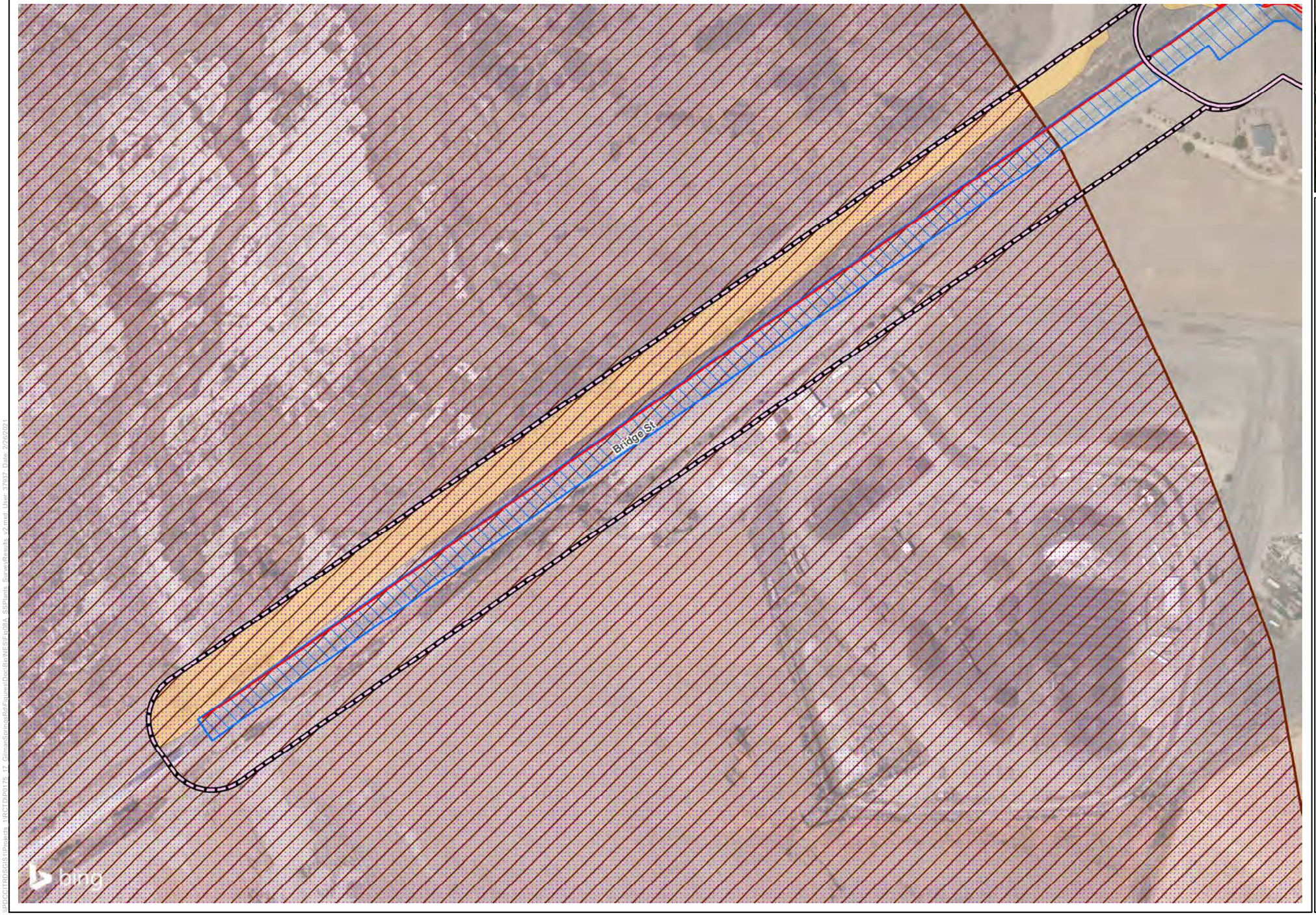

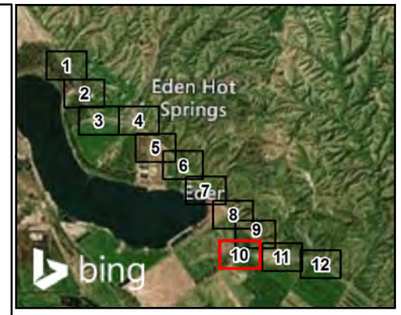

Legend

- Gilman Springs Rd Rare Plant Study Area (100-ft Buffer)
- Bridge St Rare Plant Study Area (100-ft Buffer)*
- Permanent Impacts
- Temporary Impacts
- Roadway
- Special Status Plants Suitable Habitat

Survey Areas

- Narrow Endemic Plants Survey Area
- Criteria Area Plant Survey

Survey Results

- Smooth Tarplant
- Smooth Tarplant

Note: Design changes following initial establishment of the Rare Plant Study Area and completion of field surveys resulted in the Rare Plant Study Area of Bridge Street which has not yet been mapped in the field

Source: RCTD (2021); ESRI (2017)

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Figure 2.4-1 - Sheet 10
Rare Plant Surveys and Results
Gilman Springs Median and Shoulder Improvements Project

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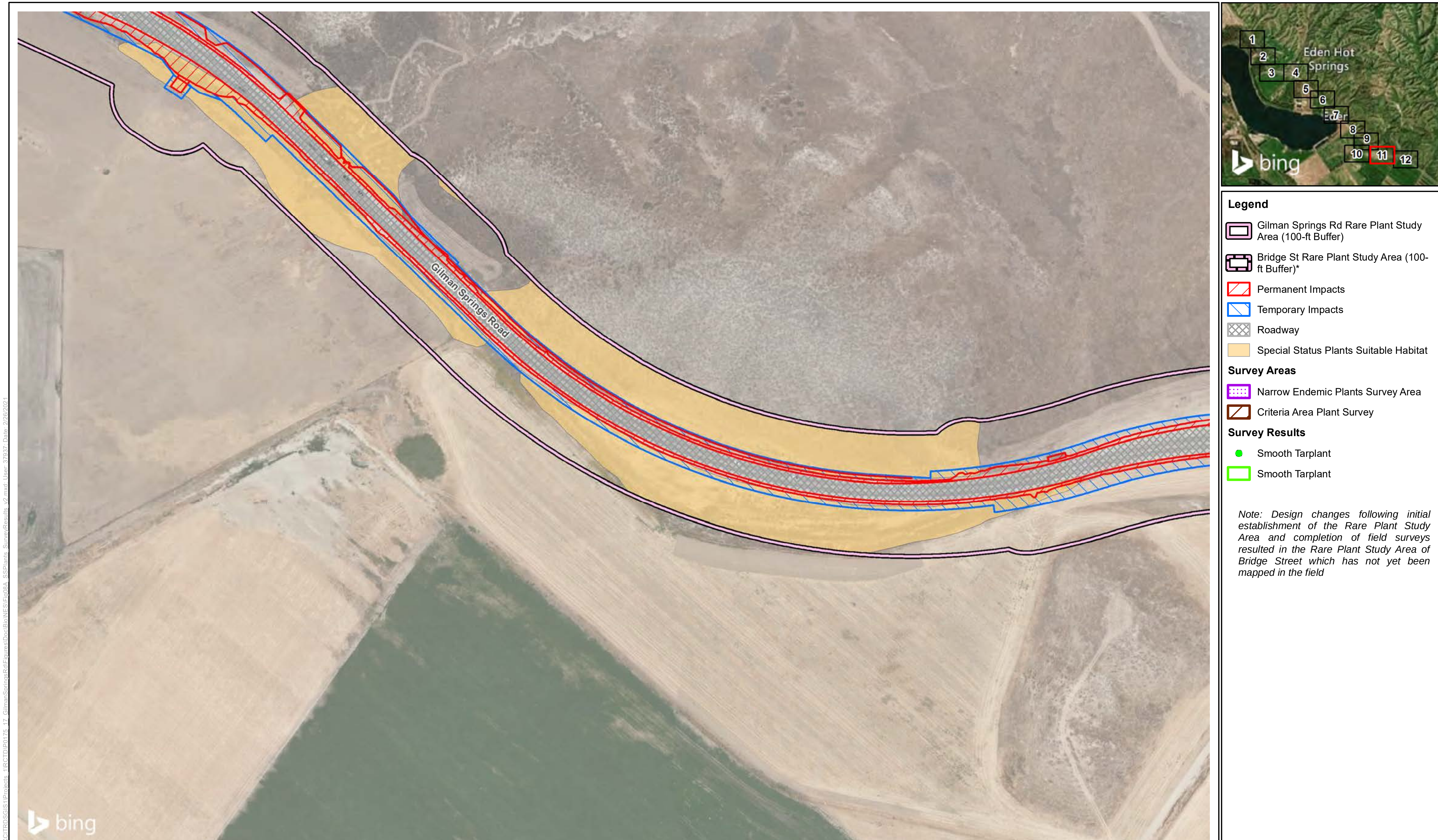

Legend

- Gilman Springs Rd Rare Plant Study Area (100-ft Buffer)
- Bridge St Rare Plant Study Area (100-ft Buffer)*
- Permanent Impacts
- Temporary Impacts
- Roadway
- Special Status Plants Suitable Habitat

Survey Areas

- Narrow Endemic Plants Survey Area
- Criteria Area Plant Survey

Survey Results

- Smooth Tarplant
- Smooth Tarplant

Note: Design changes following initial establishment of the Rare Plant Study Area and completion of field surveys resulted in the Rare Plant Study Area of Bridge Street which has not yet been mapped in the field

Source: RCTD (2021); ESRI (2017)

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Figure 2.4-1 - Sheet 11
Rare Plant Surveys and Results
Gilman Springs Median and Shoulder Improvements Project

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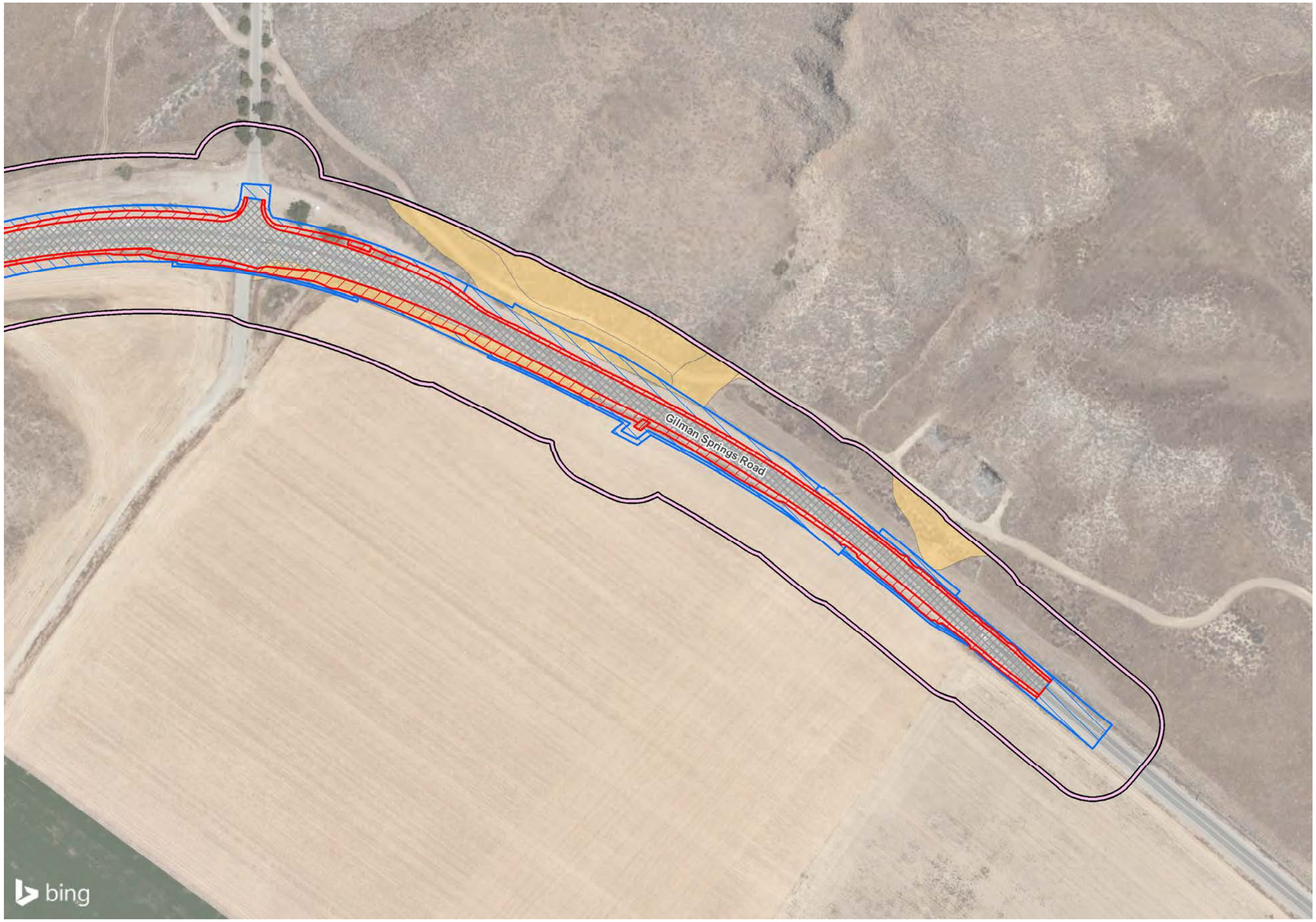

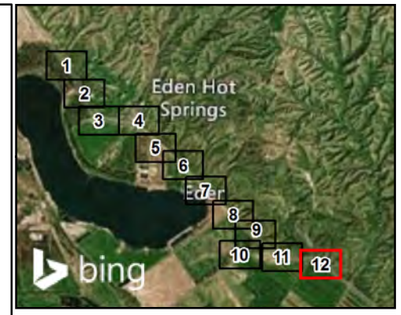

Legend

- Gilman Springs Rd Rare Plant Study Area (100-ft Buffer)
- Bridge St Rare Plant Study Area (100-ft Buffer)*
- Permanent Impacts
- Temporary Impacts
- Roadway
- Special Status Plants Suitable Habitat

Survey Areas

- Narrow Endemic Plants Survey Area
- Criteria Area Plant Survey

Survey Results

- Smooth Tarplant
- Smooth Tarplant

Note: Design changes following initial establishment of the Rare Plant Study Area and completion of field surveys resulted in the Rare Plant Study Area of Bridge Street which has not yet been mapped in the field

Source: RCTD (2021); ESRI (2017)

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0 100 200 Feet

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Figure 2.4-1 - Sheet 12
Rare Plant Surveys and Results
Gilman Springs Median and Shoulder Improvements Project

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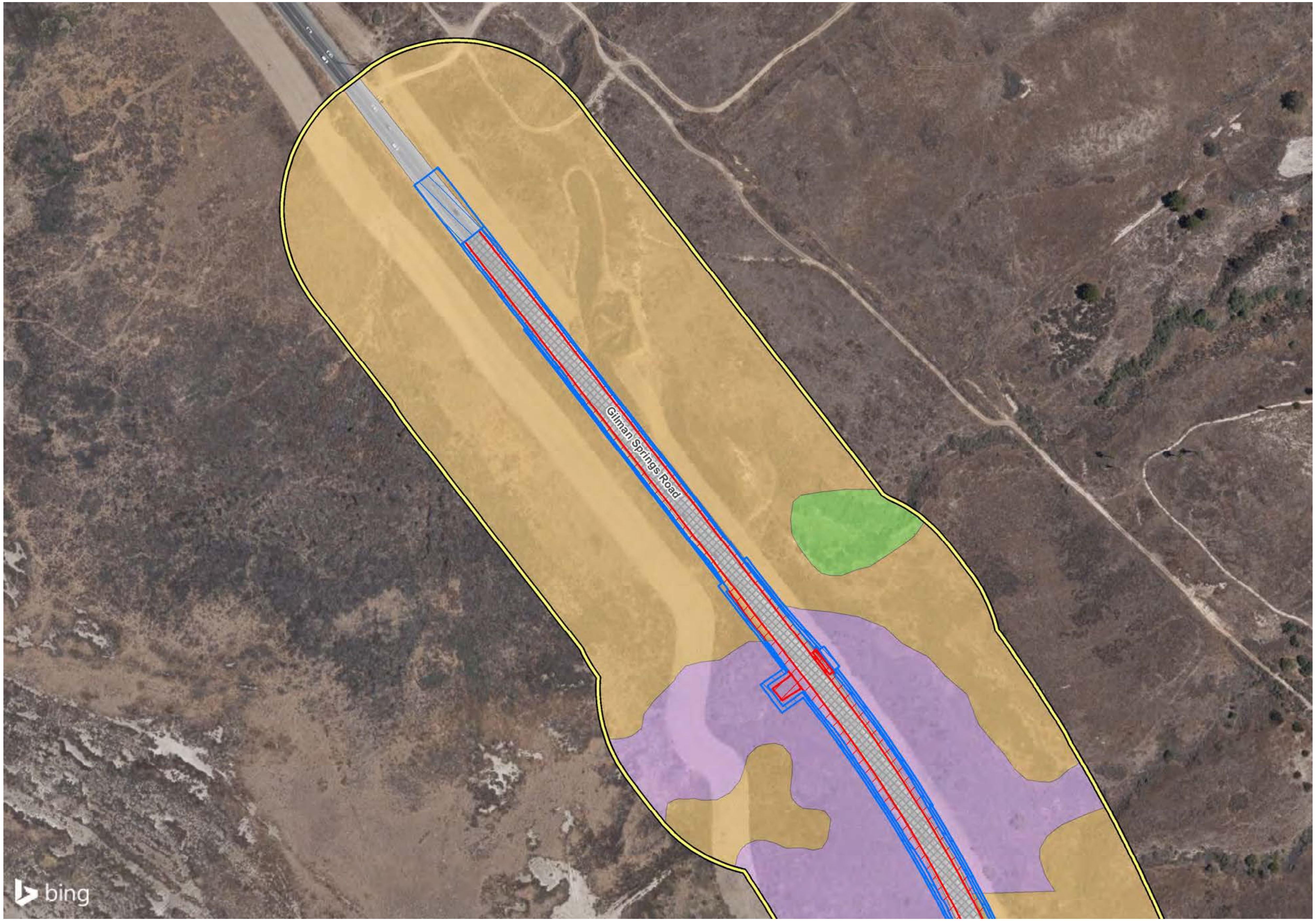

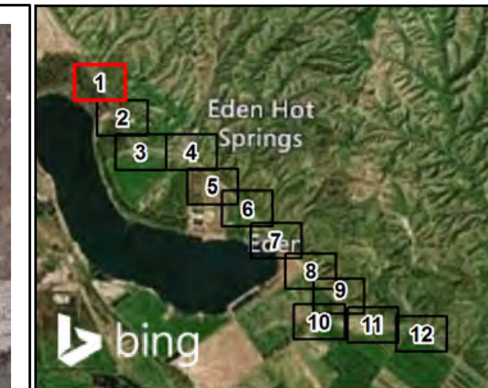

Legend

- Gilman Springs Rd BSA (300-ft Buffer)
- Bridge St BSA (300-ft Buffer)*
- Permanent Impacts
- Temporary Impacts
- Roadway

Vegetation

- Fourwing Saltbush Scrub
- Emory's and Broom Baccharis Scrub
- Disturbed Habitat
- Developed

**Note: Design changes following initial establishment of the BSA and completion of field surveys resulted in the BSA of Bridge Street not being mapped in the field. As such, areas within the Biological Study Area of Bridge Street were assessed via desktop analysis using aerial imagery (Google Earth 2021).*

Source: RCTD (2021); ESRI (2017)

N

0 100 200 Feet

1:2,400

Figure 2.4-2 - Sheet 1
Vegetation Communities and Impacts
Gilman Springs Median and Shoulder Improvements Project

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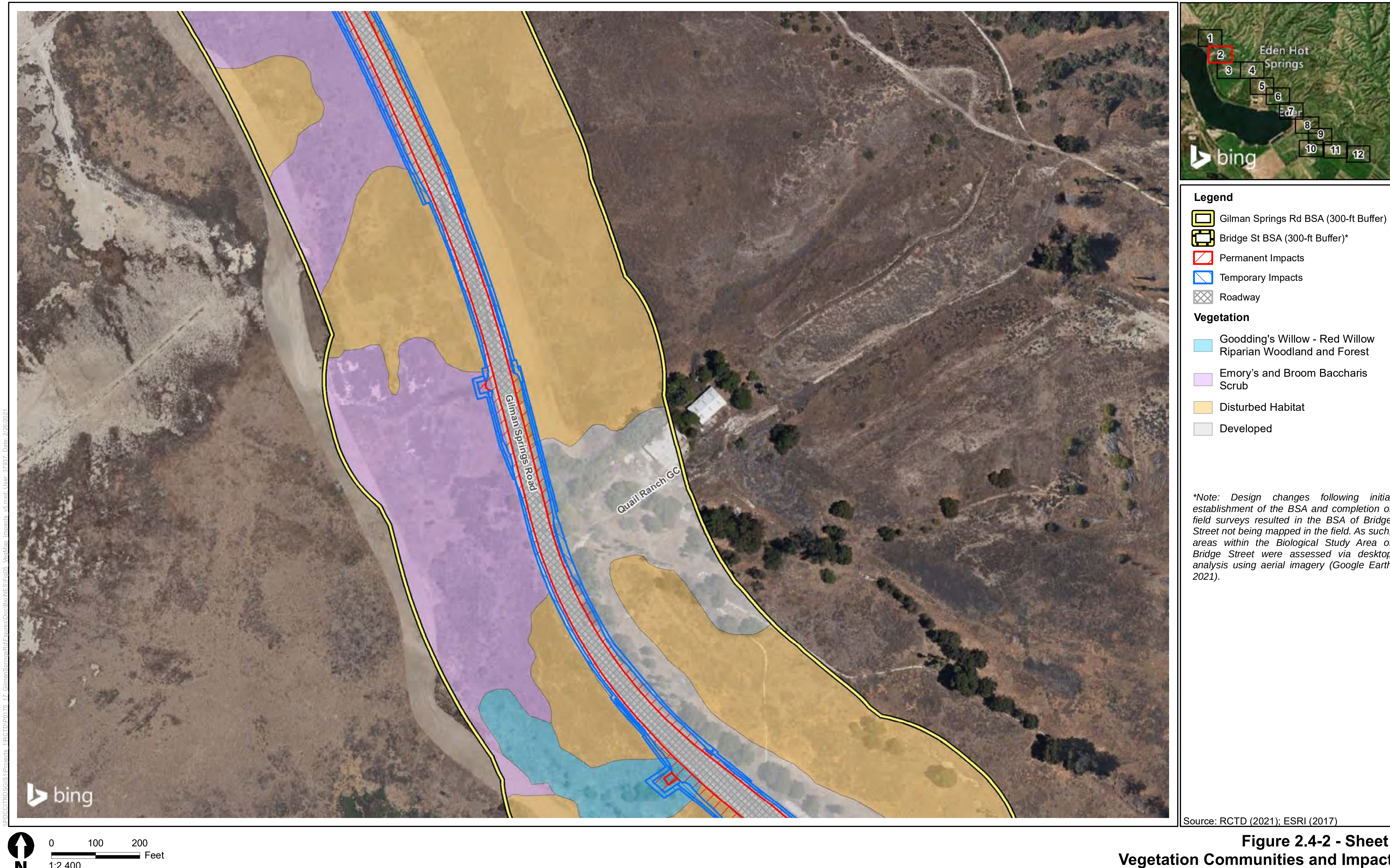

*Note: Design changes following initial establishment of the BSA and completion of field surveys resulted in the BSA of Bridge Street not being mapped in the field. As such, areas within the Biological Study Area of Bridge Street were assessed via desktop analysis using aerial imagery (Google Earth 2021).

Source: RCTD (2021); ESRI (2017)

Figure 2.4-2 - Sheet 2
Vegetation Communities and Impacts
Gilman Springs Median and Shoulder Improvements Project

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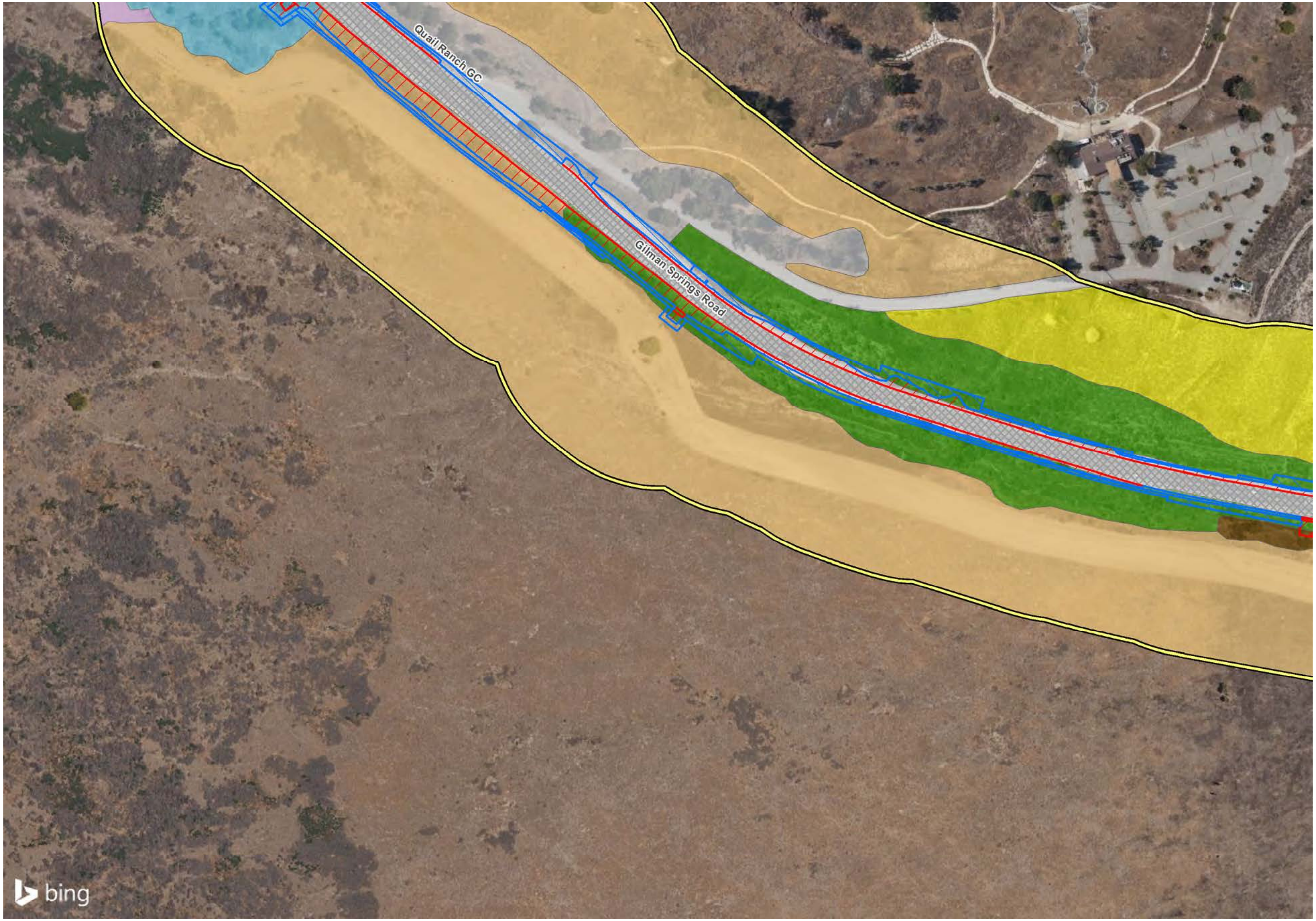

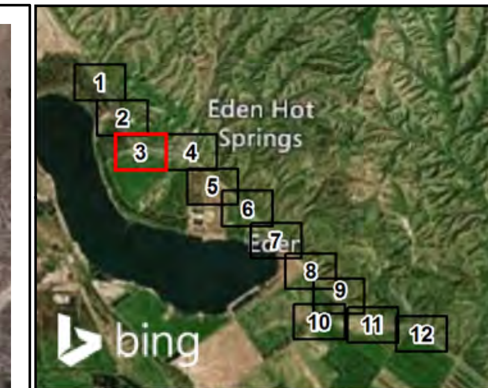

Legend

- Gilman Springs Rd BSA (300-ft Buffer)
- Bridge St BSA (300-ft Buffer)*
- Permanent Impacts
- Temporary Impacts
- Roadway

Vegetation

- Gooding's Willow - Red Willow Riparian Woodland and Forest
- Brittle Bush Scrub
- Desert-Willow - Smoketree Wash Woodland
- Disturbed Fourwing Saltbush Scrub
- Emory's and Broom Baccharis Scrub
- Disturbed Habitat
- Developed

**Note: Design changes following initial establishment of the BSA and completion of field surveys resulted in the BSA of Bridge Street not being mapped in the field. As such, areas within the Biological Study Area of Bridge Street were assessed via desktop analysis using aerial imagery (Google Earth 2021).*

Source: RCTD (2021); ESRI (2017)

N

0 100 200 Feet

1:2,400

Figure 2.4-2 - Sheet 3
Vegetation Communities and Impacts
Gilman Springs Median and Shoulder Improvements Project

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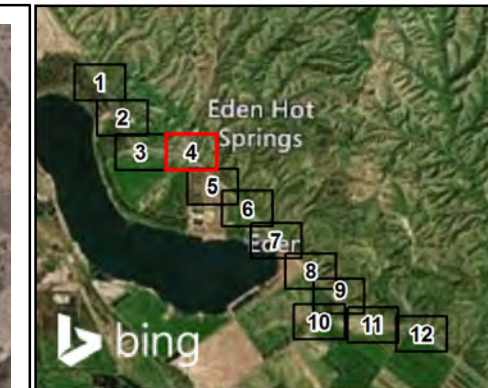

Legend

- Gilman Springs Rd BSA (300-ft Buffer)
- Bridge St BSA (300-ft Buffer)*
- Permanent Impacts
- Temporary Impacts
- Roadway

Vegetation

- Brittle Bush Scrub
- Desert-Willow - Smoketree Wash Woodland
- Fourwing Saltbush Scrub
- Disturbed Fourwing Saltbush Scrub
- Tamarisk Thickets
- Disturbed Habitat
- Developed

**Note: Design changes following initial establishment of the BSA and completion of field surveys resulted in the BSA of Bridge Street not being mapped in the field. As such, areas within the Biological Study Area of Bridge Street were assessed via desktop analysis using aerial imagery (Google Earth 2021).*

Source: RCTD (2021); ESRI (2017)

N

0 100 200 Feet

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Figure 2.4-2 - Sheet 4
Vegetation Communities and Impacts
Gilman Springs Median and Shoulder Improvements Project

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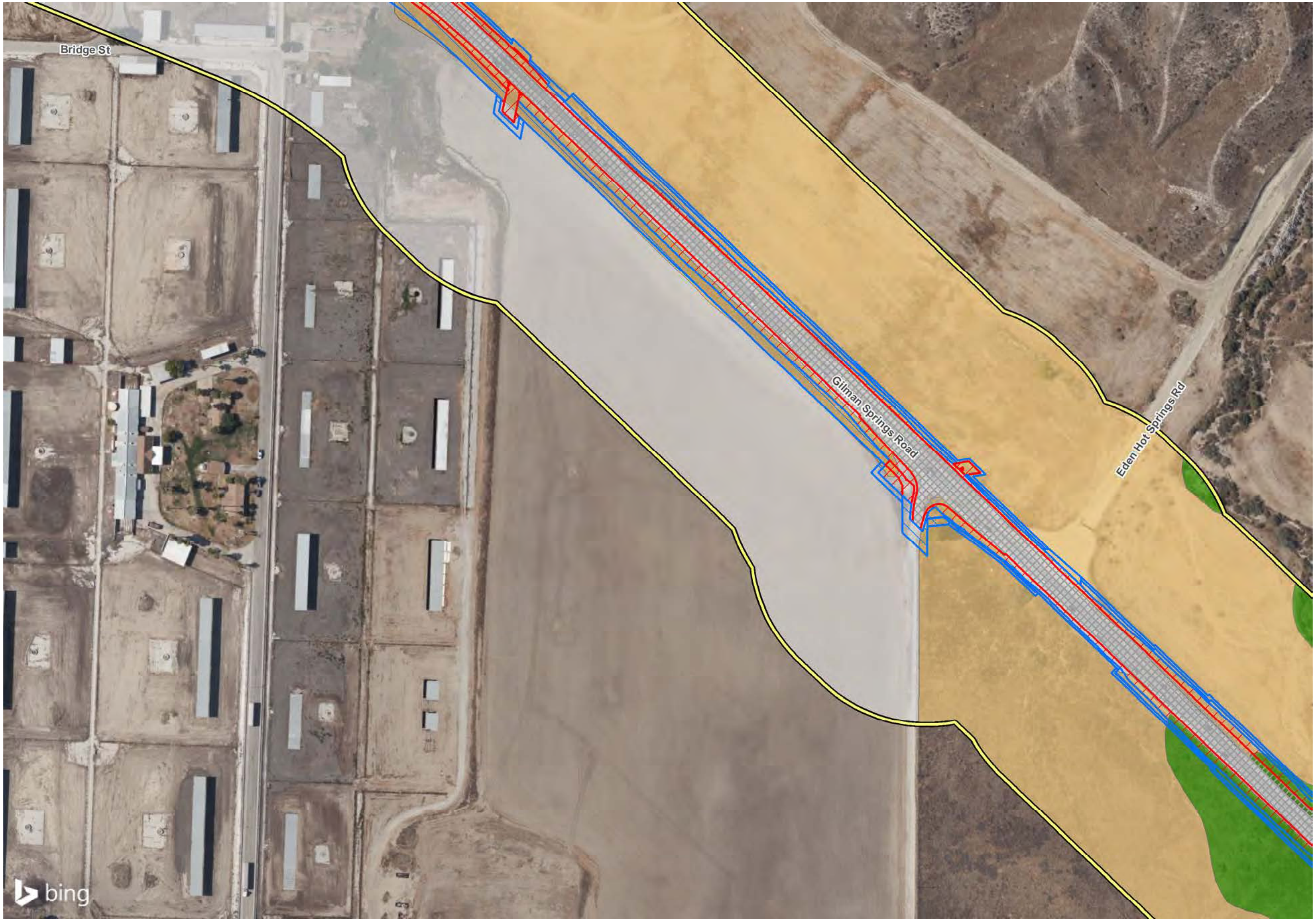

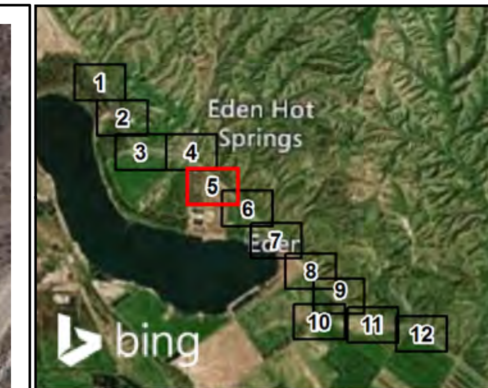

Legend

- Gilman Springs Rd BSA (300-ft Buffer)
- Bridge St BSA (300-ft Buffer)*
- Permanent Impacts
- Temporary Impacts
- Roadway

Vegetation

- Disturbed Fourwing Saltbush Scrub
- Disturbed Habitat
- Developed

**Note: Design changes following initial establishment of the BSA and completion of field surveys resulted in the BSA of Bridge Street not being mapped in the field. As such, areas within the Biological Study Area of Bridge Street were assessed via desktop analysis using aerial imagery (Google Earth 2021).*

Source: RCTD (2021); ESRI (2017)

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0 100 200 Feet

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Figure 2.4-2 - Sheet 5
Vegetation Communities and Impacts
Gilman Springs Median and Shoulder Improvements Project

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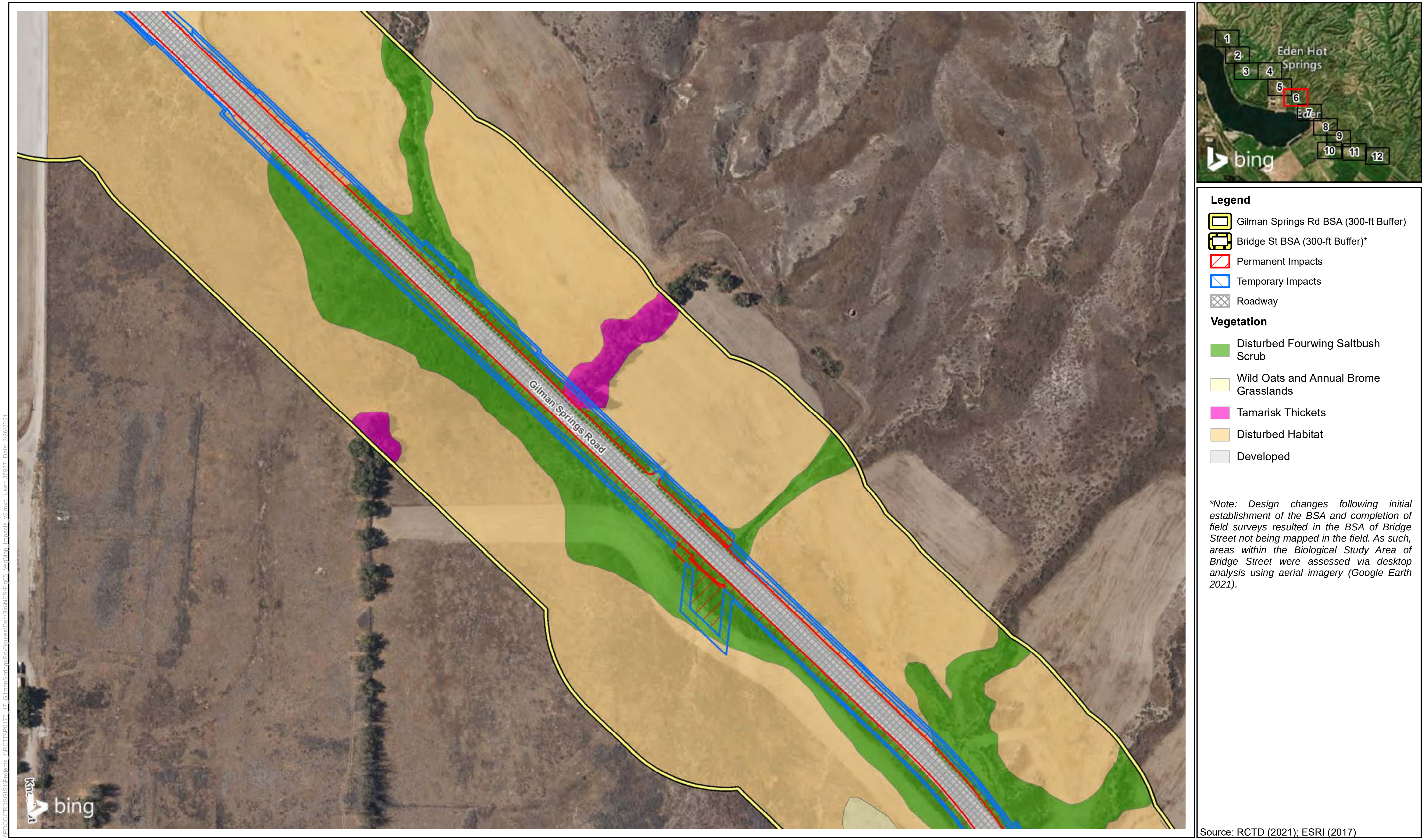

N

0 100 200 Feet

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Figure 2.4-2 - Sheet 6
Vegetation Communities and Impacts
Gilman Springs Median and Shoulder Improvements Project

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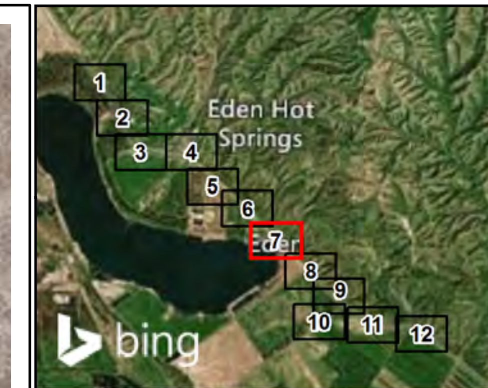

Legend

- Gilman Springs Rd BSA (300-ft Buffer)
- Bridge St BSA (300-ft Buffer)*
- Permanent Impacts
- Temporary Impacts
- Roadway

Vegetation

- Disturbed Fourwing Saltbush Scrub
- Mule Fat Thickets
- Wild Oats and Annual Brome Grasslands
- Tamarisk Thickets
- Disturbed Habitat
- Developed

**Note: Design changes following initial establishment of the BSA and completion of field surveys resulted in the BSA of Bridge Street not being mapped in the field. As such, areas within the Biological Study Area of Bridge Street were assessed via desktop analysis using aerial imagery (Google Earth 2021).*

Source: RCTD (2021); ESRI (2017)

N

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Figure 2.4-2 - Sheet 7
Vegetation Communities and Impacts
Gilman Springs Median and Shoulder Improvements Project

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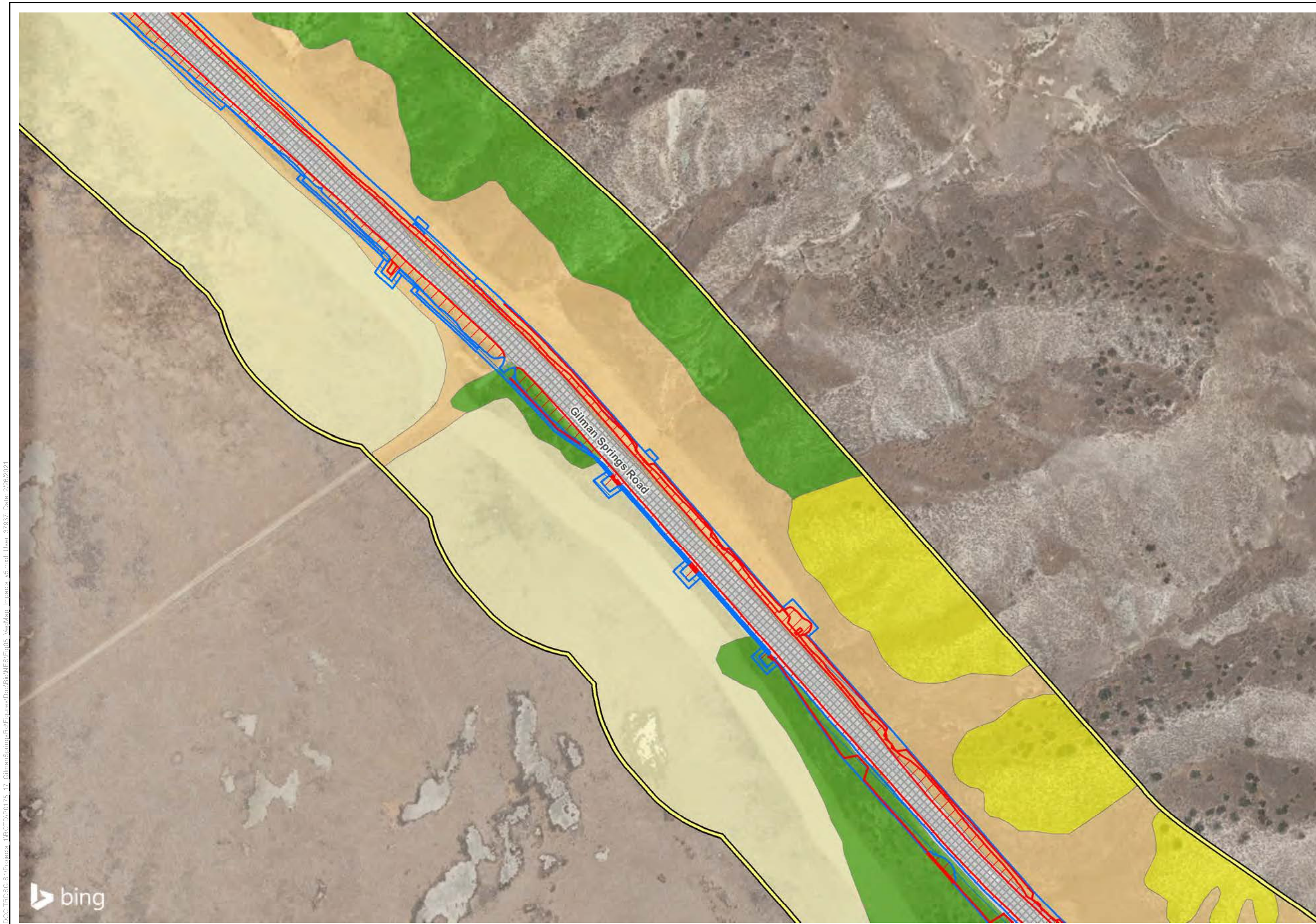

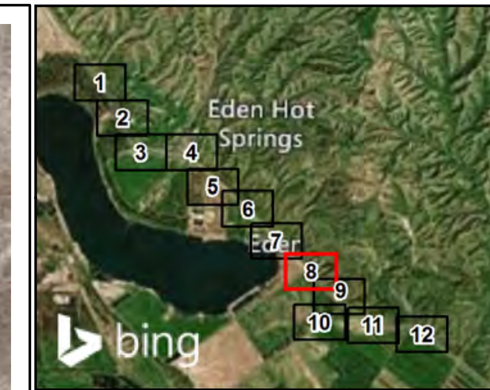

Legend

- Gilman Springs Rd BSA (300-ft Buffer)
- Bridge St BSA (300-ft Buffer)*
- Permanent Impacts
- Temporary Impacts
- Roadway

Vegetation

- Brittle Bush Scrub
- Disturbed Fourwing Saltbush Scrub
- Wild Oats and Annual Brome Grasslands
- Disturbed Habitat
- Developed

**Note: Design changes following initial establishment of the BSA and completion of field surveys resulted in the BSA of Bridge Street not being mapped in the field. As such, areas within the Biological Study Area of Bridge Street were assessed via desktop analysis using aerial imagery (Google Earth 2021).*

Source: RCTD (2021); ESRI (2017)

N

0 100 200 Feet

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Figure 2.4-2 - Sheet 8
Vegetation Communities and Impacts
Gilman Springs Median and Shoulder Improvements Project

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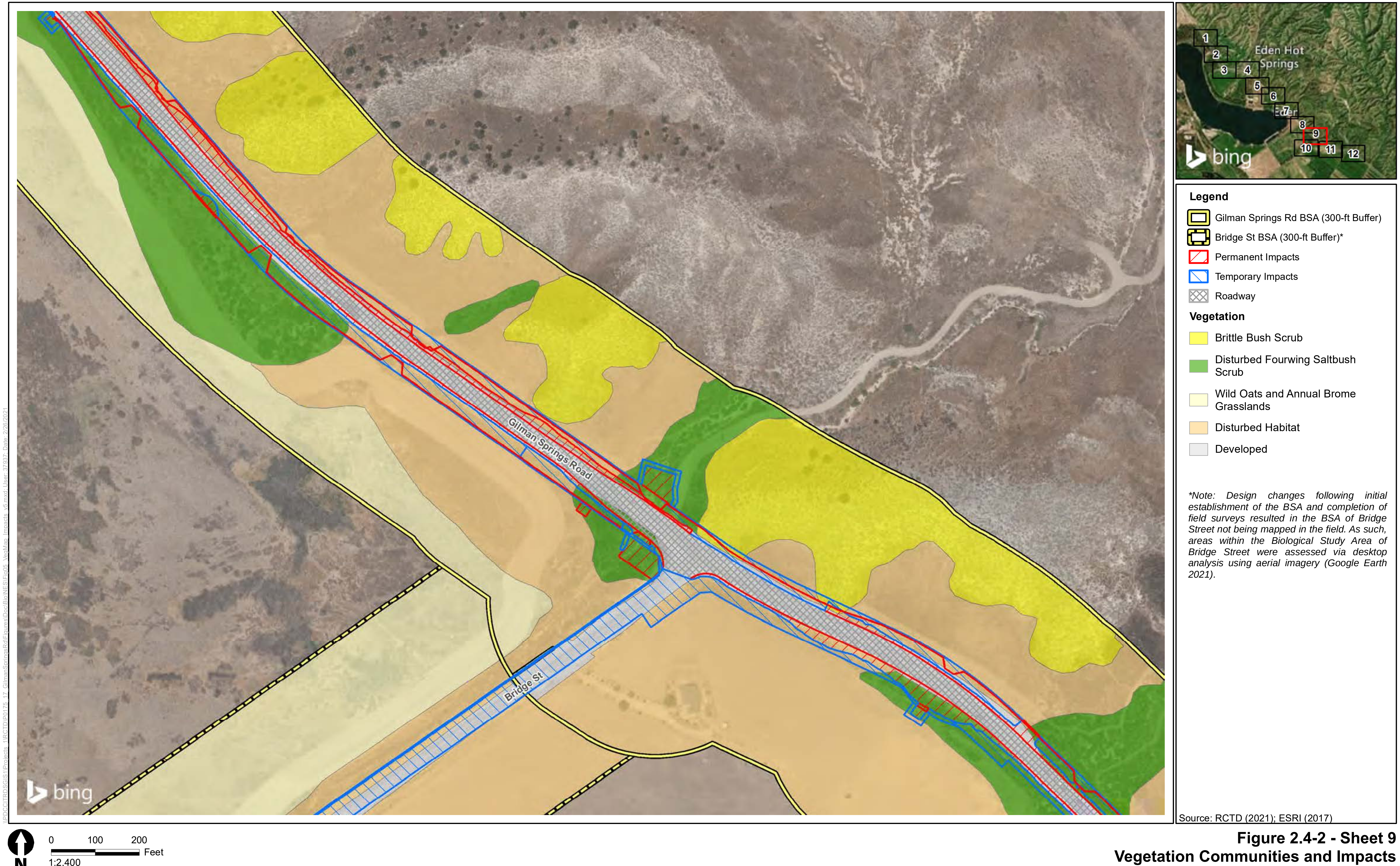

Figure 2.4-2 - Sheet 9
Vegetation Communities and Impacts
Gilman Springs Median and Shoulder Improvements Project

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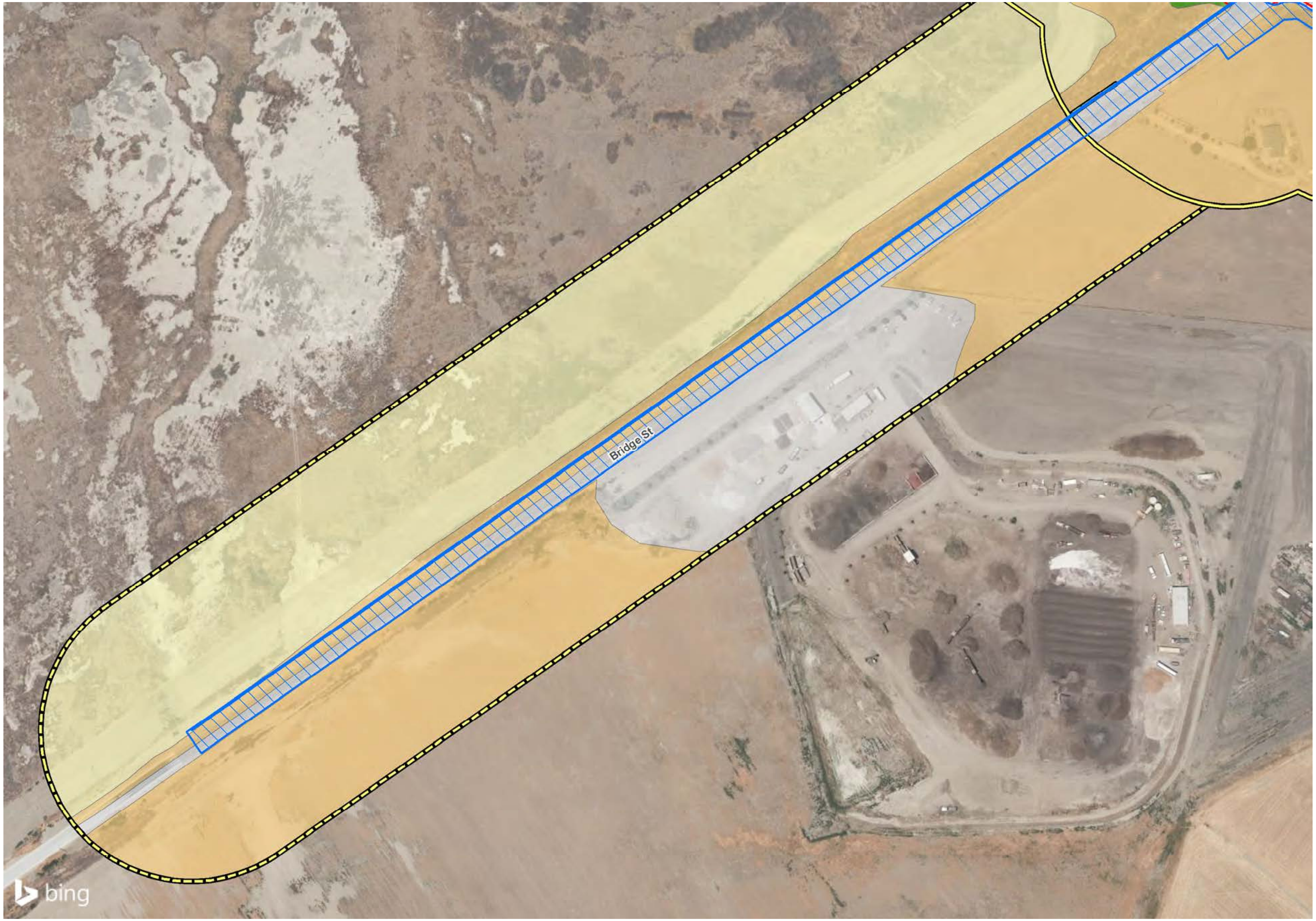

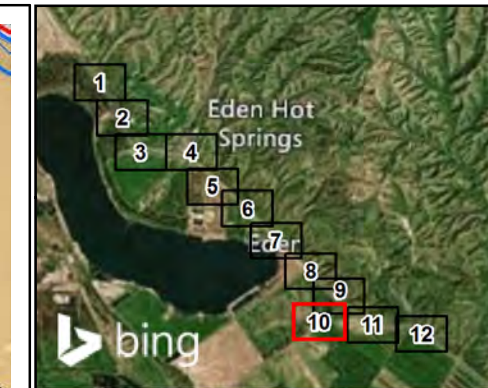

Legend

- Gilman Springs Rd BSA (300-ft Buffer)
- Bridge St BSA (300-ft Buffer)*
- Permanent Impacts
- Temporary Impacts
- Roadway

Vegetation

- Disturbed Fourwing Saltbush Scrub
- Wild Oats and Annual Brome Grasslands
- Disturbed Habitat
- Developed

**Note: Design changes following initial establishment of the BSA and completion of field surveys resulted in the BSA of Bridge Street not being mapped in the field. As such, areas within the Biological Study Area of Bridge Street were assessed via desktop analysis using aerial imagery (Google Earth 2021).*

Source: RCTD (2021); ESRI (2017)

N

0 100 200 Feet

1:2,400

Figure 2.4-2 - Sheet 10
Vegetation Communities and Impacts
Gilman Springs Median and Shoulder Improvements Project

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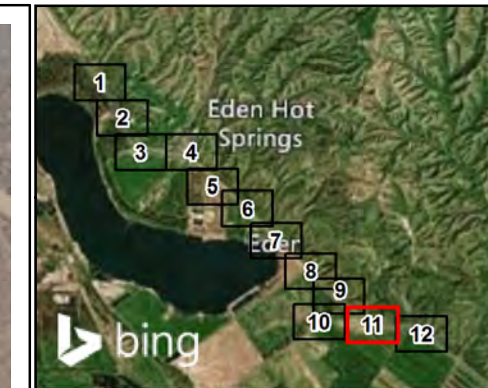

Legend

- Gilman Springs Rd BSA (300-ft Buffer)
- Bridge St BSA (300-ft Buffer)*
- Permanent Impacts
- Temporary Impacts
- Roadway

Vegetation

- Brittle Bush Scrub
- Disturbed Brittle Bush Scrub
- Disturbed Fourwing Saltbush Scrub
- Disturbed Habitat
- Developed

**Note: Design changes following initial establishment of the BSA and completion of field surveys resulted in the BSA of Bridge Street not being mapped in the field. As such, areas within the Biological Study Area of Bridge Street were assessed via desktop analysis using aerial imagery (Google Earth 2021).*

Source: RCTD (2021); ESRI (2017)

N

0 100 200 Feet

1:2,400

Figure 2.4-2 - Sheet 11
Vegetation Communities and Impacts
Gilman Springs Median and Shoulder Improvements Project

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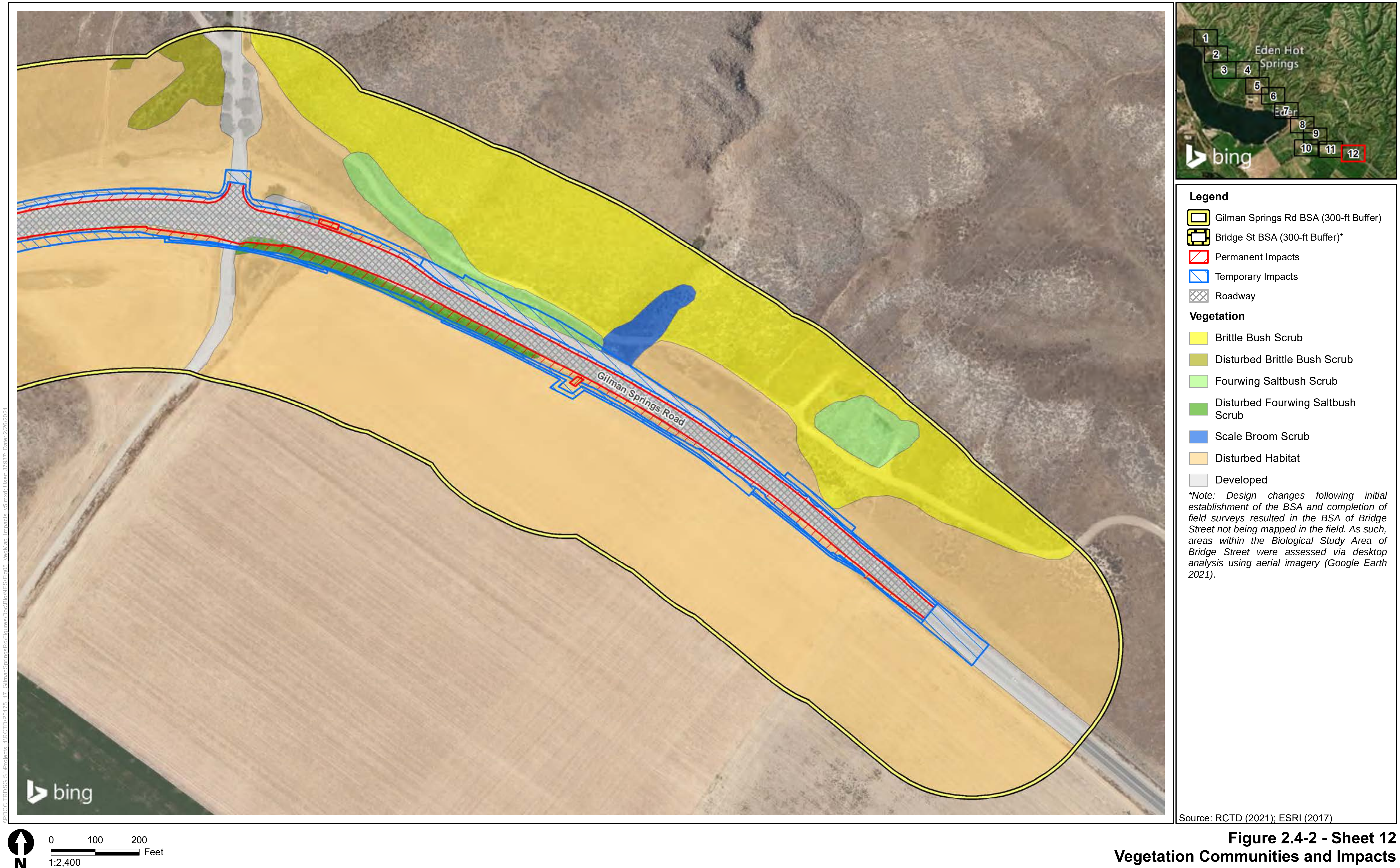

Figure 2.4-2 - Sheet 12
Vegetation Communities and Impacts
Gilman Springs Median and Shoulder Improvements Project

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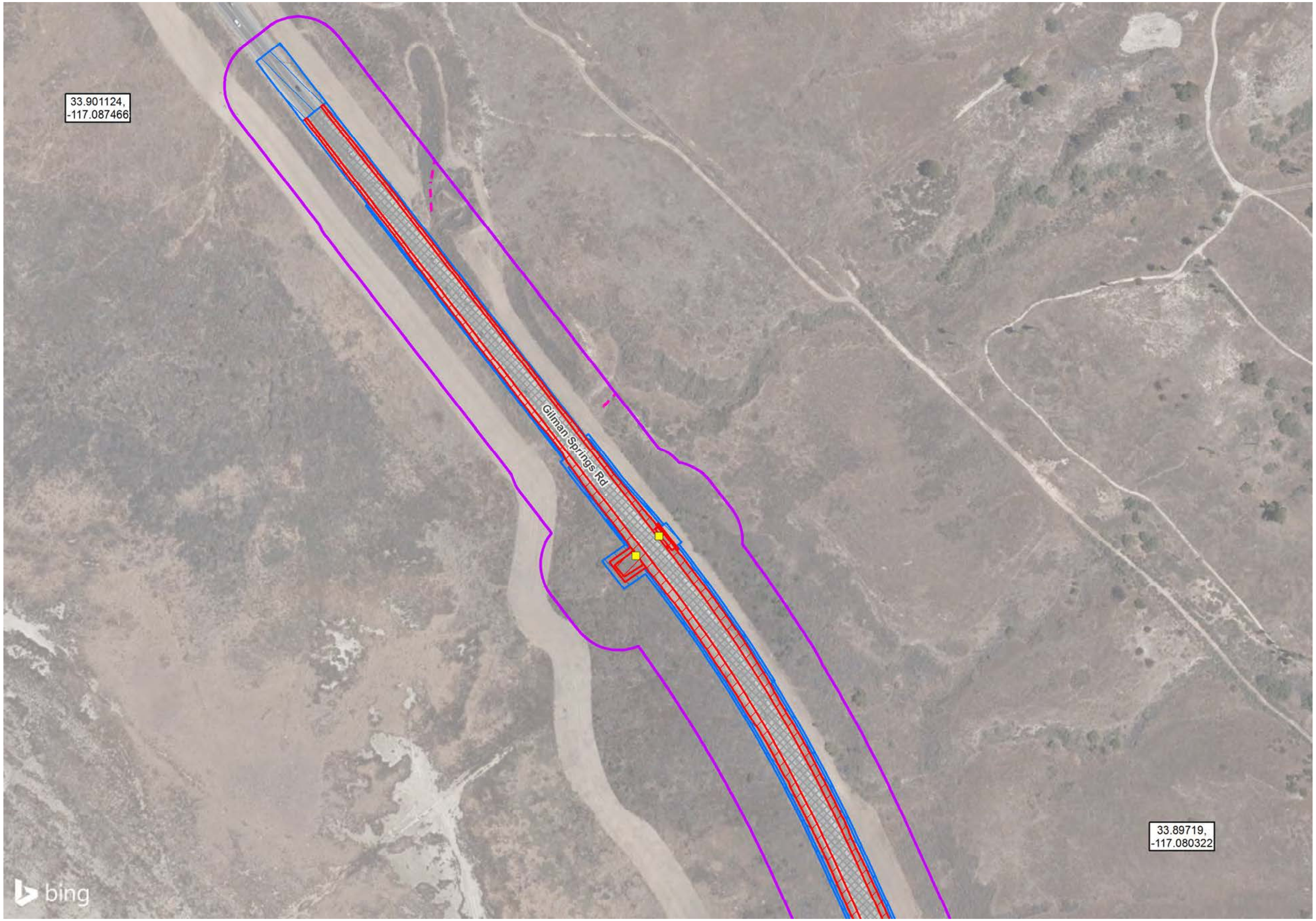

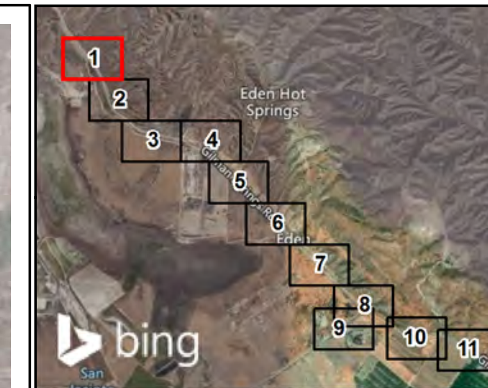

Legend

- Gilman Springs Rd JD Study Area (100-ft Buffer)
- Bridge St JD Study Area (100-ft Buffer)
- Permanent Impacts
- Temporary Impacts
- Roadway
- Wetland Sample Point (SP#)
- OHWM Data Form
- Photo Location
- Culvert
- Swale

Potential USACE/RWQCB Jurisdiction

- Non-wetland Waters of the U.S.
- Wetland Waters of the U.S.

ft = Width at Ordinary High Water Mark

Note: Design changes following initial establishment of the JD Study Area and completion of field surveys resulted in the JD Study Area of Bridge Street which has not yet been mapped in the field.

N

0 100 200 Feet

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Figure 2.4-3 (Sheet 1)
USACE/RWQCB Results
Gilman Springs Median and Shoulder Improvements Project

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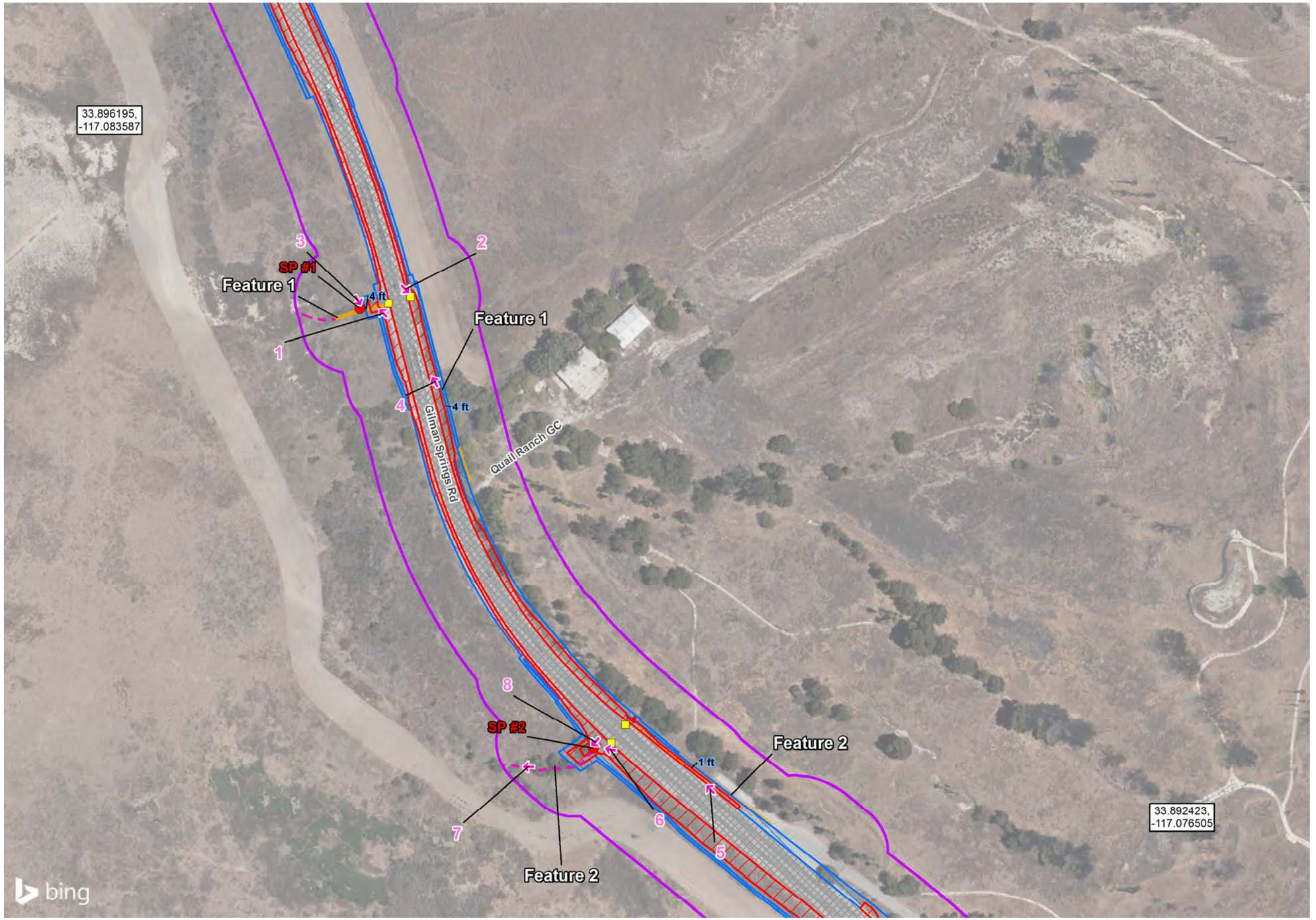

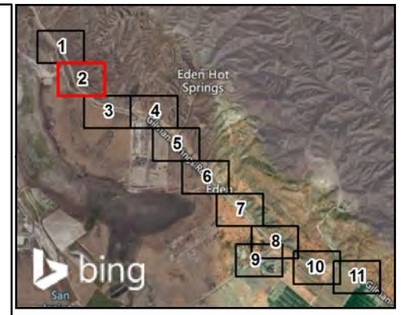

Legend

- Gilman Springs Rd JD Study Area (100-ft Buffer)
- Bridge St JD Study Area (100-ft Buffer)
- Permanent Impacts
- Temporary Impacts
- Roadway
- Wetland Sample Point (SP#)
- OHWM Data Form
- Photo Location
- Culvert
- Swale

Potential USACE/RWQCB Jurisdiction

- Non-wetland Waters of the U.S.
- Wetland Waters of the U.S.

ft = Width at Ordinary High Water Mark

Note: Design changes following initial establishment of the JD Study Area and completion of field surveys resulted in the JD Study Area of Bridge Street which has not yet been mapped in the field.

N

0 100 200 Feet

1:2,400

Figure 2.4-3 (Sheet 2)
USACE/RWQCB Results
Gilman Springs Median and Shoulder Improvements Project

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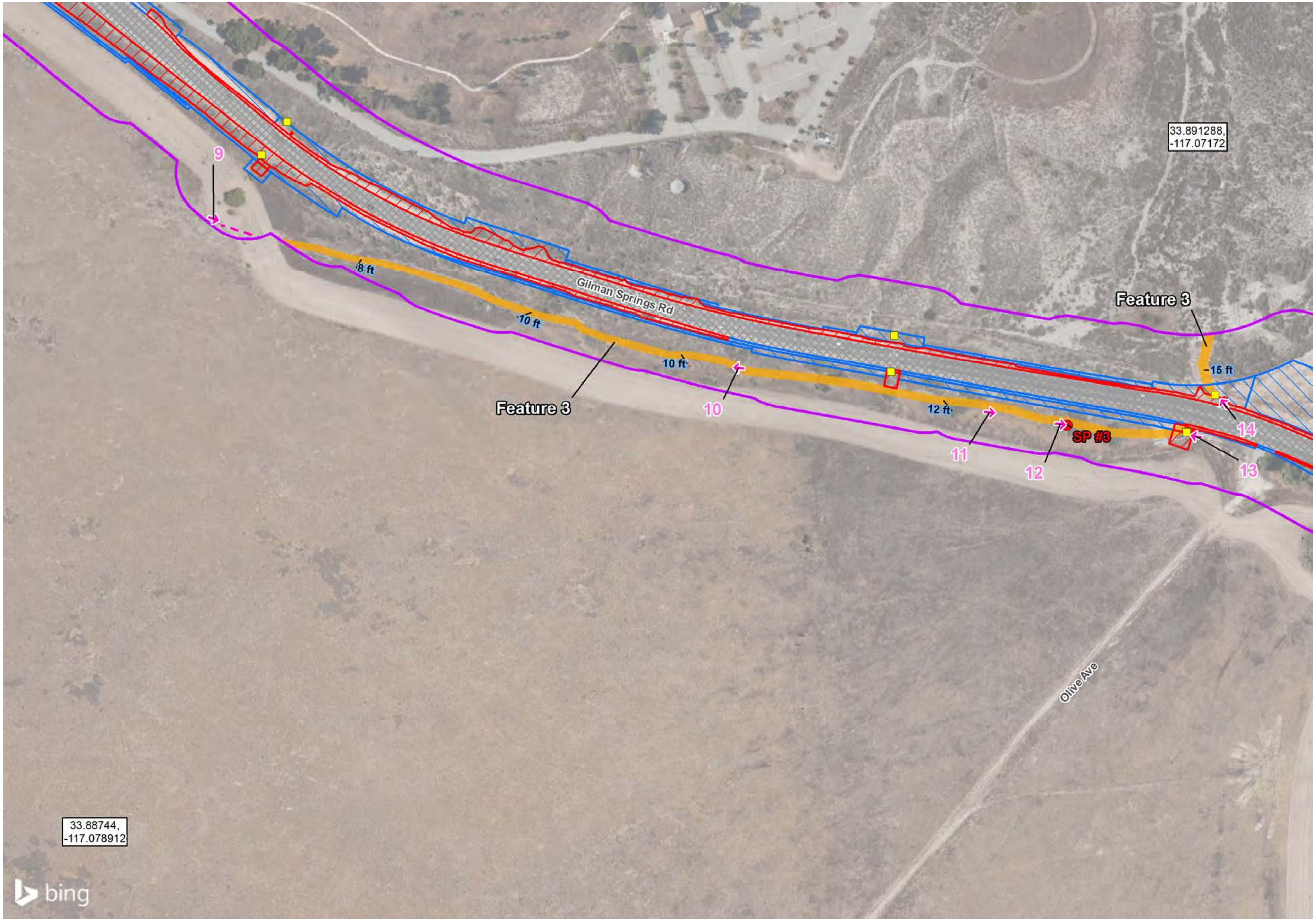

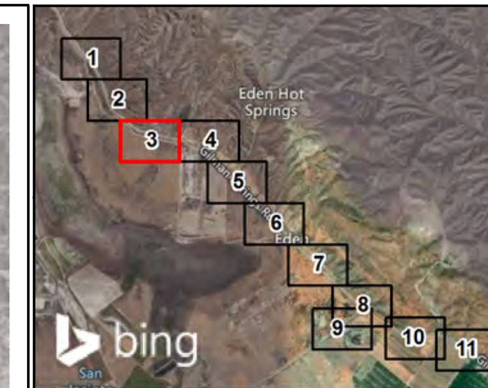

Legend

- Gilman Springs Rd JD Study Area (100-ft Buffer)
- Bridge St JD Study Area (100-ft Buffer)
- Permanent Impacts
- Temporary Impacts
- Roadway
- Wetland Sample Point (SP#)
- OHWM Data Form
- Photo Location
- Culvert
- Swale

Potential USACE/RWQCB Jurisdiction

- Non-wetland Waters of the U.S.
- Wetland Waters of the U.S.

\# ft = Width at Ordinary High Water Mark

Note: Design changes following initial establishment of the JD Study Area and completion of field surveys resulted in the JD Study Area of Bridge Street which has not yet been mapped in the field.

N

0 100 200 Feet
1:2,400

Figure 2.4-3 (Sheet 3)
USACE/RWQCB Results
Gilman Springs Median and Shoulder Improvements Project

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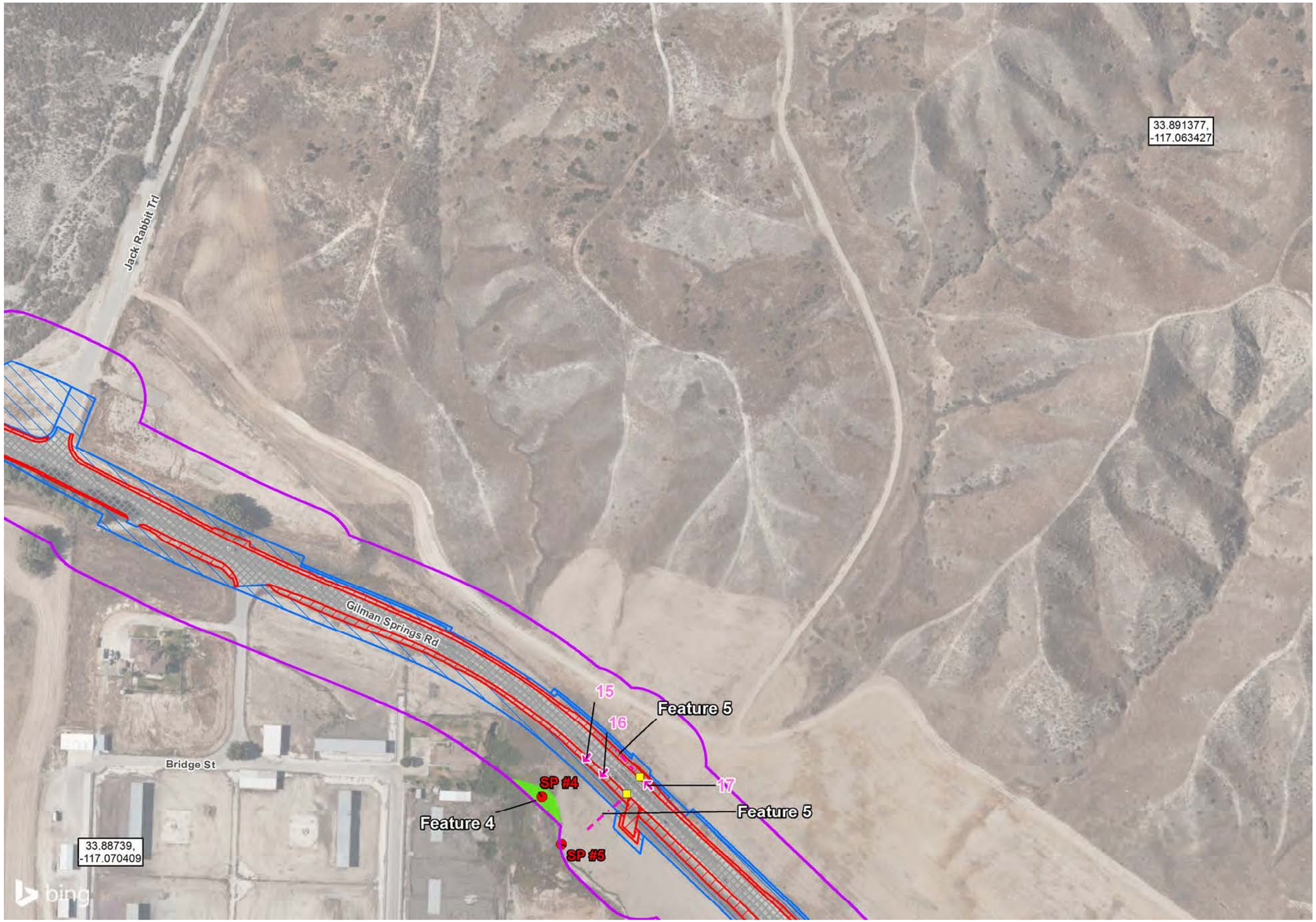

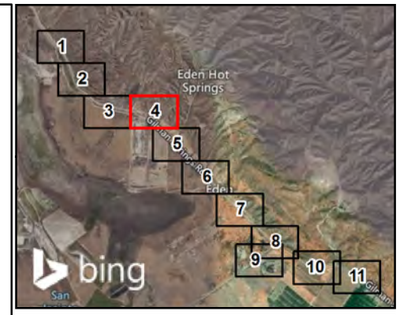

Legend

- Gilman Springs Rd JD Study Area (100-ft Buffer)
- Bridge St JD Study Area (100-ft Buffer)
- Permanent Impacts
- Temporary Impacts
- Roadway
- Wetland Sample Point (SP#)
- OHWM Data Form
- Photo Location
- Culvert
- Swale

Potential USACE/RWQCB Jurisdiction

- Non-wetland Waters of the U.S.
- Wetland Waters of the U.S.

ft = Width at Ordinary High Water Mark

Note: Design changes following initial establishment of the JD Study Area and completion of field surveys resulted in the JD Study Area of Bridge Street which has not yet been mapped in the field.

N

0 100 200 Feet

1:2,400

Figure 2.4-3 (Sheet 4)
USACE/RWQCB Results
Gilman Springs Median and Shoulder Improvements Project

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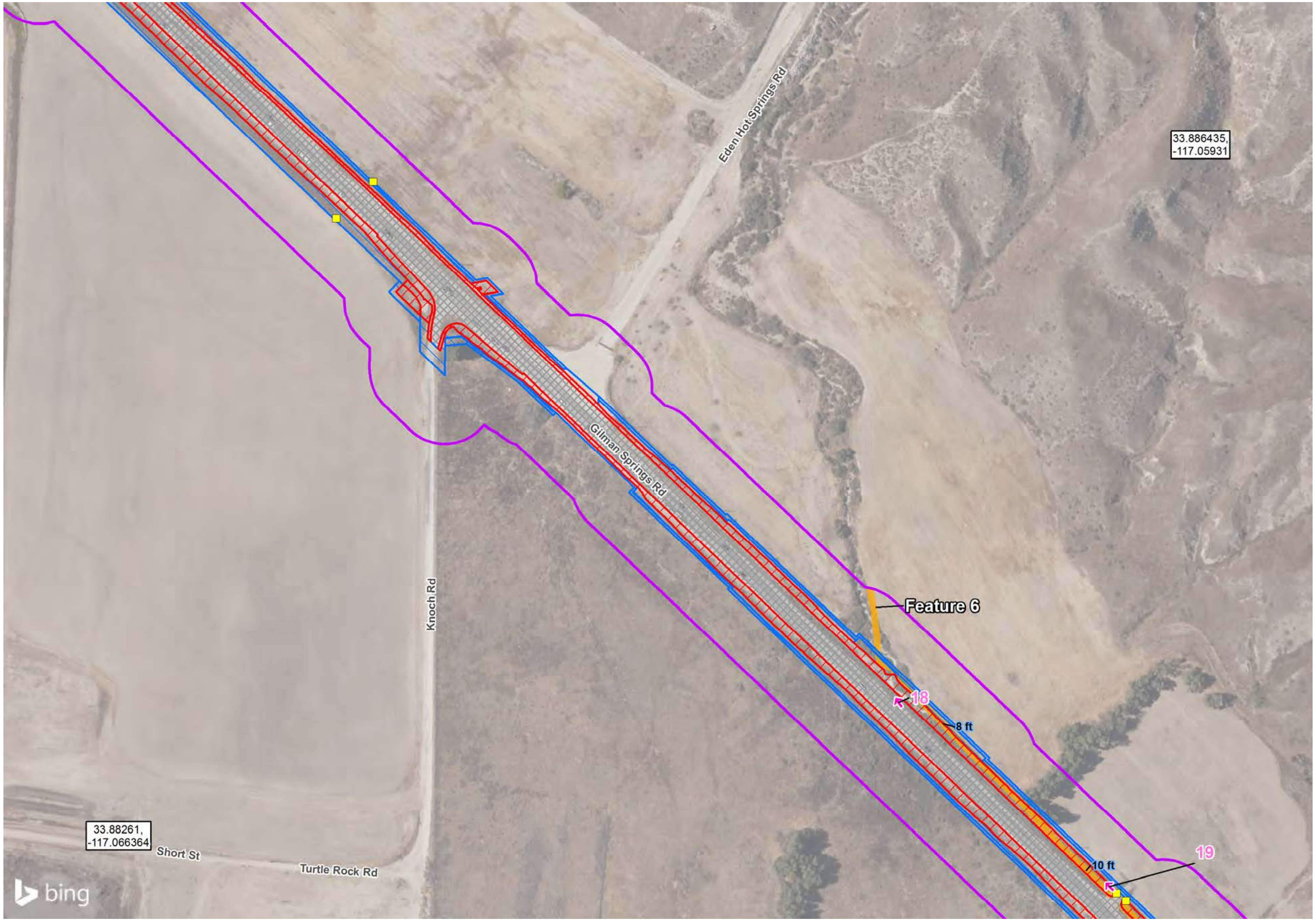

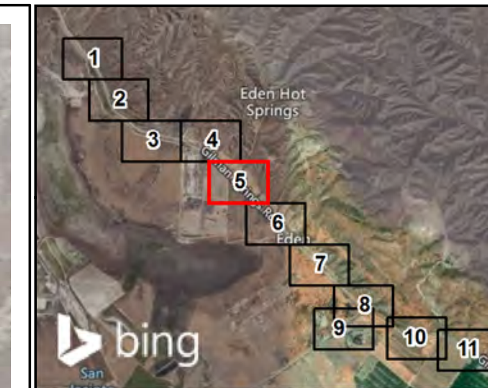

Legend

- Gilman Springs Rd JD Study Area (100-ft Buffer)
- Bridge St JD Study Area (100-ft Buffer)
- Permanent Impacts
- Temporary Impacts
- Roadway
- Wetland Sample Point (SP#)
- OHWM Data Form
- Photo Location
- Culvert
- Swale

Potential USACE/RWQCB Jurisdiction

- Non-wetland Waters of the U.S.
- Wetland Waters of the U.S.

ft = Width at Ordinary High Water Mark

Note: Design changes following initial establishment of the JD Study Area and completion of field surveys resulted in the JD Study Area of Bridge Street which has not yet been mapped in the field.

N

0 100 200 Feet

1:2,400

Figure 2.4-3 (Sheet 5)
USACE/RWQCB Results
Gilman Springs Median and Shoulder Improvements Project

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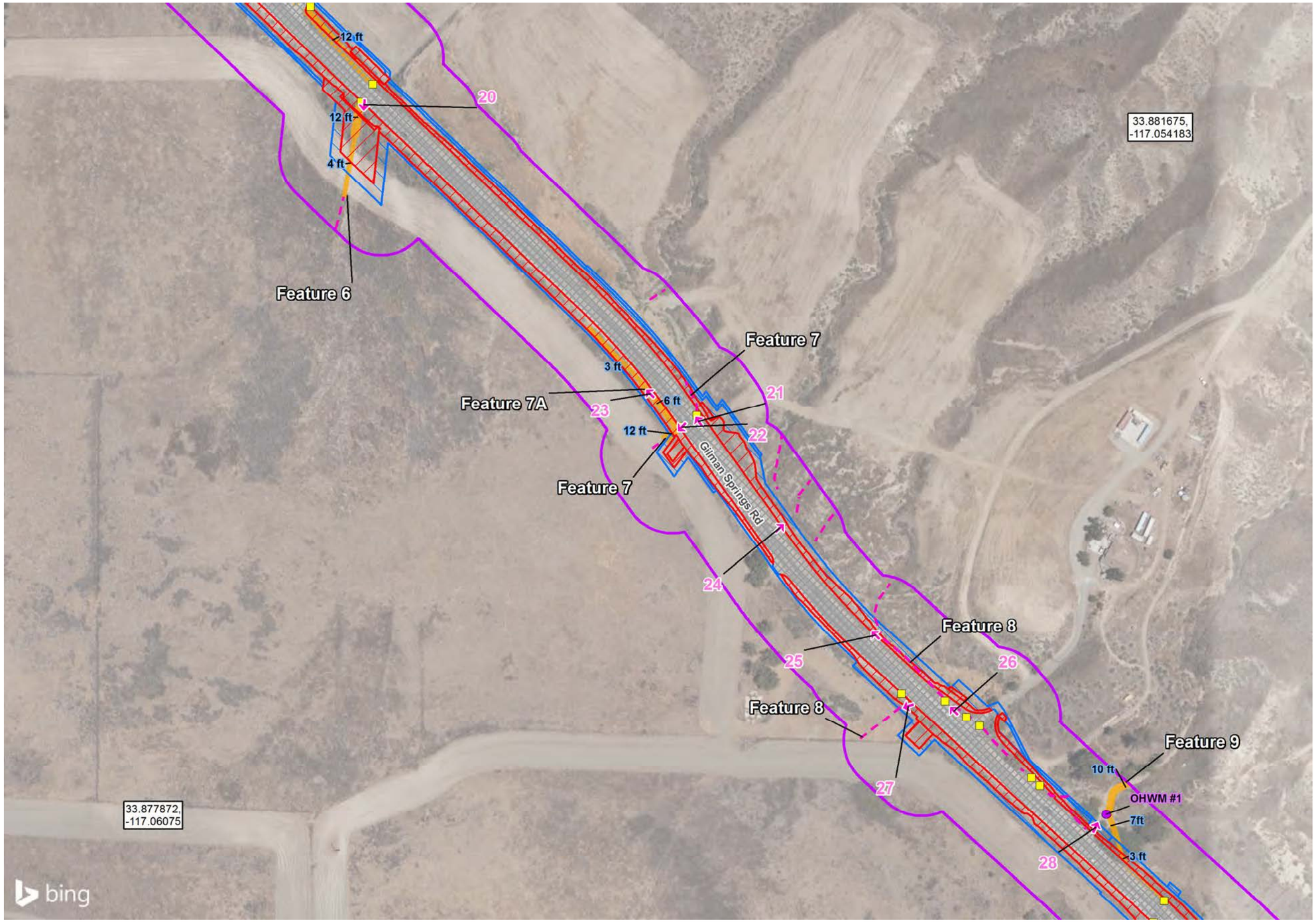

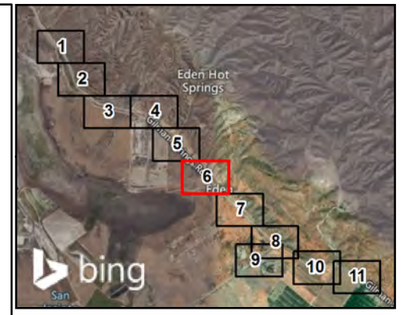

Legend

- Gilman Springs Rd JD Study Area (100-ft Buffer)
- Bridge St JD Study Area (100-ft Buffer)
- Permanent Impacts
- Temporary Impacts
- Roadway
- Wetland Sample Point (SP#)
- OHWM Data Form
- Photo Location
- Culvert
- Swale

Potential USACE/RWQCB Jurisdiction

- Non-wetland Waters of the U.S.
- Wetland Waters of the U.S.

ft = Width at Ordinary High Water Mark

Note: Design changes following initial establishment of the JD Study Area and completion of field surveys resulted in the JD Study Area of Bridge Street which has not yet been mapped in the field.

N

0 100 200 Feet

1:2,400

Figure 2.4-3 (Sheet 6)
USACE/RWQCB Results
Gilman Springs Median and Shoulder Improvements Project

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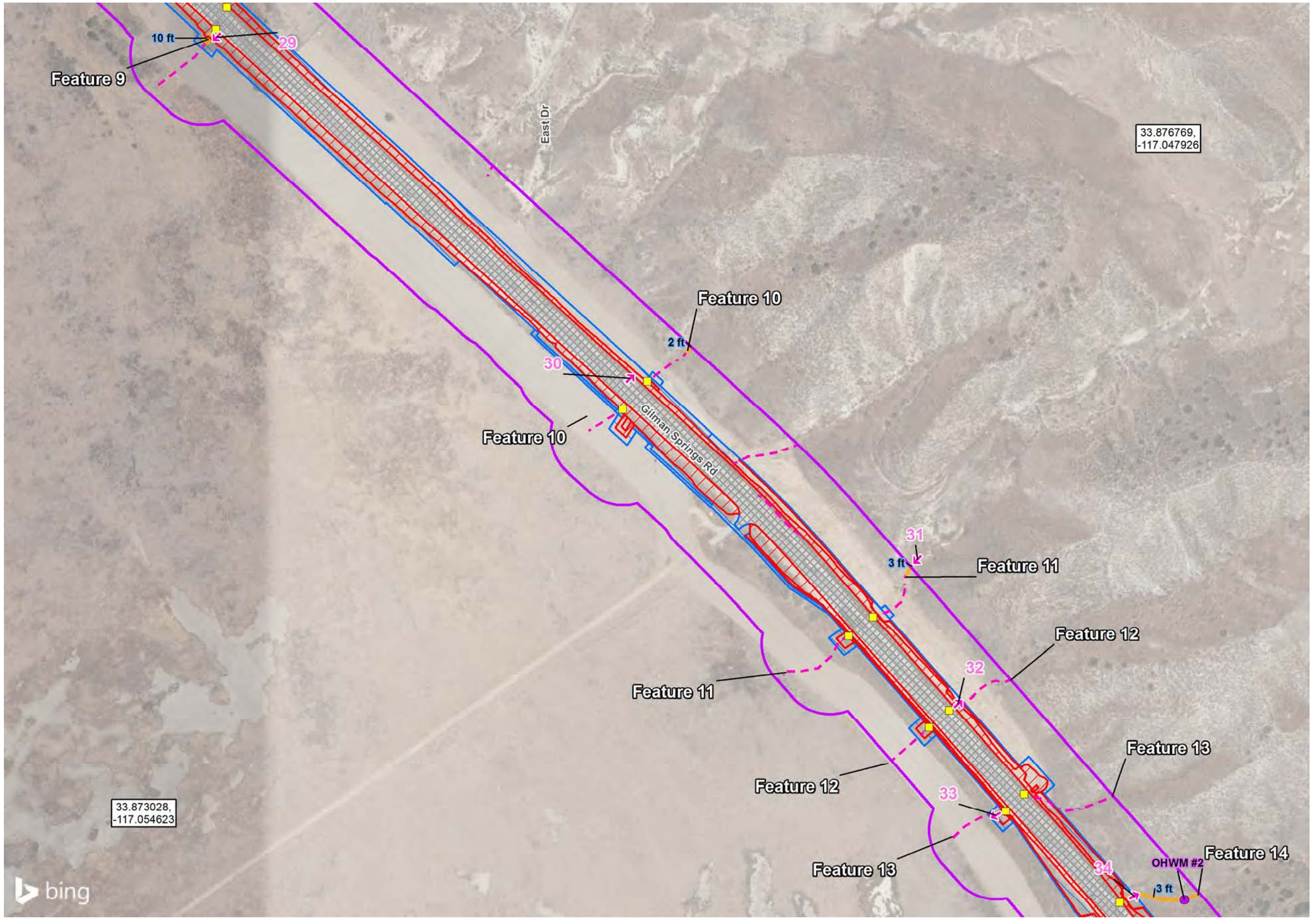

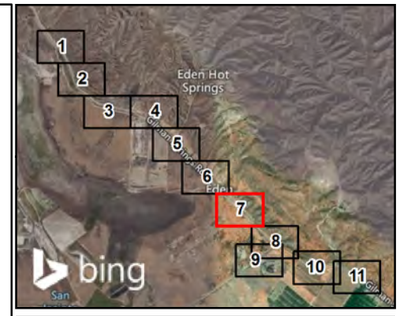

Legend

- Gilman Springs Rd JD Study Area (100-ft Buffer)
- Bridge St JD Study Area (100-ft Buffer)
- Permanent Impacts
- Temporary Impacts
- Roadway
- Wetland Sample Point (SP#)
- OHWM Data Form
- Photo Location
- Culvert
- Swale

Potential USACE/RWQCB Jurisdiction

- Non-wetland Waters of the U.S.
- Wetland Waters of the U.S.

ft = Width at Ordinary High Water Mark

Note: Design changes following initial establishment of the JD Study Area and completion of field surveys resulted in the JD Study Area of Bridge Street which has not yet been mapped in the field.

N

0 100 200 Feet

1:2,400

Figure 2.4-3 (Sheet 7)
USACE/RWQCB Results
Gilman Springs Median and Shoulder Improvements Project

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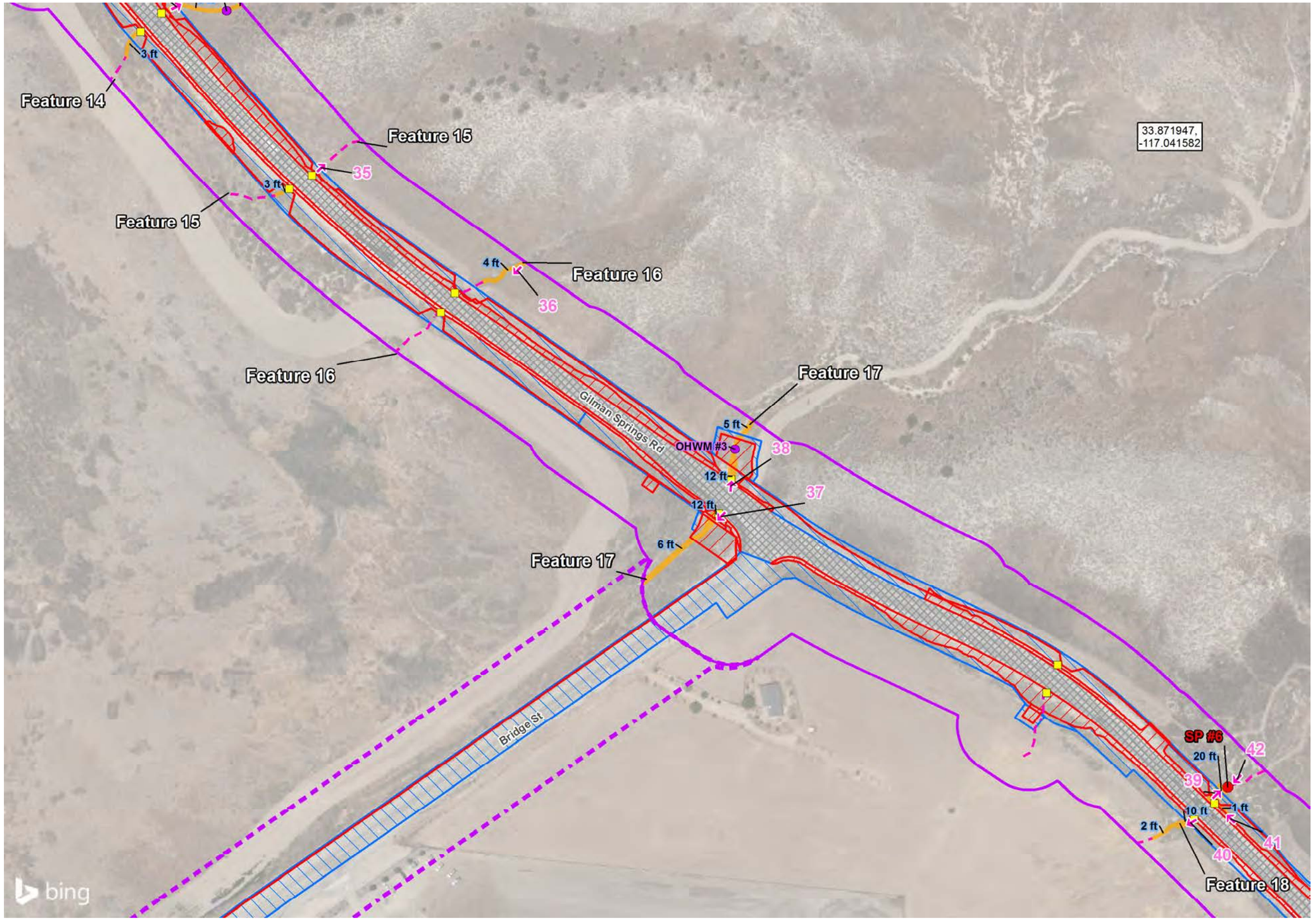

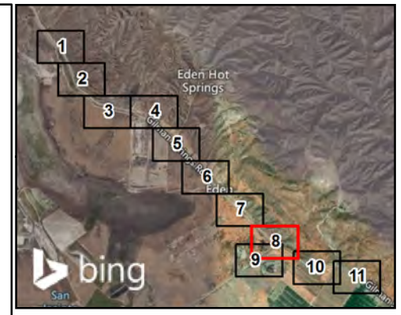

Legend

- Gilman Springs Rd JD Study Area (100-ft Buffer)
- Bridge St JD Study Area (100-ft Buffer)
- Permanent Impacts
- Temporary Impacts
- Roadway
- Wetland Sample Point (SP#)
- OHWM Data Form
- Photo Location
- Culvert
- Swale

Potential USACE/RWQCB Jurisdiction

- Non-wetland Waters of the U.S.
- Wetland Waters of the U.S.

ft = Width at Ordinary High Water Mark

Note: Design changes following initial establishment of the JD Study Area and completion of field surveys resulted in the JD Study Area of Bridge Street which has not yet been mapped in the field.

N

0 100 200 Feet

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Figure 2.4-3 (Sheet 8)
USACE/RWQCB Results
Gilman Springs Median and Shoulder Improvements Project

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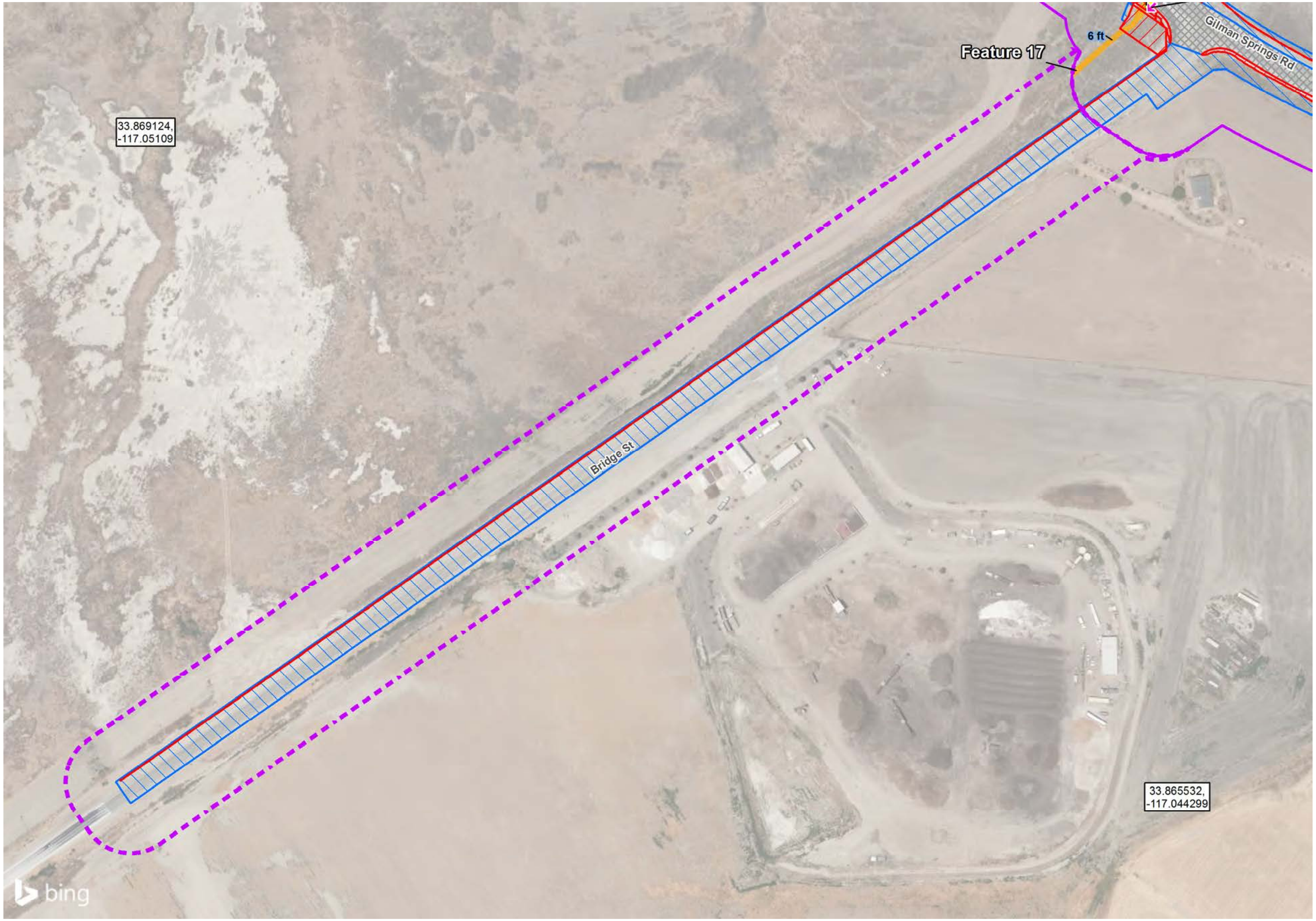

Legend

- Gilman Springs Rd JD Study Area (100-ft Buffer)
- Bridge St JD Study Area (100-ft Buffer)
- Permanent Impacts
- Temporary Impacts
- Roadway
- Wetland Sample Point (SP#)
- OHWM Data Form
- Photo Location
- Culvert
- Swale

Potential USACE/RWQCB Jurisdiction

- Non-wetland Waters of the U.S.
- Wetland Waters of the U.S.

ft = Width at Ordinary High Water Mark

Note: Design changes following initial establishment of the JD Study Area and completion of field surveys resulted in the JD Study Area of Bridge Street which has not yet been mapped in the field.

N

0 100 200 Feet

1:2,400

Figure 2.4-3 (Sheet 9)
USACE/RWQCB Results
Gilman Springs Median and Shoulder Improvements Project

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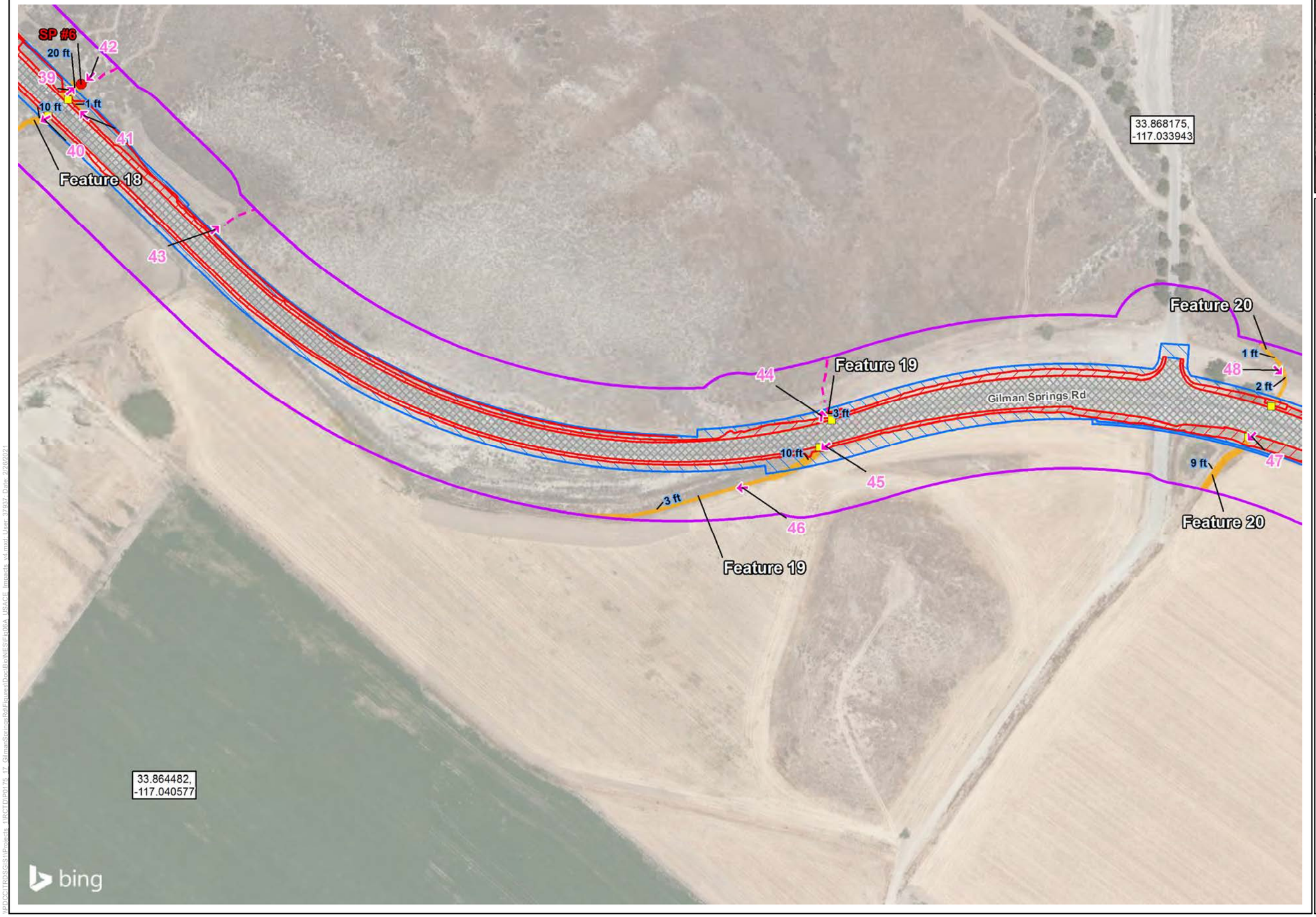

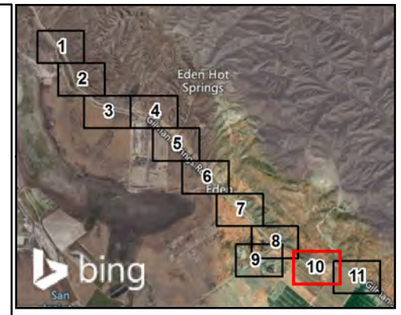

Legend

- Gilman Springs Rd JD Study Area (100-ft Buffer)
- Bridge St JD Study Area (100-ft Buffer)
- Permanent Impacts
- Temporary Impacts
- Roadway
- Wetland Sample Point (SP#)
- OHWM Data Form
- Photo Location
- Culvert
- Swale

Potential USACE/RWQCB Jurisdiction

- Non-wetland Waters of the U.S.
- Wetland Waters of the U.S.

ft = Width at Ordinary High Water Mark

Note: Design changes following initial establishment of the JD Study Area and completion of field surveys resulted in the JD Study Area of Bridge Street which has not yet been mapped in the field.

N

0 100 200 Feet

1:2,400

Figure 2.4-3 (Sheet 10)
USACE/RWQCB Results
Gilman Springs Median and Shoulder Improvements Project

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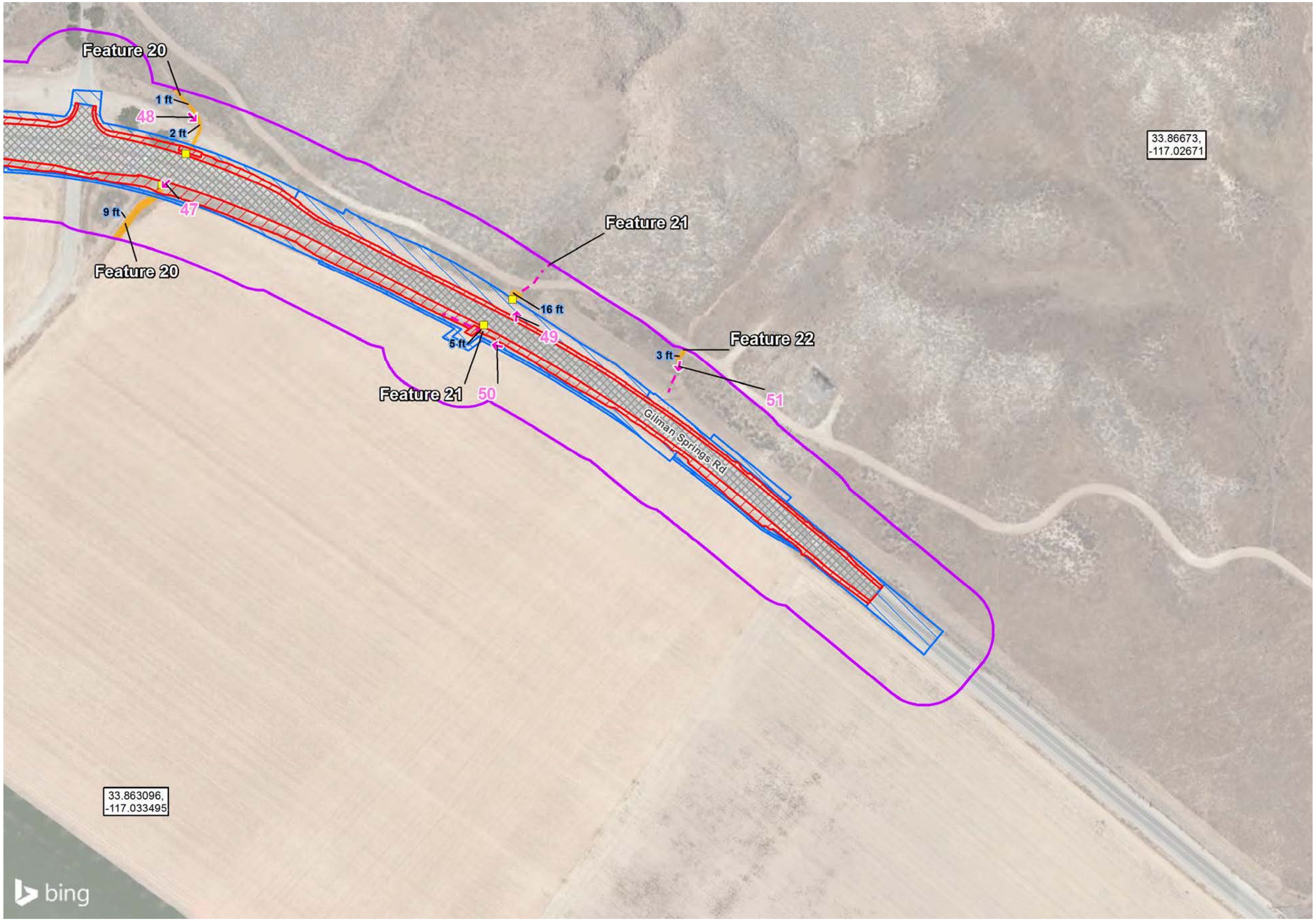

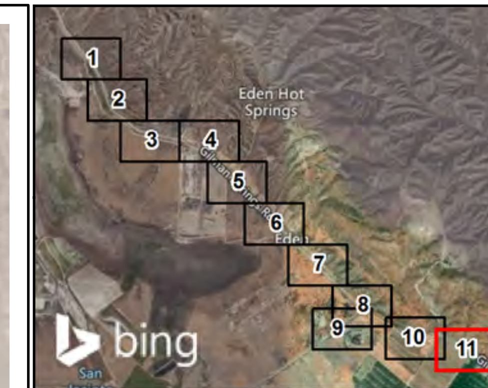

Legend

- Gilman Springs Rd JD Study Area (100-ft Buffer)
- Bridge St JD Study Area (100-ft Buffer)
- Permanent Impacts
- Temporary Impacts
- Roadway
- Wetland Sample Point (SP#)
- OHWM Data Form
- Photo Location
- Culvert
- Swale

Potential USACE/RWQCB Jurisdiction

- Non-wetland Waters of the U.S.
- Wetland Waters of the U.S.

\# ft = Width at Ordinary High Water Mark

Note: Design changes following initial establishment of the JD Study Area and completion of field surveys resulted in the JD Study Area of Bridge Street which has not yet been mapped in the field.

N

0 100 200 Feet

1:2,400

Figure 2.4-3 (Sheet 11)
USACE/RWQCB Results
Gilman Springs Median and Shoulder Improvements Project

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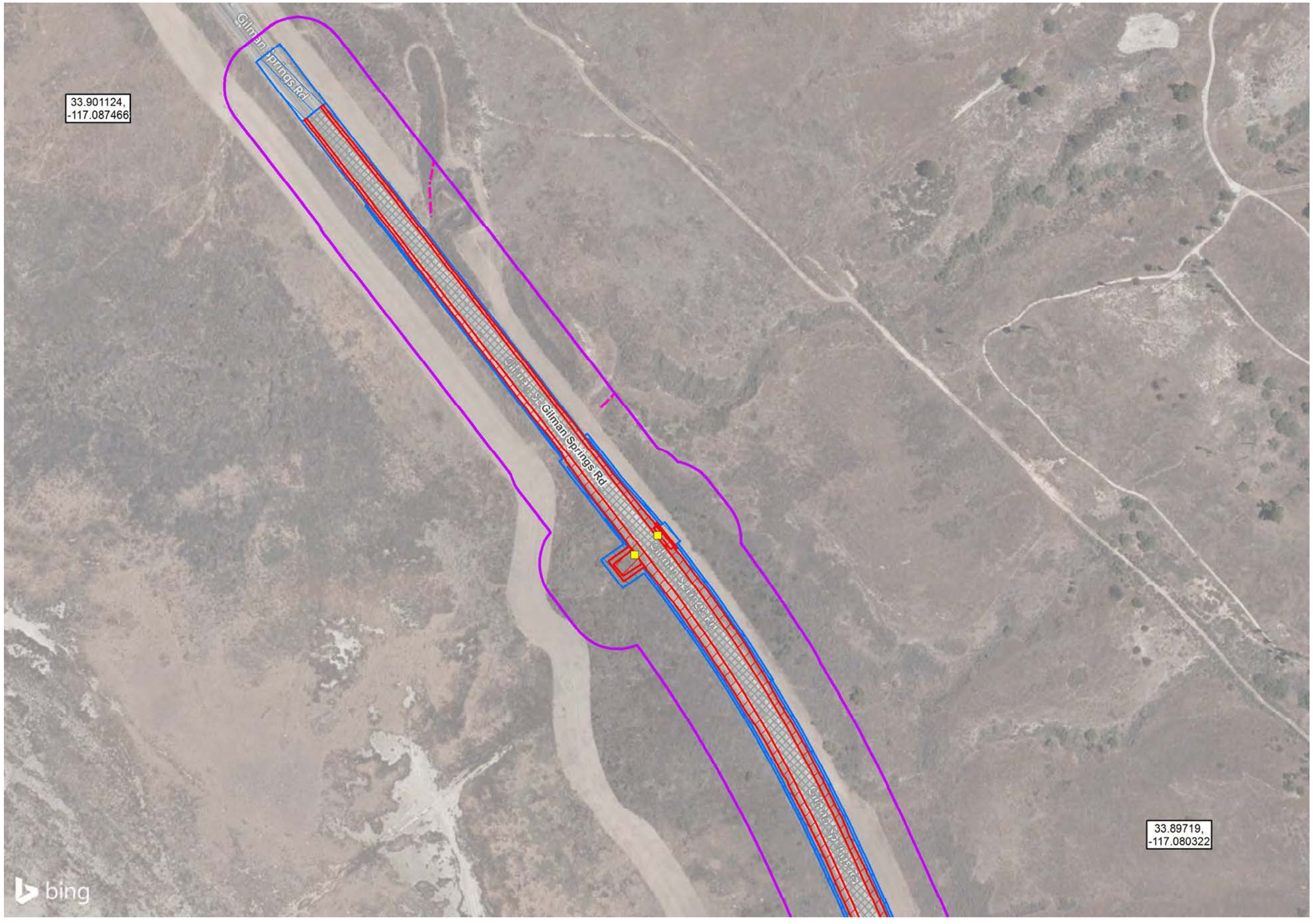

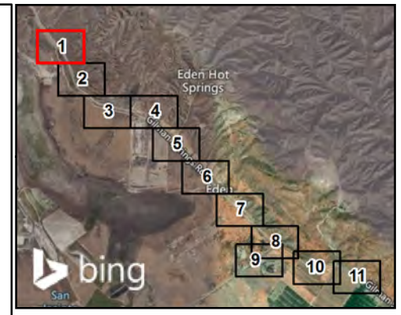

Legend

- Gilman Springs Rd JD Study Area (100-ft Buffer)
- Bridge St JD Study Area (100-ft Buffer)
- Permanent Impacts
- Temporary Impacts
- Roadway
- Culvert
- Photo Location
- Swale

Potential CDFW Jurisdiction

- Streambed
- Riparian
- # ft = Top of Bank

Note: Design changes following initial establishment of the JD Study Area and completion of field surveys resulted in the JD Study Area of Bridge Street which has not yet been mapped in the field.

N

0 100 200 Feet

1:2,400

Figure 2.4-4 (Sheet 1)
CDFW Results
Gilman Springs Median and Shoulder Improvements Project

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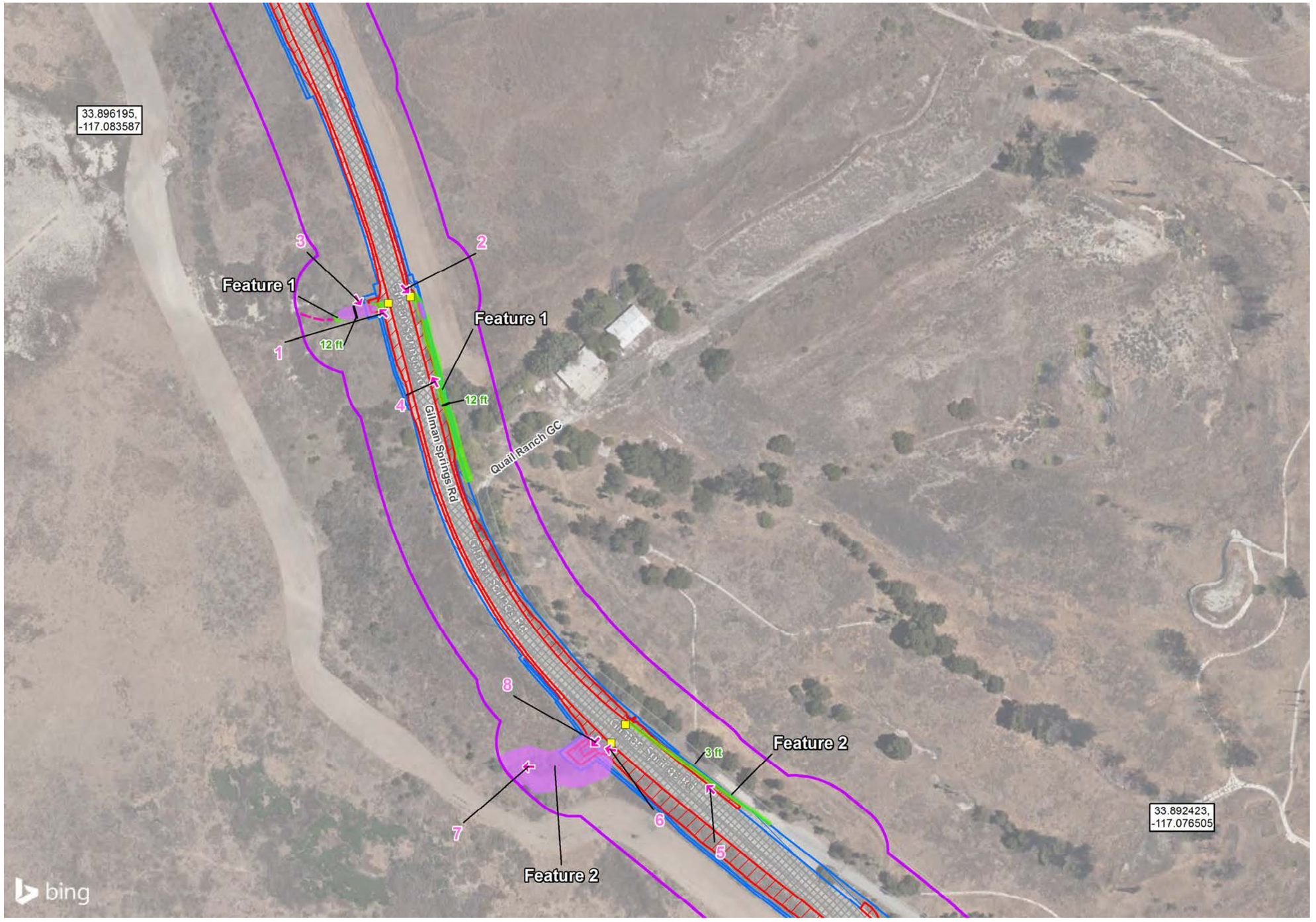

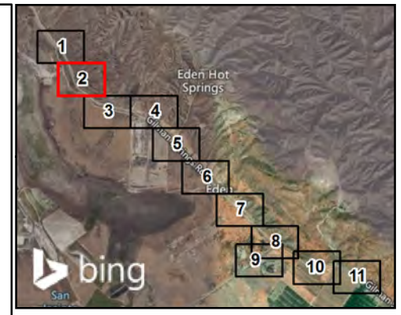

Legend

- Gilman Springs Rd JD Study Area (100-ft Buffer)
- Bridge St JD Study Area (100-ft Buffer)
- Permanent Impacts
- Temporary Impacts
- Roadway
- Culvert
- Photo Location
- Swale

Potential CDFW Jurisdiction

- Streambed
- Riparian
- # ft = Top of Bank

Note: Design changes following initial establishment of the JD Study Area and completion of field surveys resulted in the JD Study Area of Bridge Street which has not yet been mapped in the field.

N

0 100 200 Feet

1:2,400

Figure 2.4-4 (Sheet 2)
CDFW Results
Gilman Springs Median and Shoulder Improvements Project

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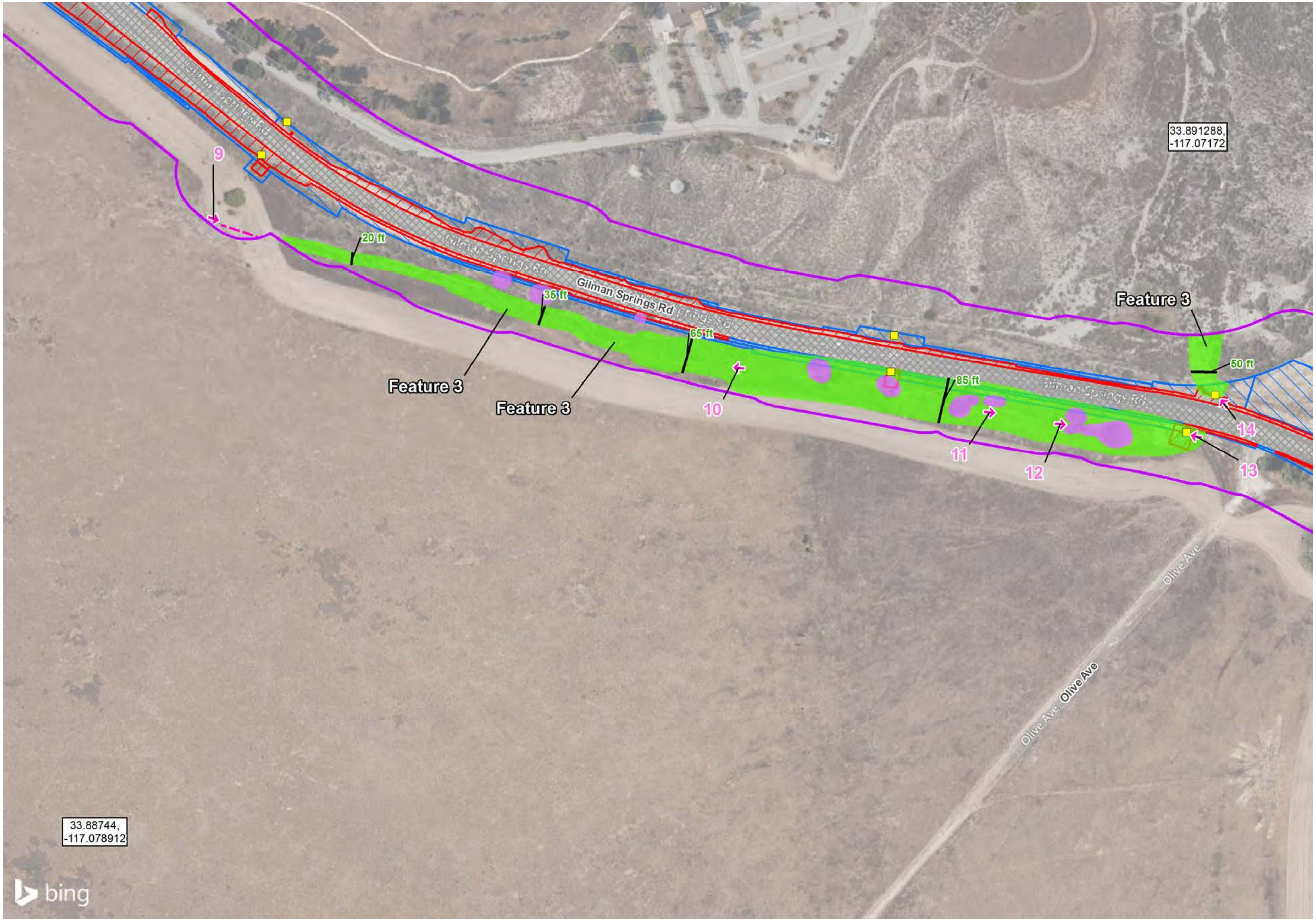

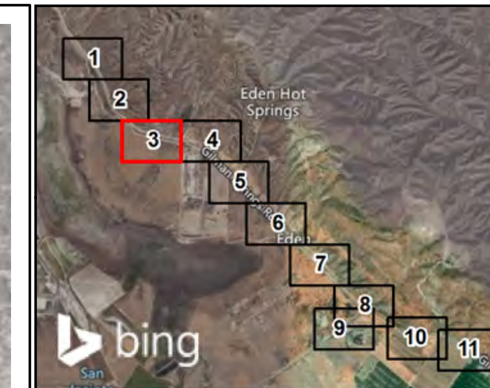

Legend
- Gilman Springs Rd JD Study Area (100-ft Buffer)
- Bridge St JD Study Area (100-ft Buffer)
- Permanent Impacts
- Temporary Impacts
- Roadway
- Culvert
- Photo Location
- Swale

Potential CDFW Jurisdiction
- Streambed
- Riparian
- # ft = Top of Bank

Note: Design changes following initial establishment of the JD Study Area and completion of field surveys resulted in the JD Study Area of Bridge Street which has not yet been mapped in the field.

N

0 100 200 Feet

1:2,400

Figure 2.4-4 (Sheet 3)
CDFW Results
Gilman Springs Median and Shoulder Improvements Project

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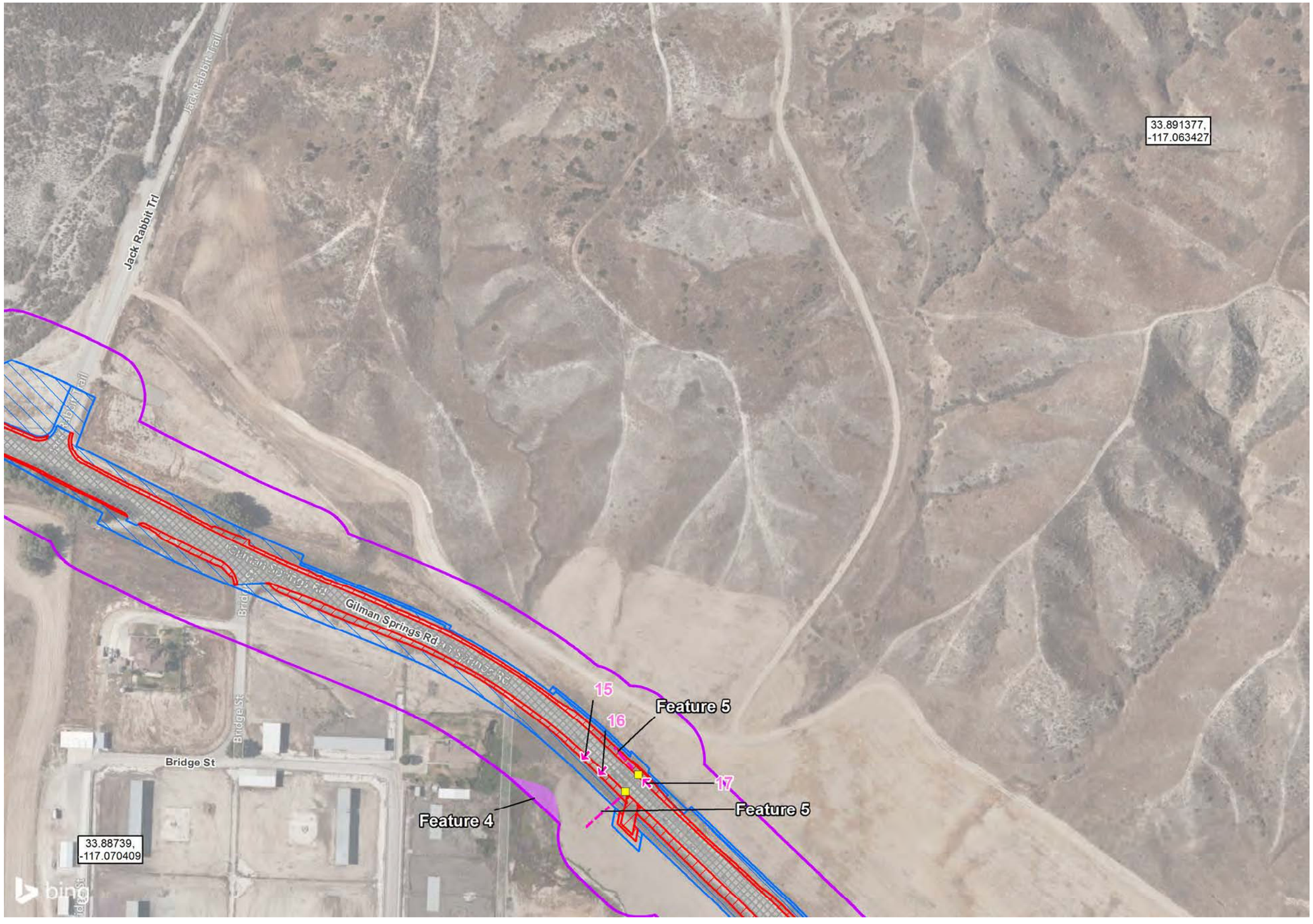

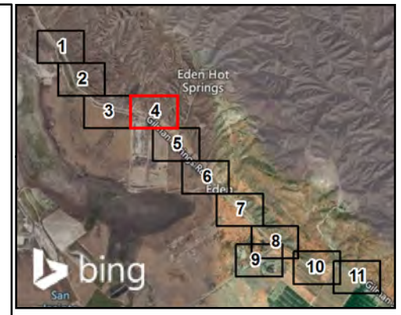

Legend

- Gilman Springs Rd JD Study Area (100-ft Buffer)
- Bridge St JD Study Area (100-ft Buffer)
- Permanent Impacts
- Temporary Impacts
- Roadway
- Culvert
- Photo Location
- Swale

Potential CDFW Jurisdiction

- Streambed
- Riparian
- # ft = Top of Bank

Note: Design changes following initial establishment of the JD Study Area and completion of field surveys resulted in the JD Study Area of Bridge Street which has not yet been mapped in the field.

N

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Figure 2.4-4 (Sheet 4)
CDFW Results
Gilman Springs Median and Shoulder Improvements Project

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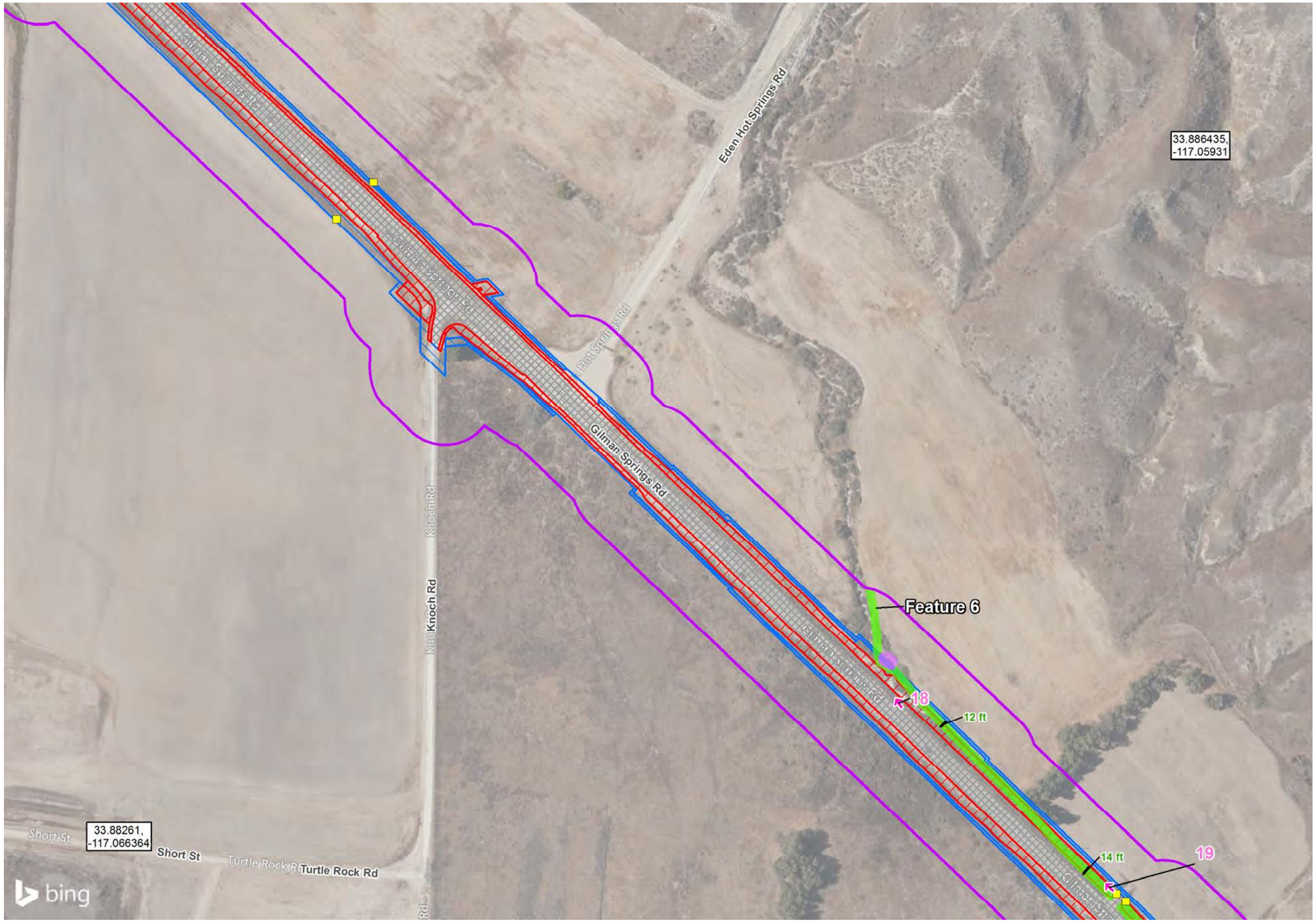

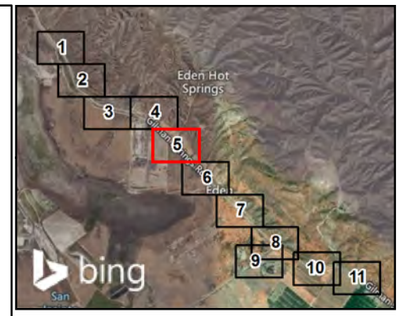

Legend

- Gilman Springs Rd JD Study Area (100-ft Buffer)
- Bridge St JD Study Area (100-ft Buffer)
- Permanent Impacts
- Temporary Impacts
- Roadway
- Culvert
- Photo Location
- Swale

Potential CDFW Jurisdiction

- Streambed
- Riparian
- # ft = Top of Bank

Note: Design changes following initial establishment of the JD Study Area and completion of field surveys resulted in the JD Study Area of Bridge Street which has not yet been mapped in the field.

N

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Figure 2.4-4 (Sheet 5)
CDFW Results
Gilman Springs Median and Shoulder Improvements Project

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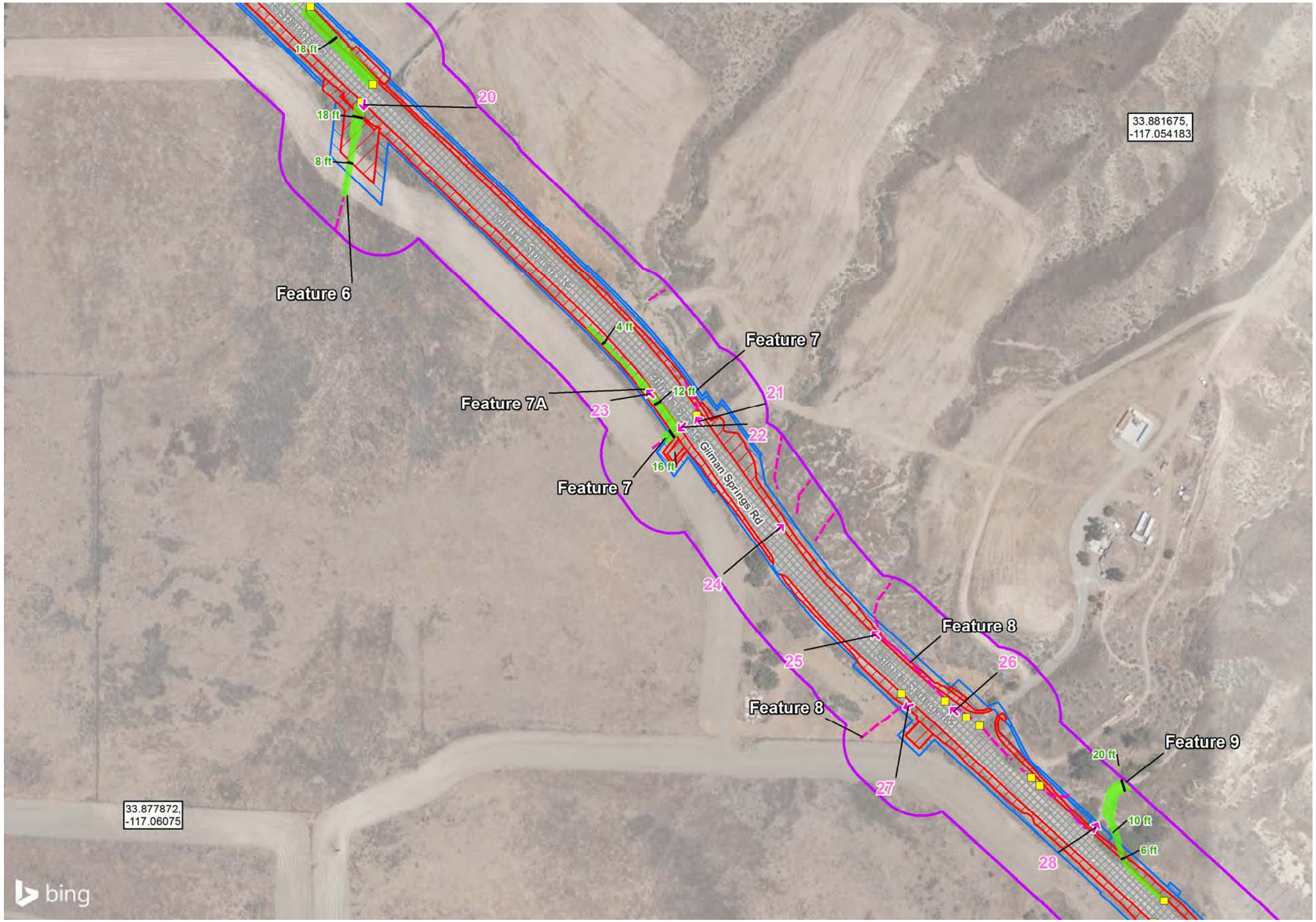

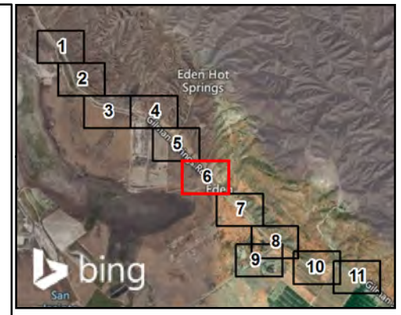

Legend

- Gilman Springs Rd JD Study Area (100-ft Buffer)
- Bridge St JD Study Area (100-ft Buffer)
- Permanent Impacts
- Temporary Impacts
- Roadway
- Culvert
- Photo Location
- Swale

Potential CDFW Jurisdiction

- Streambed
- Riparian
- # ft = Top of Bank

Note: Design changes following initial establishment of the JD Study Area and completion of field surveys resulted in the JD Study Area of Bridge Street which has not yet been mapped in the field.

N

0 100 200 Feet

1:2,400

Figure 2.4-4 (Sheet 6)
CDFW Results
Gilman Springs Median and Shoulder Improvements Project

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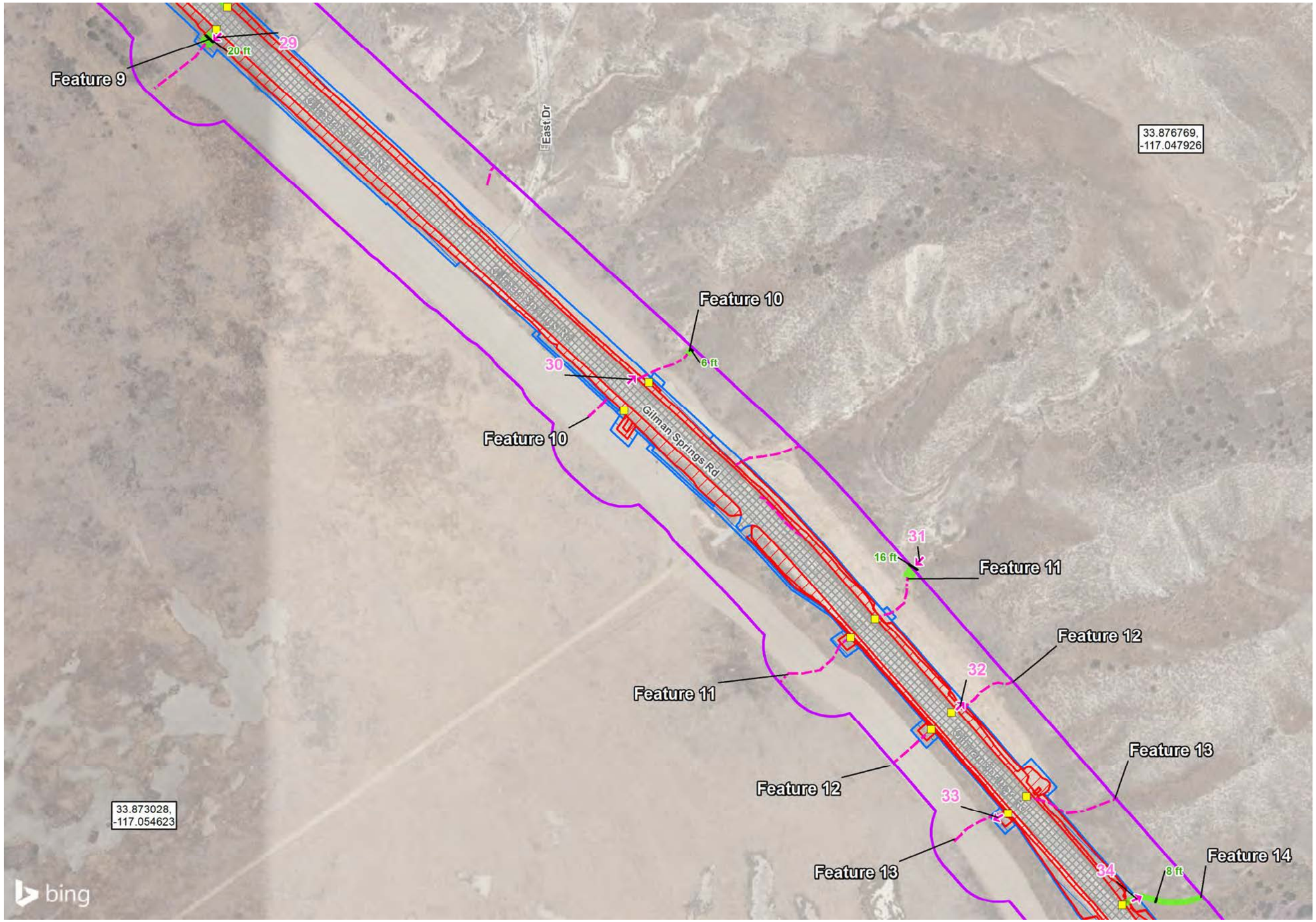

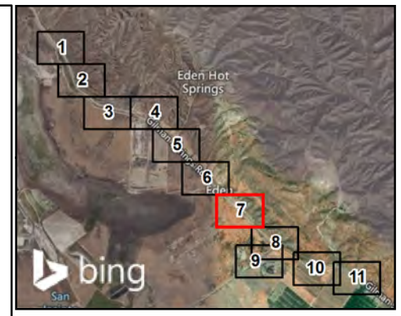

Legend

- Gilman Springs Rd JD Study Area (100-ft Buffer)
- Bridge St JD Study Area (100-ft Buffer)
- Permanent Impacts
- Temporary Impacts
- Roadway
- Culvert
- Photo Location
- Swale

Potential CDFW Jurisdiction

- Streambed
- Riparian
- # ft = Top of Bank

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N

0 100 200 Feet

1:2,400

Figure 2.4-4 (Sheet 7)
CDFW Results
Gilman Springs Median and Shoulder Improvements Project

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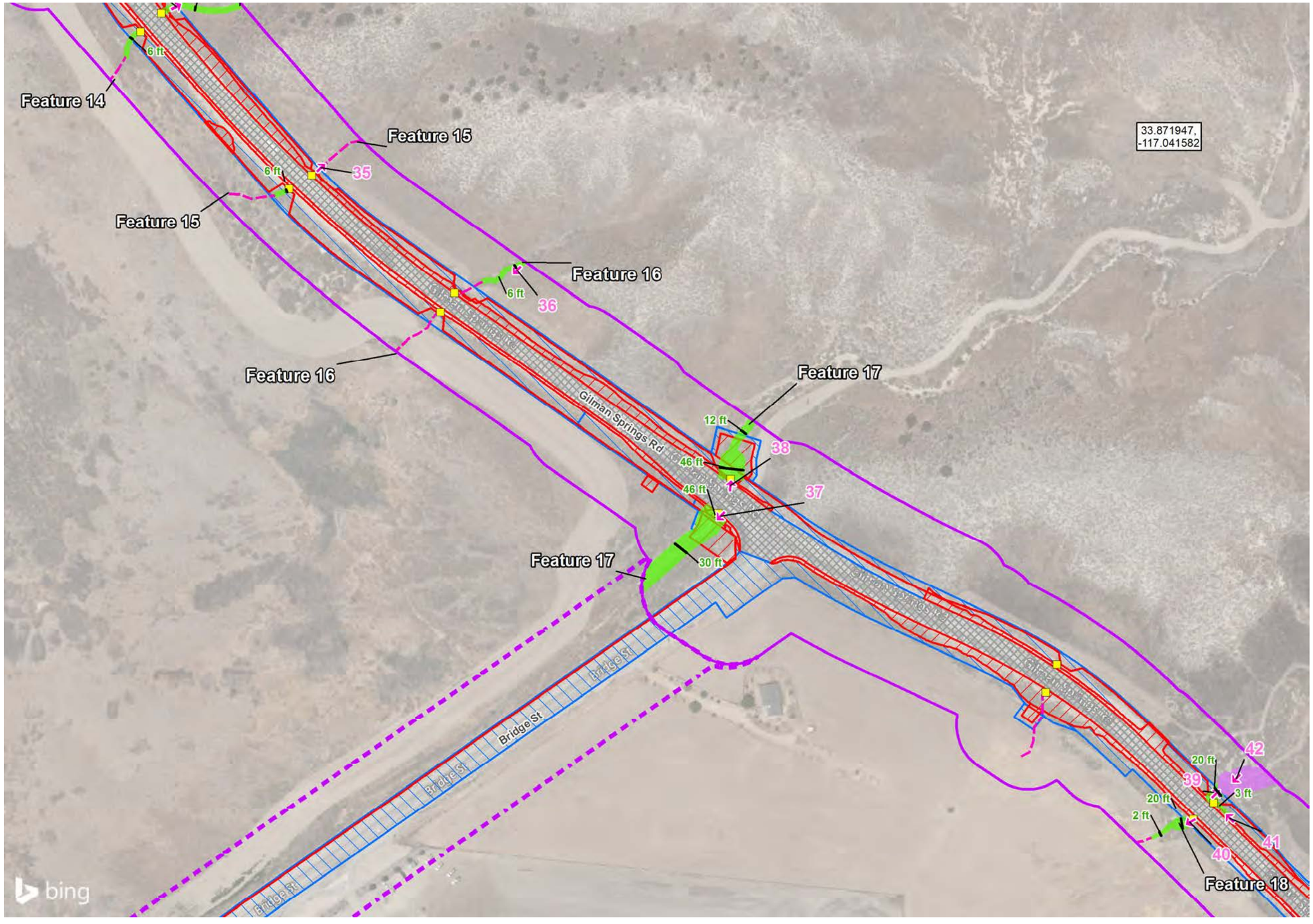

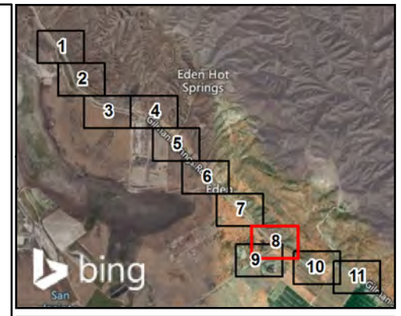

Legend

- Gilman Springs Rd JD Study Area (100-ft Buffer)
- Bridge St JD Study Area (100-ft Buffer)
- Permanent Impacts
- Temporary Impacts
- Roadway
- Culvert
- Photo Location
- Swale

Potential CDFW Jurisdiction

- Streambed
- Riparian
- # ft = Top of Bank

Note: Design changes following initial establishment of the JD Study Area and completion of field surveys resulted in the JD Study Area of Bridge Street which has not yet been mapped in the field.

N

0 100 200 Feet

1:2,400

Figure 2.4-4 (Sheet 8)
CDFW Results
Gilman Springs Median and Shoulder Improvements Project

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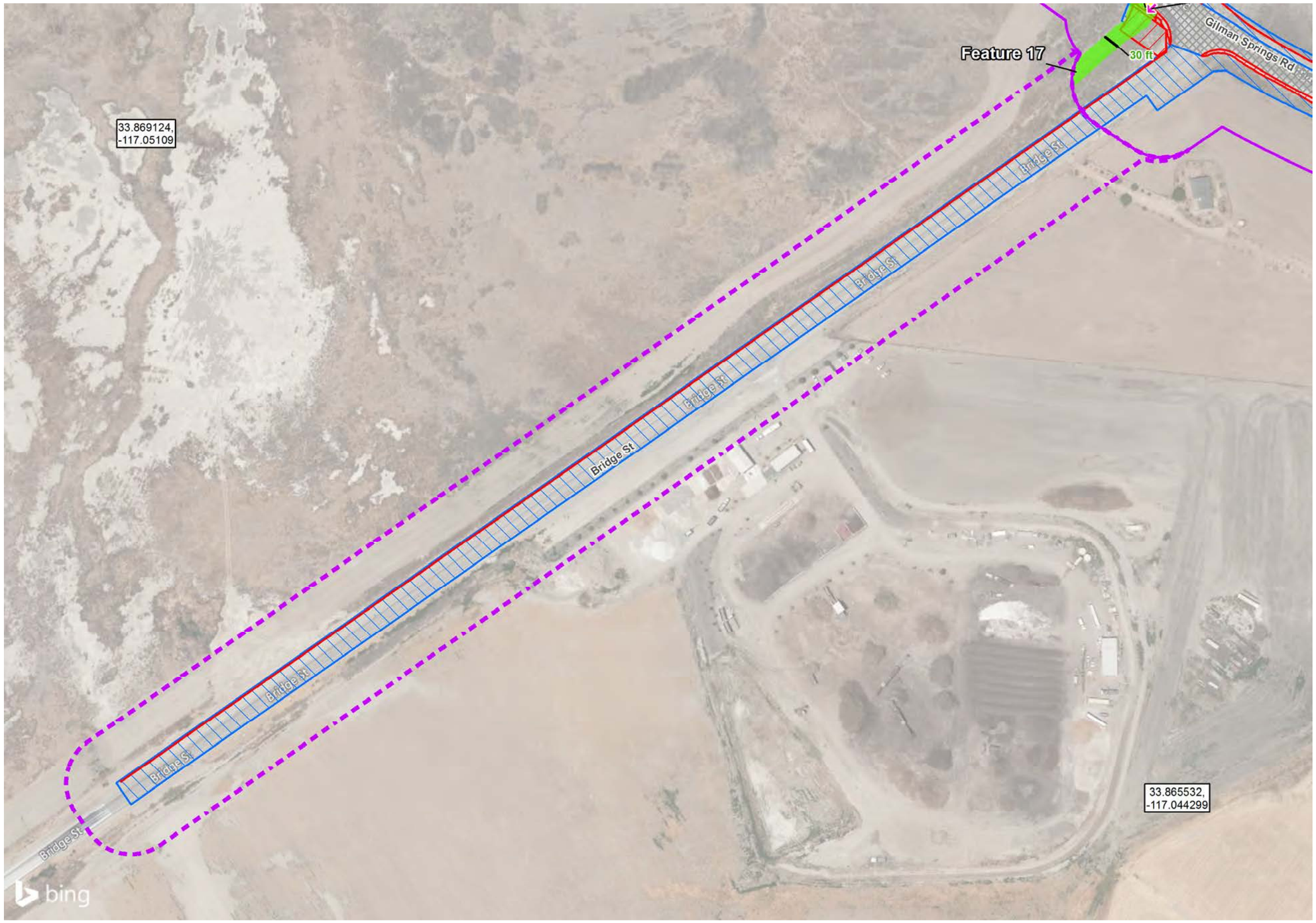

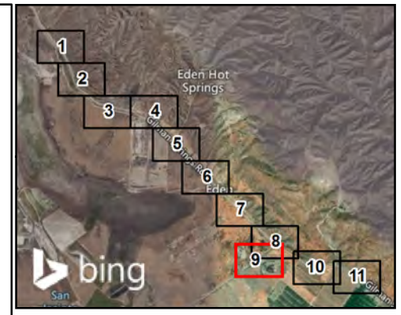

Legend

- Gilman Springs Rd JD Study Area (100-ft Buffer)
- Bridge St JD Study Area (100-ft Buffer)
- Permanent Impacts
- Temporary Impacts
- Roadway
- Culvert
- Photo Location
- Swale

Potential CDFW Jurisdiction

- Streambed
- Riparian
- # ft = Top of Bank

Note: Design changes following initial establishment of the JD Study Area and completion of field surveys resulted in the JD Study Area of Bridge Street which has not yet been mapped in the field.

N

0 100 200 Feet

1:2,400

Figure 2.4-4 (Sheet 9)
CDFW Results
Gilman Springs Median and Shoulder Improvements Project

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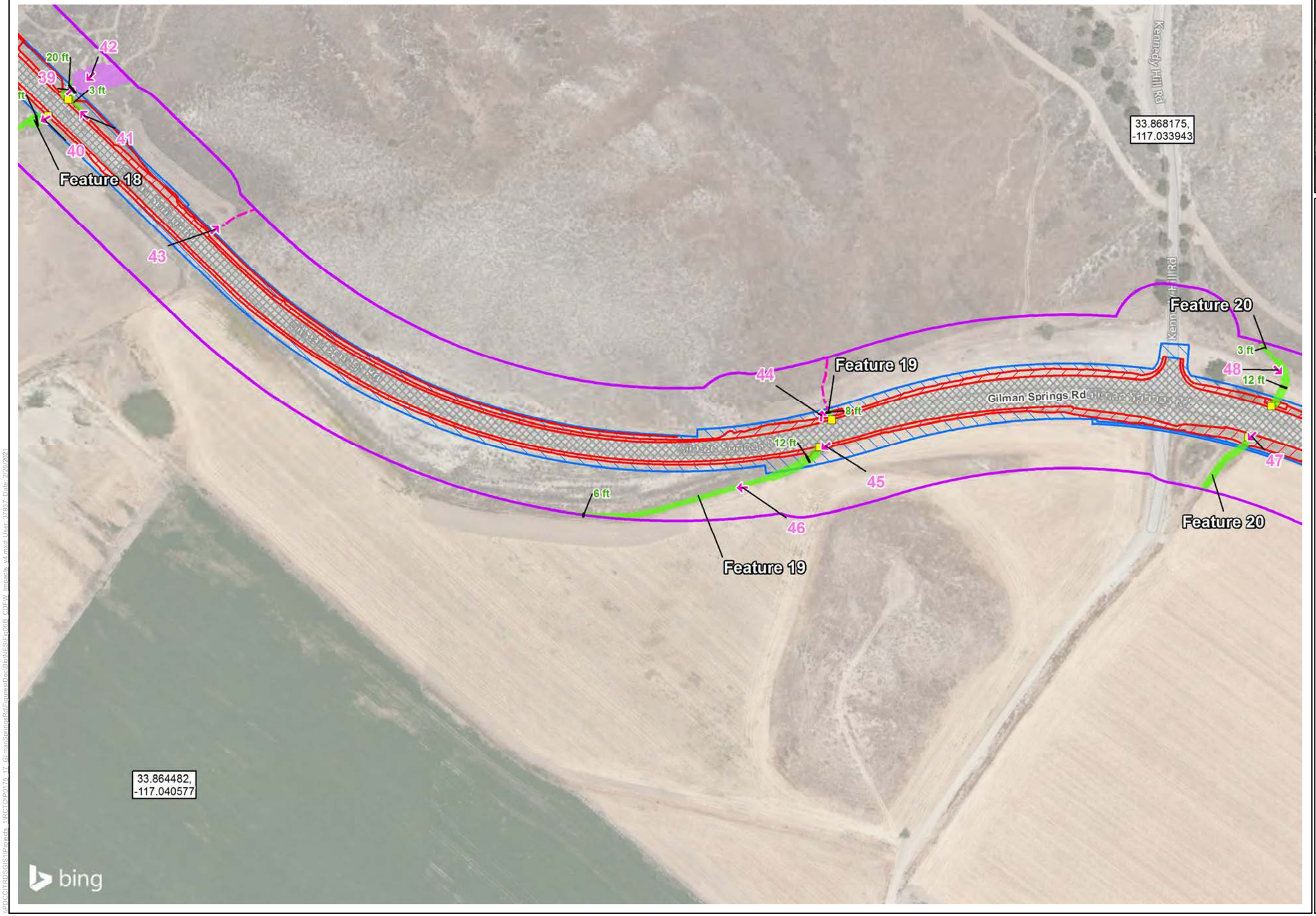

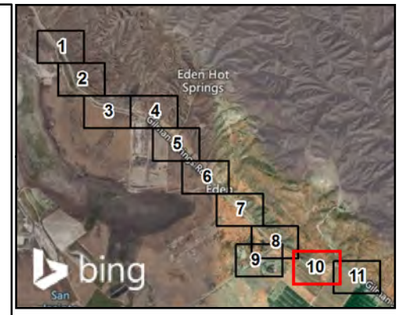

Legend

- Gilman Springs Rd JD Study Area (100-ft Buffer)
- Bridge St JD Study Area (100-ft Buffer)
- Permanent Impacts
- Temporary Impacts
- Roadway
- Culvert
- Photo Location
- Swale

Potential CDFW Jurisdiction

- Streambed
- Riparian

ft = Top of Bank

Note: Design changes following initial establishment of the JD Study Area and completion of field surveys resulted in the JD Study Area of Bridge Street which has not yet been mapped in the field.

N

0 100 200 Feet

1:2,400

Figure 2.4-4 (Sheet 10)
CDFW Results
Gilman Springs Median and Shoulder Improvements Project

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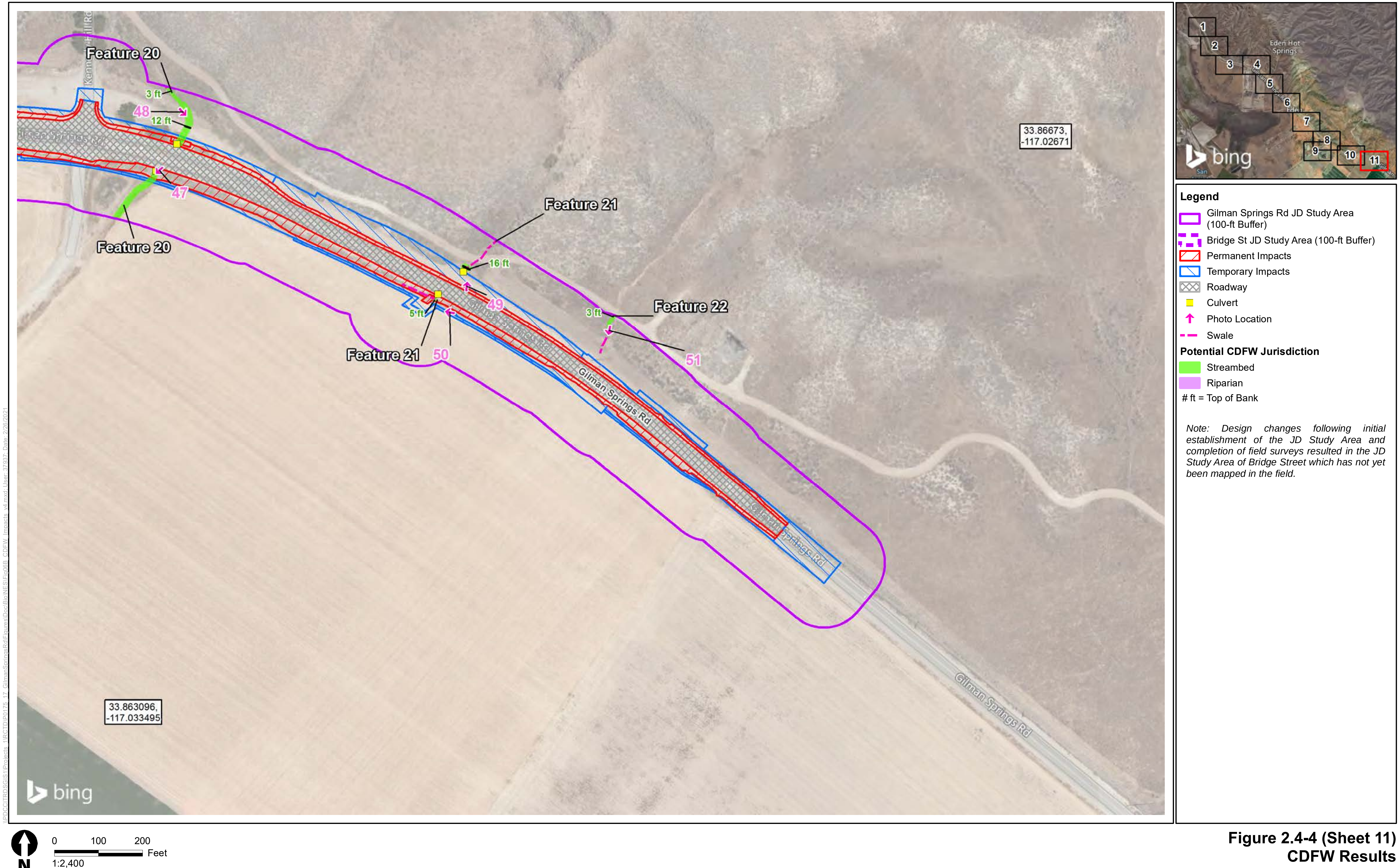

Figure 2.4-4 (Sheet 11)
CDFW Results
Gilman Springs Median and Shoulder Improvements Project

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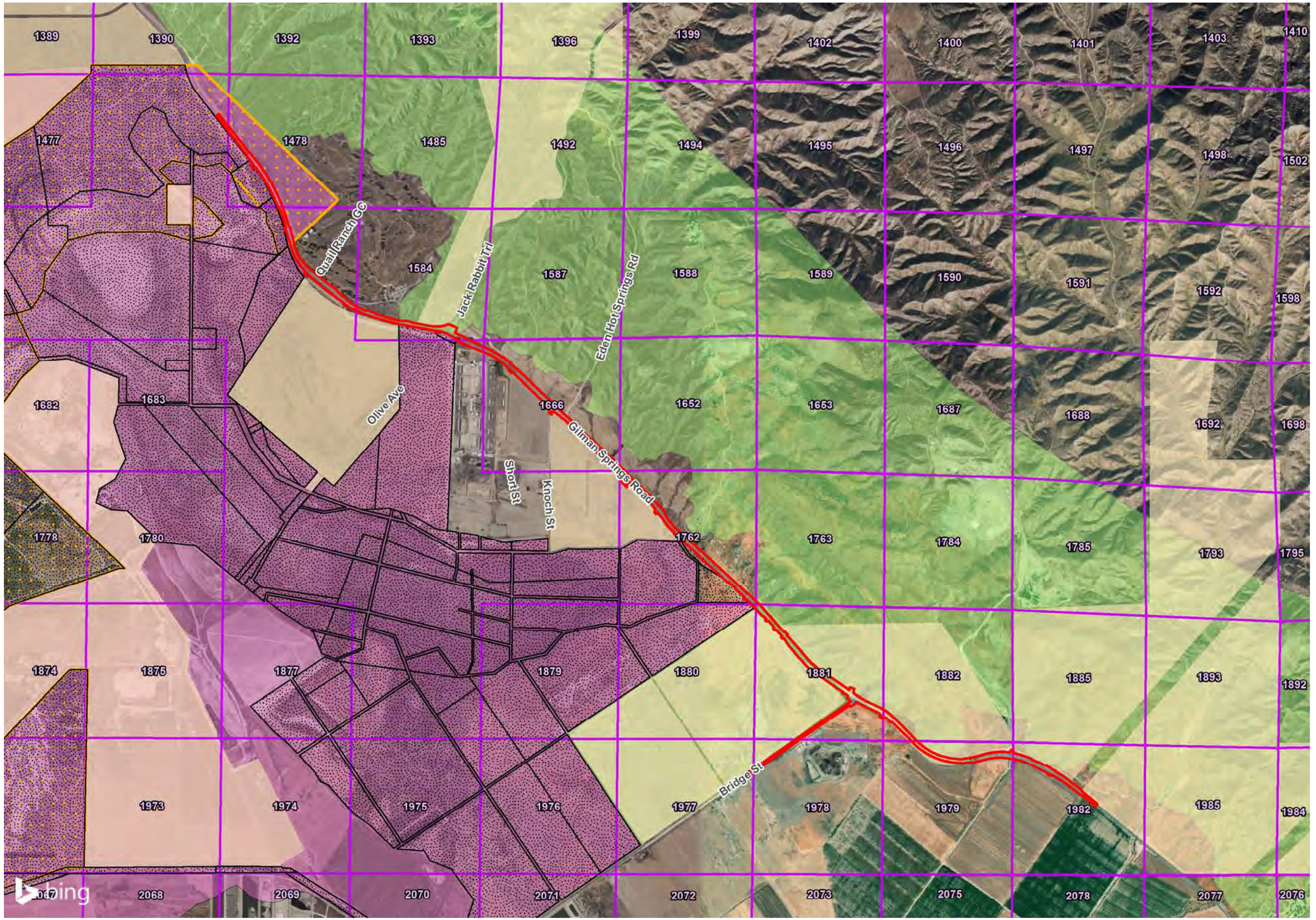

Legend

- Limits of Disturbance

Western Riverside County Multiple Species Habitat Conservation Plan

- PQP Conserved Lands
- Existing Core-H
- Proposed Core-3
- Criteria Cell
- Additonal Reserved Lands

Stephens' Kangaroo Rat Habitat Conservation Plan

- San Jacinto-Lake Perris Core Reserve

Source: RCTD (2017); ESRI (2017)

N

0 1,000 2,000 Feet

1:24,000

Figure 2.4-5
MSHCP Conservation Areas
Gilman Springs Median and Shoulder Improvements Project

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The project would require authorization from USACE (pursuant to CWA § 404), RWQCB (pursuant to CWA § 401 and Porter–Cologne), and CDFW (pursuant to California Fish and Game Code § 1602) as a result of impacts on jurisdictional aquatic resources. A CWA Section 404 Nationwide permit is expected to be required for the project. **AMMs BIO-8** through **BIO-10** would be incorporated into the project in order to minimize impacts on aquatic resources. Implementation of **MM BIO-11** (see Section 2.4.3, *Avoidance, Minimization, and Mitigation Measures*) would compensate fully for any impacts on aquatic resources. Impacts would be considered ***less than significant*** with incorporation of **MM BIO-11**.

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

Less-than-Significant Impact.

The project occurs within WRC MSHCP Proposed Core 3 and Existing Core H. The WRC MSHCP strives to preserve these areas for wildlife movement. Although the project would extend through a WRC MSHCP core/linkage area, it would not add capacity and, as proposed, is considered a maintenance activity under WRC MSHCP Volume I, Section 7.3.4, and, as such, the project is a Covered Activity under the WRC MSHCP.

Within the BSA, Existing Core H is composed of the San Jacinto Wildlife Area (see Figure 2.4-6), private lands, and lands with pre-existing conservation agreements. Proposed Core 3 (Badlands/Potrero) is primarily private lands with some P/QP lands. Proposed Core 3 is connected to Existing Core H.

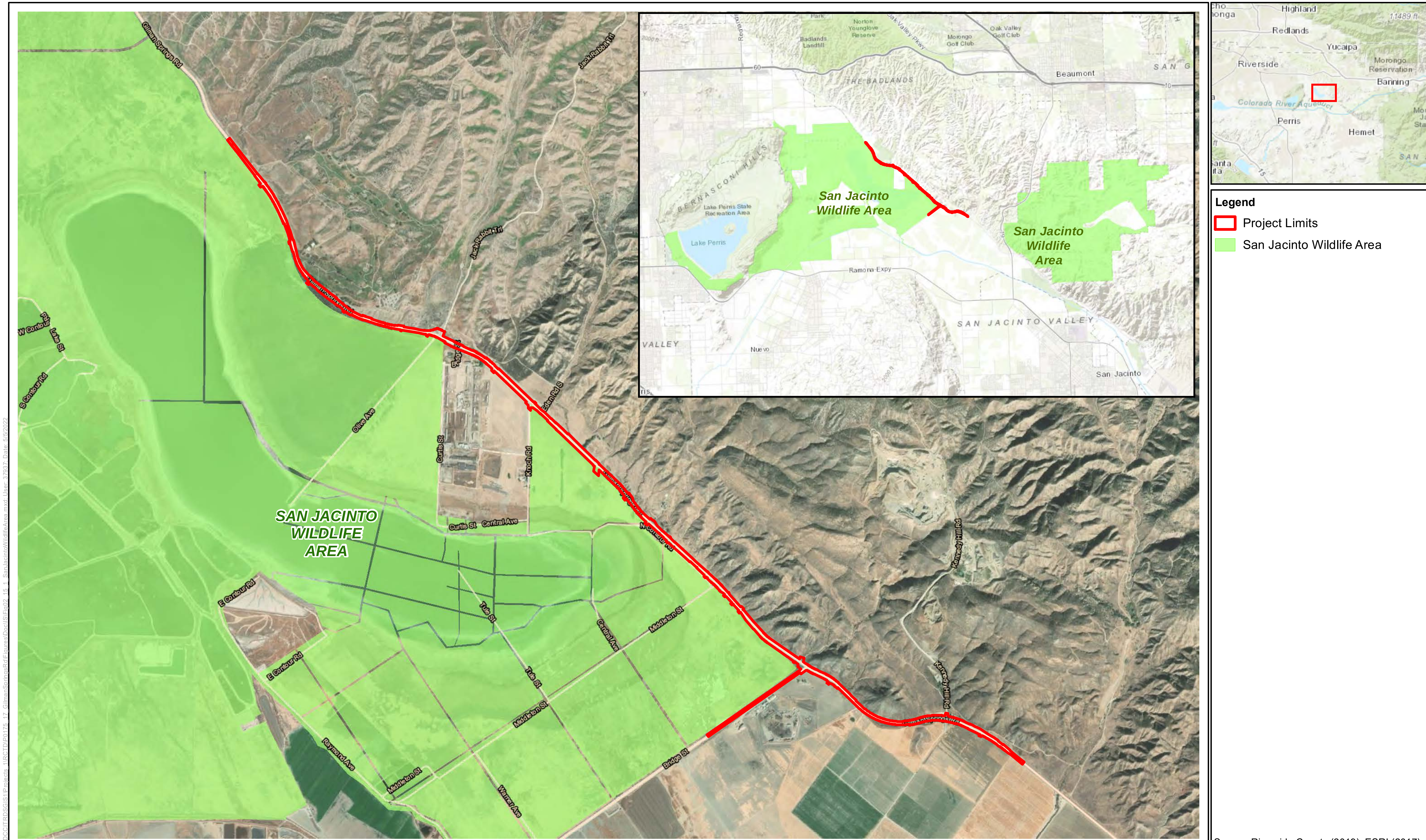
A total of 23 subgrade culverts were mapped within the BSA boundaries. Most of these culverts are three feet or smaller in diameter and partially or completely blocked by sediment, debris, or vegetation. Based solely on the culvert sizes, the majority of the undercrossings could support small to medium mammals. However, due to blockage, most of these undercrossings limit wildlife use, and several have riprap that would impede wildlife usage. In addition, limited topographical features would direct wildlife to these structures, and because most of the right of way also lacks substantial fencing, there are no existing barriers to wildlife movement across the road surface. Thus, most undercrossings do not provide substantial crossing opportunities.

The undercrossing at Jack Rabbit Trail (WRC MSHCP Proposed Core 3) could support the movement of larger wildlife, based on the culvert size, but because of the existing riprap within a highly erosional upstream area and a 90-degree bank curve at the downstream end, there is high potential that wildlife currently is being deterred from using this undercrossing structure. The existing undercrossing just north of Bridge Street (also WRC MSHCP Proposed Core 3) could also support some small to large wildlife movement; however, there are no fences or structures in the area that would direct wildlife through the drainage. Based on the descriptions of the undercrossings, these structures have low existing function for wildlife movement.

Due to the widening of the shoulder, improvements to culverts through the length of the project are necessary. The Bridge Street underpass is being designed to accommodate small to large-

sized mammals following the guidelines in WRC MHSCP Volume I, Section 7.5.2. The underpass at Bridge Street would be expanded from a 12-foot-wide by 6-foot-high by 72-foot-long culvert to a large span reinforced-concrete box culvert that would be 26 feet wide by 7.5 feet high by 72 feet long, with a dry bench for wildlife to cross during high flows and smaller tubes the same length as the structure on the dry bench for small-mammal passage. In addition, wildlife fencing would be installed north and south of the crossing, along a portion of Gilman Springs Road, and also on the northern side of Bridge Street, to direct wildlife to the crossing area. Jumpouts would be installed along the proposed fenced areas along Gilman Springs Road to ensure that wildlife does not get trapped within the right of way. The proposed jumpouts will be earthen escape ramps that allow wildlife to safely jump out of the road right of way and onto the safe side of the fence. The jumpout structure would also be designed at a height sufficient to prevent wildlife from jumping into the roadside of the fence. It is anticipated that these enhancements would encourage wildlife to move through the undercrossing, rather than across the roadway, within this segment of the Gilman Springs Road improvements, which is anticipated to support movement of key populations of species within the WRC MSHCP for Proposed Core 3. The impacts associated with the improvements to the Bridge Street undercrossing would be beneficial compared to existing conditions of the roadway. There are currently no plans for wildlife crossing improvements to the culvert at Jack Rabbit Trail, due to the highly erosive soils and sizable increase in impacts that would occur beyond the scope of the project. Additionally, there is potential for future widening of Gilman Springs Road (based on the *Riverside County General Plan – Circulation Element*), although a wildlife crossing at this site is not currently a feasible option. Therefore, improvements to the Jack Rabbit Trail underpass are limited to a 6-foot extension of the culvert.

The openness index of the existing small to medium culverts range between 0.01 and 0.24 and, at the time of the reconnaissance surveys, were blocked by vegetative debris. Therefore, under the existing condition, culverts along Gilman Springs Road are expected to have minimal to no use by wildlife. The widened roadbed and shoulder would result in most of the culverts being lengthened an average of 12 feet. The longer culverts and additional road improvements that would be incorporated to the expanded right of way would reduce the openness index of the culverts for passage. Impact-resistant channelizers would generally be placed 48 feet apart within the median and would not prevent wildlife from crossing over the roadway. There may be an increase in wildlife collisions with vehicles; however, the project would not result in an impediment to wildlife movement. Furthermore, with the addition of the wildlife crossing, fencing, and jumpouts at Bridge Street and the commitment to the clearing of the culverts along the project alignment, as addressed in the following sentences, the project may reduce wildlife collisions. **AMM BIO-19** would potentially make crossings more attractive to wildlife by requiring that every culvert be cleared of all obstructions during construction, such that there is a clear line of sight from one end of each culvert to the other. In addition, the County would remove debris from culverts annually post-construction (**AMM BIO-17**). **AMM BIO-20** requires the development a Wildlife Fencing Plan that would provide the details for fence design and wildlife escape opportunities. There are no migratory fish within the BSA due to the ephemeral nature of all of the waterways.



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0 1,000 2,000 Feet
1:24,000

Figure 2.4-6
San Jacinto Wildlife Area
Gilman Springs Median and Shoulder Improvements Project

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