Project Description

Document No.: 241112133015_9d45e44e
Revision No.: Draft

Union Pacific Railroad

Bahia Yard Expansion Project, Martinez Subdivision, Solano County, California
December 2024

Project Description

Client Name:	Union Pacific Railroad
Project Name:	Bahia Yard Expansion Project, Martinez Subdivision, Solano County, California
Project No.:	UPPRCP14
Document No.:	241112133015_9d45e44e
Revision No.:	Draft
Date:	December 2024

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Contents

Appendices

Acronyms and Abbreviations

BMP	best management practice
CEQA	California Environmental Quality Act
MP	milepost
project	UPRR Bahia Yard Expansion Project
ROW	right-of-way
UPRR	Union Pacific Railroad

1. Project Proponent

Union Pacific Railroad (UPRR)

2. Project Title

UPPR Bahia Yard Expansion Project (project), Martinez Subdivision, Solano County, California

3. Project Location

UPRR is proposing to construct a 6,406-foot-long second siding track parallel to an existing siding track that is adjacent to the existing UPRR Martinez Subdivision mainline track from Milepost (MP) 37.5 to MP 38.8. The project is in the city of Benicia, Solano County, and extends from approximately 1,860 feet (0.35 mile) north of Lake Herman Road on the southern end to the southern side of Morrow Lane on the northern end. The siding track is centered at latitude 38°5'56.05" N and longitude -122°6'8.08" W (U.S. Geological Survey 7.5-minute Vine Hill quadrangle, Sections 17 and 20, Township 03 North, Range 02 West, Mount Diablo Meridian) (Appendix A, Figure 1).

4. Purpose and Need

The purpose of the project is to allow for interstate commerce and to support safe and efficient rail service for local customers in the Northern California megaregion. The Martinez Subdivision on the Northern California Service Unit serves a variety of markets, including UPRR's Benicia Railroad Automotive Vehicle Transloading Facility. The construction of a support track at the Bahia Yard will facilitate growth of the auto facility and support the capacity of various other industrial customers served by UPRR's yard in Ozol, California.

The geographical and environmental constraints in and around the San Francisco Bay Area limit the ability of UPRR to support the demand and growth of Northern California markets. There are very few locations where tracks can be constructed to meet the capacity needs of California's supply chain. The newly constructed track must be close to the businesses that UPRR supports and long enough to hold the demand for rail cars.

Use of the proposed location of the project at Bahia will expand an existing support track connected to the UPRR mainline to accommodate efficient operations, and the site is large enough to hold the demand for cars at Benicia and the surrounding business community. The project will also improve drainage in the area to support a safe and reliable network.

The rail line supports Capitol Corridor passenger rail service. The expanded capacity will reduce the number of delays to both freight- and passenger-rail service.

5. Project Overview

UPRR is proposing to construct a 6,406-foot-long second siding track parallel to an existing siding track that is adjacent to the existing UPRR Martinez Subdivision mainline track from MP 37.5 to MP 38.8. The project also includes five culvert replacements. Appendix B contains design schematics of the proposed siding track and culvert replacements.

Before construction activities, best management practices (BMPs) will be installed as needed to avoid impacts on water quality. Temporary work areas will be cleared and graded for equipment access and mobility. Clean gravel will be placed in temporary work areas to provide a stable surface for equipment.

Materials (culverts and fill material) will be transported to the project site along existing access roads and will be temporarily placed within the UPRR right-of-way (ROW). An existing ROW fence will be removed from the eastern side of the existing tracks for the length of the project area.

The total volume of fill material for the project is estimated to be approximately 25,000 cubic yards. The volume of cut material is estimated to be approximately 20,000 cubic yards. The total cut material will be hauled offsite for disposal. The project will require approximately 5.3 acres of grading/fill. Final estimates will be reported following completion of geotechnical studies and reporting. Approximately 2.43 acres of seeding will be required. Temporary impacts will include jack-and-bore pits and equipment access for ROW fence removal.

Permanent impacts on wetlands and waters (Waters of the United States/State) will occur with implementation of the project. Permanent grading at wetlands and waters is anticipated to affect approximately 2.12 acres. The volume of fill material for wetlands and waters is approximately 10,525 cubic yards. These activities will result in 1.40 acres of temporary impacts to wetlands and waters. Table 1 provides an overview of proposed impacts to wetlands and waters.

Credits at a mitigation bank will be purchased, or a compensation fee will be paid, for 2.12 acres of permanent impacts on wetlands in coordination with regulatory agencies. UPRR anticipates that mitigation credits for impacts to wetlands will be rounded up to the nearest .01 acre, such that adequate compensation will be provided for the <0.01 acre of permanent impacts to non-wetland waters.

5.1 Construction Equipment

Equipment for the project is anticipated to include the following:

- One excavator
- One front-end loader
- One backhoe
- One bulldozer
- Four dump trucks
- One motor grader
- One grapple truck
- One lowboy truck
- Ten construction worker vehicles per day
- One water truck (for dust control)

5.2 Access Routes and Staging Areas

Construction vehicles and equipment will be brought to the site via existing access roads at Lake Herman Road and at Morrow Lane and along the UPRR ROW. Laydown areas for rail, ties, and other track material will be within the footprint for the second siding track (Appendix A, Figure 2).

5.3 Second Siding Track

The project proposes to construct a 6,406-foot-long second siding track parallel to an existing siding track adjacent to the existing UPRR mainline track from MP 37.5 to MP 38.8. The second siding track will be constructed on the eastern side of the existing track. The siding track will extend from approximately 1,860 feet (0.35 mile) north of Lake Herman Road, and on the northern end the track will terminate on the southern side of Morrow Lane. Construction of the second siding track will require grading, cut, and fill on the eastern side of the track.

5.4 Culvert Replacements

The project includes replacement of five existing culverts along the UPRR mainline. Work at these sites will include either jack and bore or plug, fill, and removal of existing culverts. Table 2 summarizes the proposed pre- and post-project conditions at each culvert.

Table 1. Permanent and Temporary Impacts to Waters of the United States/State

Name	Permanent (acres)	Permanent (linear feet)	Permanent (~cubic yards)*	Temporary (acres)	Temporary (linear feet)	Temporary (~cubic yards)*
Wetlands/Other Waters						
PEM-01	1.24	0	6,200.00	0.34	0	1,700.00
PEM-02	0	0	0	<0.01	0	25.00
PEM-03	0	0	0	<0.01	0	25.00
PEM-04	0.73	0	3,525.00	0.87	0	4,500.00
PEM-06	0.08	0	400.00	<0.01	0	20.00
PEM-07	0	0	0	<0.01	0	75.00
PSS-01	0.07	0	375.00	<0.01	0	155.00
Subtotal	*2.12*	*0*	*10,500.00*	*1.26*	*0*	*6,500.00*
Non-wetland waters/Riverine, Intermittent Stream						
W-01	*<0.01*	13.00	15.00	0.06	190.00	375.00
W-02	0	0	0	<0.01	0	25.00
W-04	*<0.01*	12.50	10.00	0.07	28.50	225.00
W-05	0	0	0	0.02	90.00	125.00
W-06	0	0	0	0	0	0
Subtotal	*<0.01*	*0*	25.00	*0.14*	*0*	*750.00*
Total	2.12	25.50	10,525.00	1.40	308.50	6,795.00

*Cubic yards of fill are approximated and rounded to the nearest whole number – total volume is subject to change and will be reported prior to commencement of construction.

Table 2. Existing and Proposed Culvert Features

MP	Existing Culvert	Replacement Culvert	Additional Features at Culvert Inlet	Riprap at Culvert Inlet	Additional Features at Culvert Outlet
37.83	(2) 36-inch × 112-foot CMP	60-inch × 118-foot SSP	Plug, fill, and remove existing 36-inch culvert as needed.	Place Type 1 riprap at inlet, 55 tons	Place Type 1 riprap at outlet, 50 tons
38.09	30-inch × 100-foot SSP	48-inch × 98-foot SSP	Plug, fill, and remove existing 30-inch culvert as needed.	Place Type 1 riprap at inlet, 25 tons	Place Type 1 riprap at outlet, 25 tons
38.20	4-foot × 2-foot × 58-foot WBC	Three 42-inch × 97-foot SSP	Plug, fill, and remove existing 30-inch culvert as needed.	Place Type 1 riprap at inlet, 30 tons	Place Type 1 riprap at outlet, 30 tons
38.31	24-inch × 60-foot CMP	Two 48-inch × 94-foot SSP	Plug, fill, and remove existing 24-inch culvert as needed.	Place Type 1 riprap at inlet, 35 tons	Place Type 1 riprap at outlet, 30 tons
38.68	4-foot × 2-foot × 58-foot WBC	Four 42-inch × 92-foot SSP	Plug, fill, and remove existing 4-foot × 2-foot culvert as needed.	Place Type 1 riprap at inlet, 35 tons	Place Type 1 riprap at outlet, 30 tons

CMP = corrugated metal pipe
SSP = smooth steel pipe
WBC = wooden box culvert

5.5 Water Diversion

All work conducted below the ordinary high water mark is anticipated to occur during the dry season. Water diversion measures such as cofferdams will be installed within wetland areas during low tide events to ensure additional inundation of water does not occur during construction. Dewatering is not anticipated at this time; however, in the event that dewatering is required an agency approved dewatering plan and water quality monitoring plan will be implemented prior to dewatering activities.

5.6 Right-of-Way Requirements

UPRR will require acquisition of approximately 2.95 acres of ROW from two property owners for construction of the second siding track and replacement culverts.

5.7 Site Preparation, Protection, and Restoration

The following protective measures and site restoration activities will be completed at the site:

- Before ground disturbance, highly visible markers will be used to delineate the project site.
- Existing vegetation that does not present a safety concern relative to train operations will be carefully hand-trimmed to ground level to allow immediate re-establishment.
- A worker environmental awareness training program for construction personnel, including contractors, will be conducted before construction begins to inform them of their responsibilities for BMPs and permit conditions for waters of the United States, special-status species, and other sensitive resources.
- Construction BMPs will be installed in staging areas as needed to contain sediment within the project area and to avoid downgradient water quality impacts on Suisun Marsh and Goodyear Slough. Erosion control measures will include the use of hay bales, fiber rolls, silt fences, or other accepted practices.
- Vehicle traffic will occur on established roads and the UPRR ROW.
- During construction, trash and construction debris will be removed from the work areas daily. Food-related trash items, such as wrappers, cans, bottles, and food scraps, will be disposed of in closed containers and removed at the end of each workday from the project site.
- Fueling and maintenance of vehicles and other equipment will occur at least 100 feet from Suisun Marsh, Goodyear Slough, and any associated riparian habitat.
- A spill prevention and countermeasure plan will be developed before project construction that includes onsite handling rules for avoiding impacts on drainages and waterways. Spills will be cleaned immediately according to the spill prevention and countermeasure plan, and appropriate agencies identified in the plan will be notified of any spills and cleanup activities.

The land on both sides of the tracks within the UPRR ROW is sparsely vegetated but will likely require some vegetation removal. As part of regularly scheduled maintenance, UPRR will clear the vegetation within its ROW as a fire hazard precaution in conformance with Federal Railroad Administration requirements. The UPRR ROW will not be revegetated following construction of the project. The following activities will be performed when the project is complete:

- Temporary fill, including any water diversion structures such as cofferdams, will be removed within 30 days of project completion.
- BMPs will be removed after construction is complete and no potential for sediment transport exists.

6. California Environmental Quality Act – Statutory Exemption

This project has undergone extensive environmental analysis, and several measures and BMPs have been incorporated into the project to avoid environmental impacts. However, because this project supports Amtrak passenger service, it is exempt from the California Environmental Quality Act (CEQA) under a CEQA statutory exemption. Government Code Section 21080(b) specifies certain activities that are not subject to CEQA as follows:

> *(b) This division does not apply to any of the following activities:*
>
> > *(10) A project for the institution or increase of passenger or commuter services on rail or highway rights-of-way already in use, including modernization of existing stations and parking facilities.*

This statutory exemption is repeated in the CEQA Guidelines; refer to 14 *California Code of Regulations* Section 15275—Specified Mass Transit Projects, in Article 18—Statutory Exemptions. The first section in Article 18, Section 15260, states "[t]his article describes the exemptions from CEQA granted by the Legislature." This group of exemptions is distinguished from those set forth in Article 19—Categorical Exemptions. Whereas CEQA provides exceptions from the Categorical Exemptions under defined circumstances that the lead agency must consider before it finds such an exemption applicable (Section 15300.2), the Statutory Exemptions in Article 18 apply to the activities they cover without such exceptions (also Section 15061(b)).

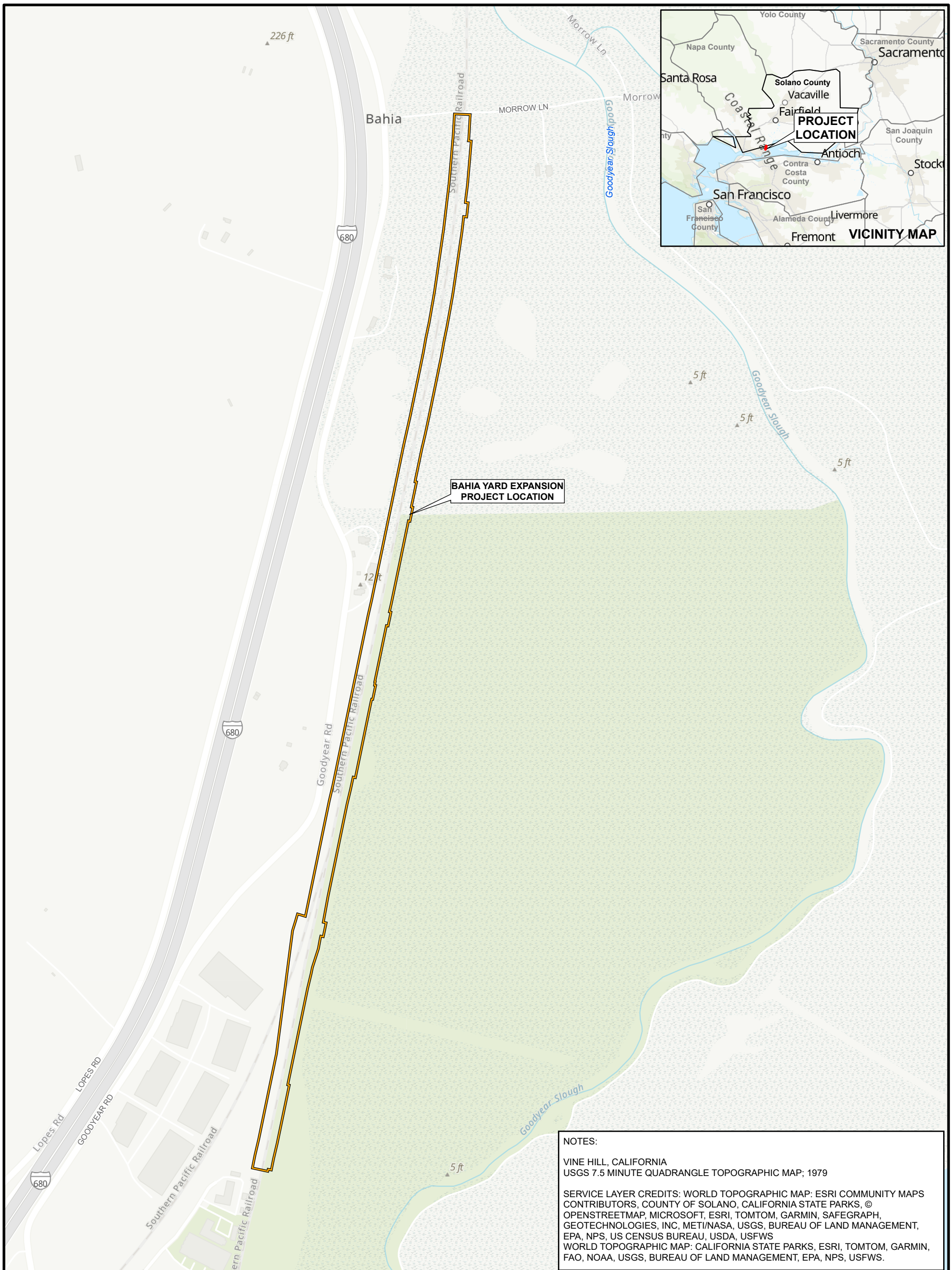
The project is located on the Martinez Subdivision in Solano County, California, which supports Amtrak passenger service. This project is necessary to improve interstate commerce and to support safe and efficient rail service for local customers in the Northern California megaregion.

7. Project Schedule

Project construction is scheduled to take approximately 10 months and begin in 2026. Most of this time is for equipment and materials delivery, mobilization, and demobilization. Actual construction of the project will be conducted over a period of approximately 24 weeks. All work conducted below the ordinary high water mark is anticipated to occur during the dry season. The proposed schedule is as follows:

1. **Fall 2025:** Obtain permits from agencies.
2. **Summer 2026:**
    - Mobilize and install BMPs.
    - Construct culvert replacements.
    - Remove existing ROW fence.
    - Grade the subgrade and place ballast.
    - Construct siding track.
    - Restore site.
    - Demobilize.

Appendix A
Figures



NOTES:

VINE HILL, CALIFORNIA
USGS 7.5 MINUTE QUADRANGLE TOPOGRAPHIC MAP; 1979

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WORLD TOPOGRAPHIC MAP: CALIFORNIA STATE PARKS, ESRI, TOMTOM, GARMIN, FAO, NOAA, USGS, BUREAU OF LAND MANAGEMENT, EPA, NPS, USFWS.

LEGEND

PROJECT AREA (19.46 ACRES)

0 600 1,200
Feet

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FIGURE 1
PROJECT OVERVIEW

PROJECT DESCRIPTION
BAHIA YARD EXPANSION PROJECT
UNION PACIFIC RAILROAD
SOLANO COUNTY, CALIFORNIA

Jacobs

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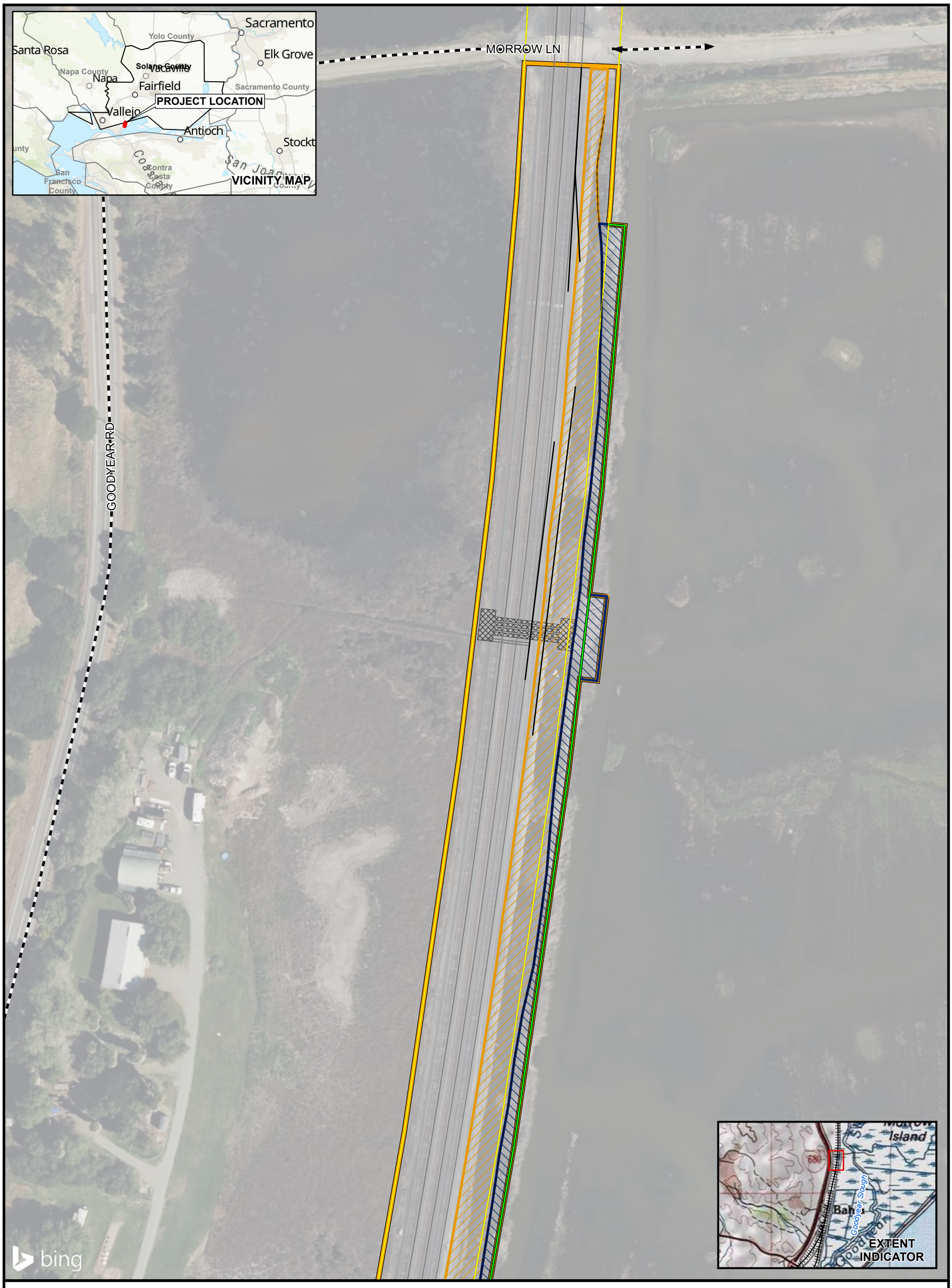

LEGEND

- EXISTING TRACK
- PROPOSED TRACK
- EXISTING CULVERT
- EXISTING ACCESS ROUTE
- CUT LINE
- FILL LINE
- FENCELINE (TO BE REMOVED)
- FENCELINE
- UNION PACIFIC RAILROAD RIGHT-OF-WAY
- RIGHT-OF-WAY (TO BE ACQUIRED)
- PROJECT AREA (19.46 ACRES)
- PERMANENT GRADING LIMIT (5.34 ACRES)
- TEMPORARY WORK AREA (2.45 ACRES)
- PROPOSED CULVERT LOCATION

NOTES:

CONSTRUCTION VEHICLES AND EQUIPMENT WILL BE BROUGHT TO THE SITE VIA EXISTING ACCESS ROADS AT LAKE HERMAN ROAD, GOODYEAR ROAD, AND MORROW LANE AND ALONG THE UPRR RIGHT-OF-WAY. LAYDOWN AREAS FOR RAIL, TIES, AND OTHER TRACK MATERIAL WILL BE WITHIN THE FOOTPRINT FOR THE PROPOSED TRACK.

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FIGURE 2 (PAGE 1 OF 5)
PROJECT COMPONENTS

PROJECT DESCRIPTION
BAHIA YARD EXPANSION PROJECT
UNION PACIFIC RAILROAD
SOLANO COUNTY, CALIFORNIA

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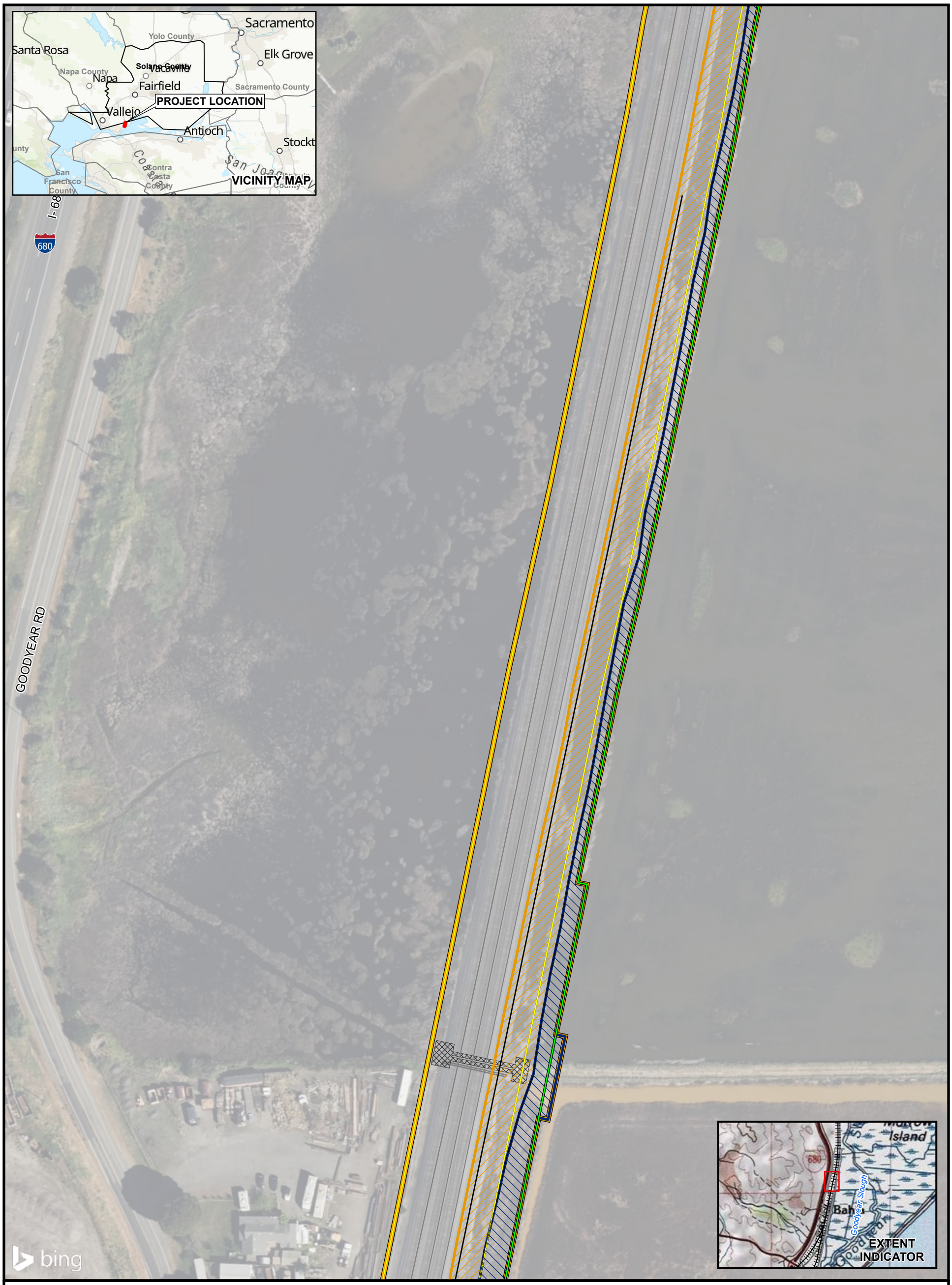

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- FILL LINE
- FENCELINE (TO BE REMOVED)
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Feet

FIGURE 2 (PAGE 2 OF 5)
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UNION PACIFIC RAILROAD
SOLANO COUNTY, CALIFORNIA

Jacobs

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FIGURE 2 (PAGE 3 OF 5)
PROJECT COMPONENTS

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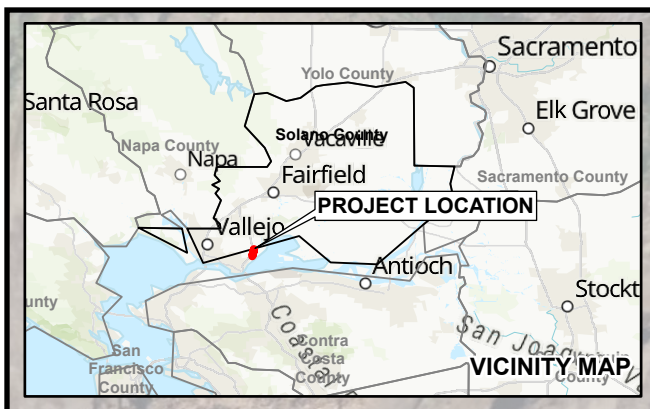
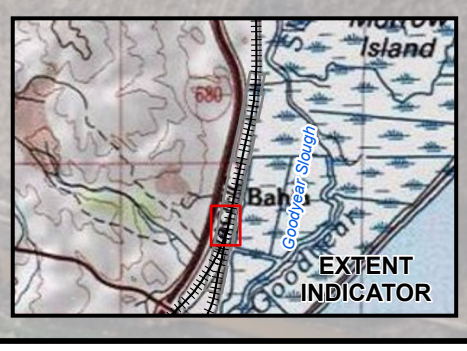


GOODYEAR RD



LEGEND

- EXISTING TRACK
- PROPOSED TRACK
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- EXISTING ACCESS ROUTE
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- FENCELINE (TO BE REMOVED)
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Feet

FIGURE 2 (PAGE 4 OF 5)
PROJECT COMPONENTS

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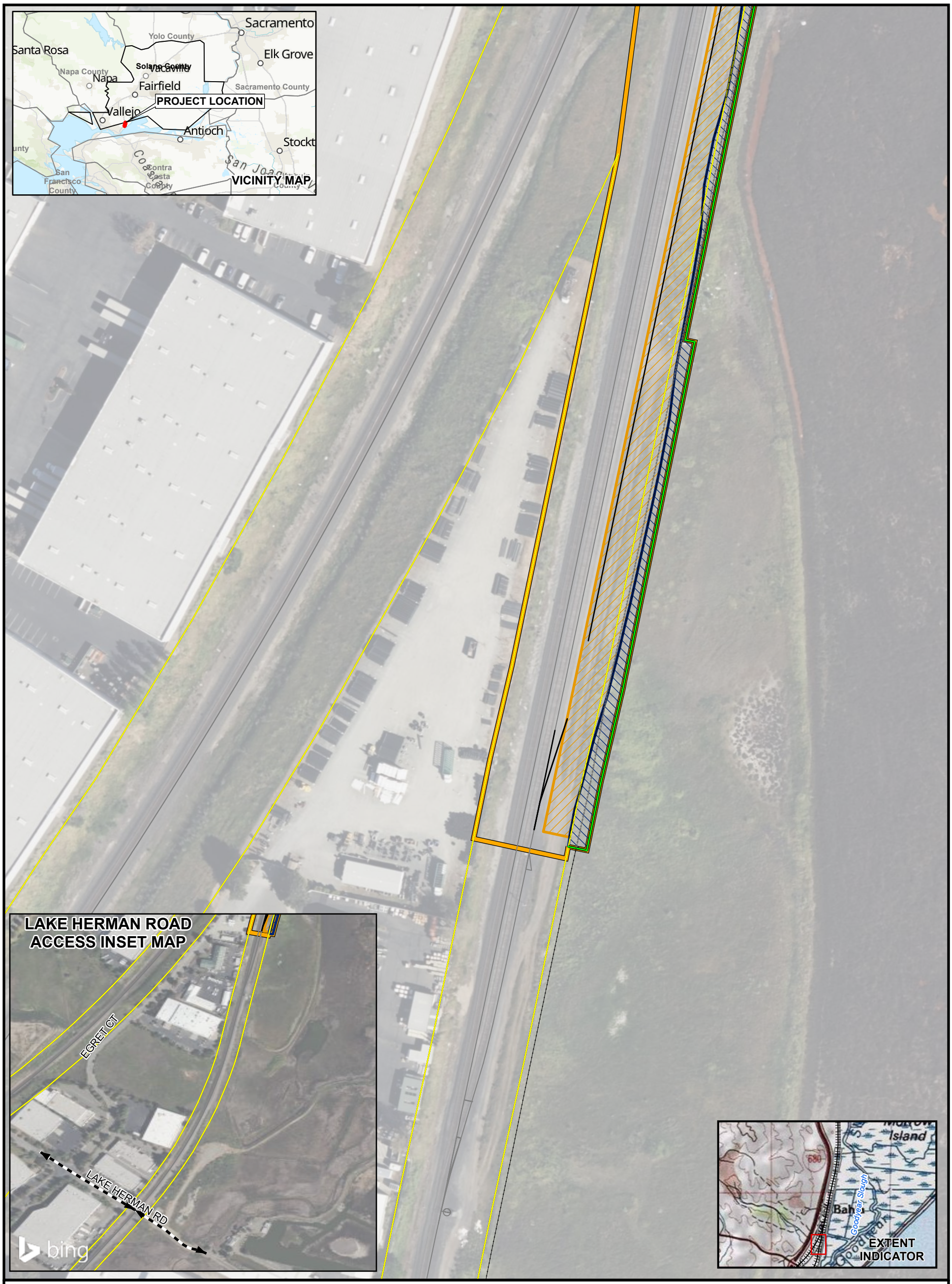

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- CUT LINE
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FIGURE 2 (PAGE 5 OF 5)
PROJECT COMPONENTS
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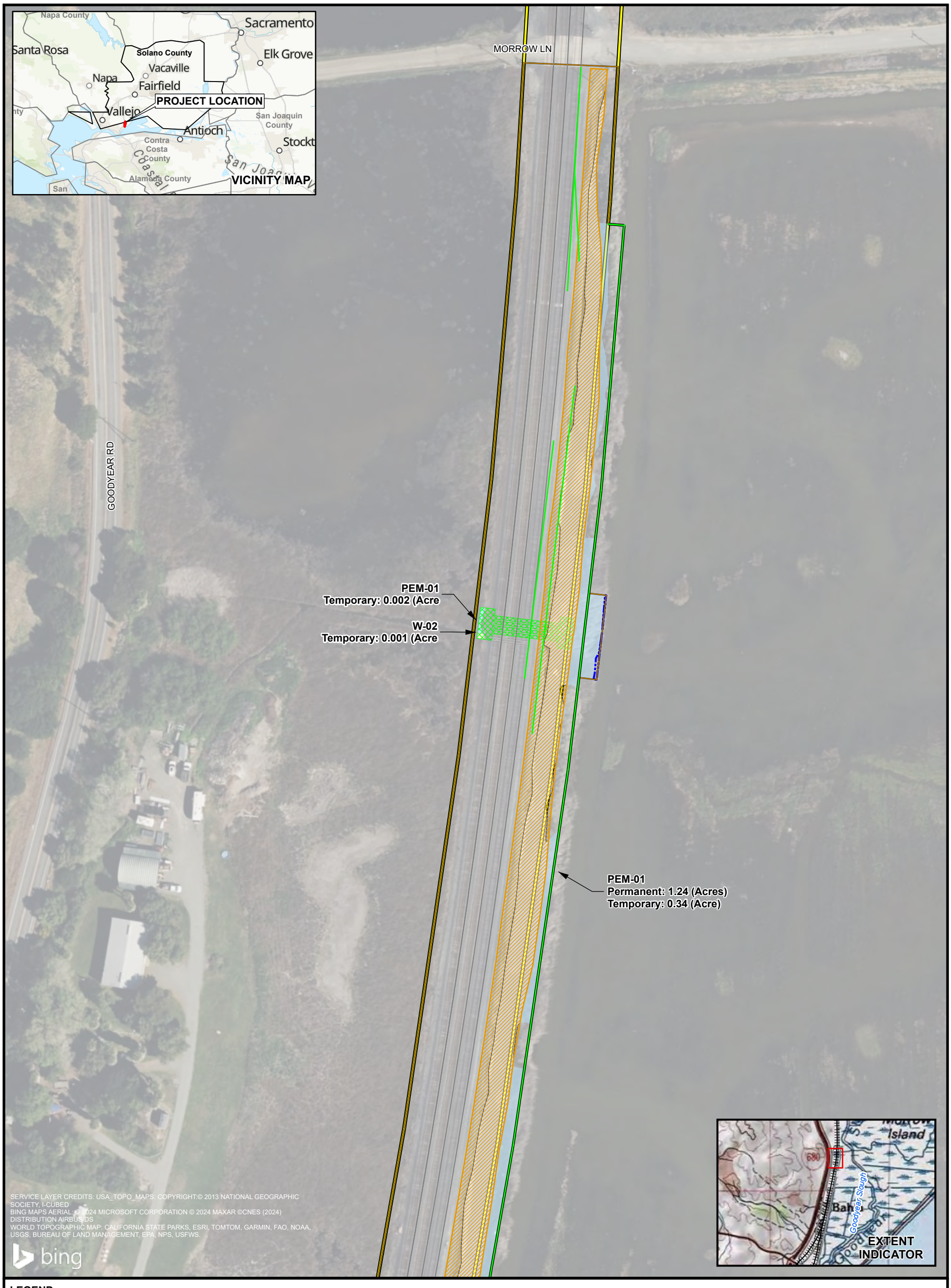

LEGEND

- PROPOSED TRACK
- EXISTING TRACK
- EXISTING CULVERT (PLUG AND FILL AS NEEDED)
- FENCELINE (TO BE REMOVED)
- FENCELINE
- RIGHT-OF-WAY (REQUIRED)
- UNION PACIFIC RAILROAD RIGHT-OF-WAY
- PROJECT LIMITS (19.46 ACRES)
- PERMANENT GRADING LIMIT (5.34 ACRES)
- WORK AREA (2.45 ACRES)
- PROPOSED CULVERT LOCATION (JACK AND BORE)
- ORDINARY HIGHWATER MARK – NATURAL WATERCOURSE
- PERMANENT IMPACT TO WETLAND (2.12 ACRES)
- PERMANENT DISTURBANCE BELOW ORDINARY HIGHWATER MARK (0.004 ACRE)
- TEMPORARY IMPACT TO WETLAND (1.32 ACRES)
- TEMPORARY DISTURBANCE BELOW ORDINARY HIGHWATER MARK (0.144 ACRE)

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Feet

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FIGURE 3 (PAGE 1 OF 5)
IMPACTS TO WATERS OF THE UNITED STATES/STATE

BAHIA YARD EXPANSION PROJECT
UNION PACIFIC RAILROAD
SOLANO COUNTY, CALIFORNIA

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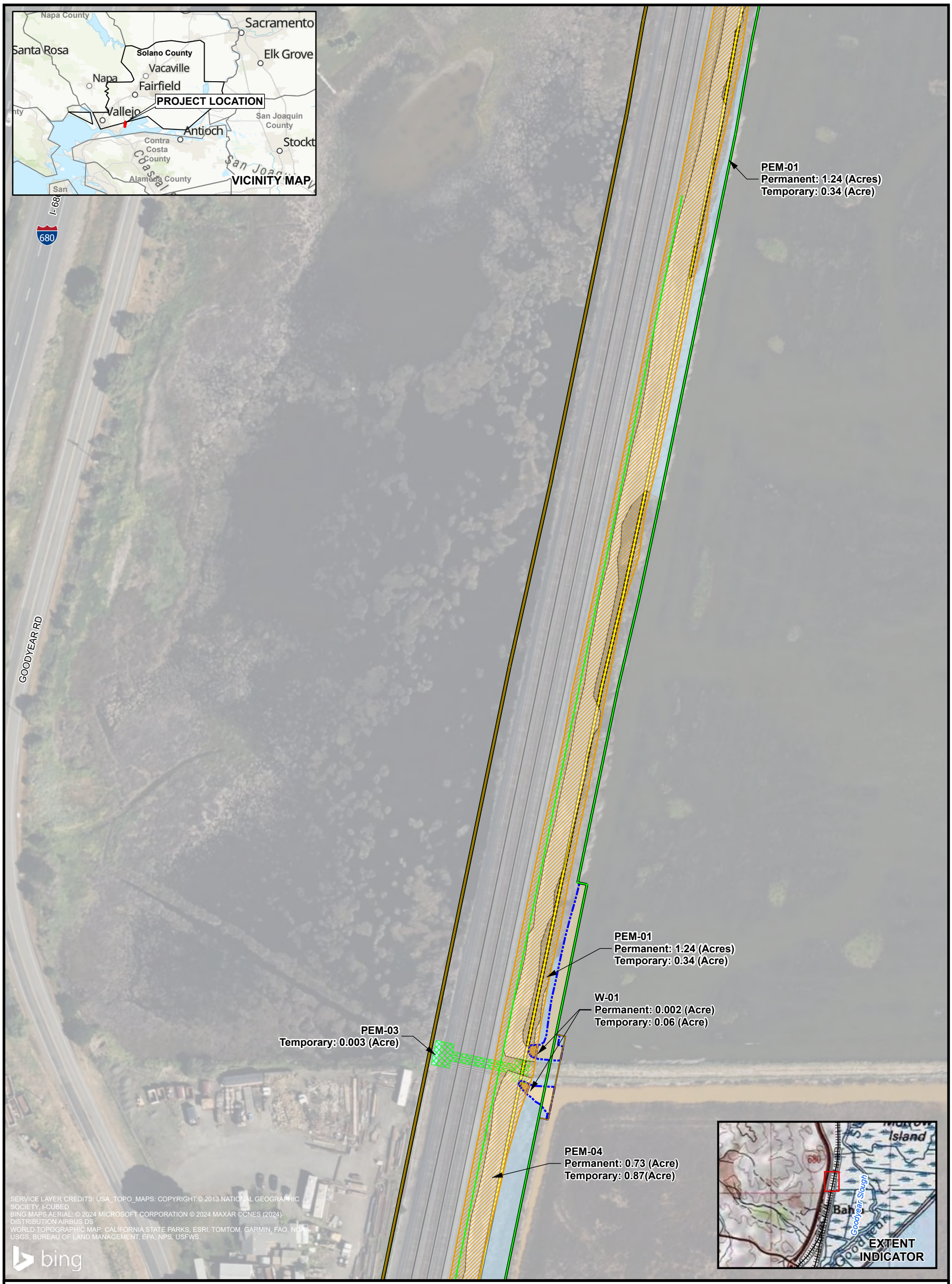

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- UNION PACIFIC RAILROAD RIGHT-OF-WAY
- PROJECT LIMITS (19.46 ACRES)
- PERMANENT GRADING LIMIT (5.34 ACRES)
- WORK AREA (2.45 ACRES)
- PROPOSED CULVERT LOCATION (JACK AND BORE)
- ORDINARY HIGHWATER MARK – NATURAL WATERCOURSE
- PERMANENT IMPACT TO WETLAND (2.12 ACRES)
- PERMANENT DISTURBANCE BELOW ORDINARY HIGHWATER MARK (0.004 ACRE)
- TEMPORARY IMPACT TO WETLAND (1.32 ACRES)
- TEMPORARY DISTURBANCE BELOW ORDINARY HIGHWATER MARK (0.144 ACRE)

N

0 100 200
Feet

NOTES:

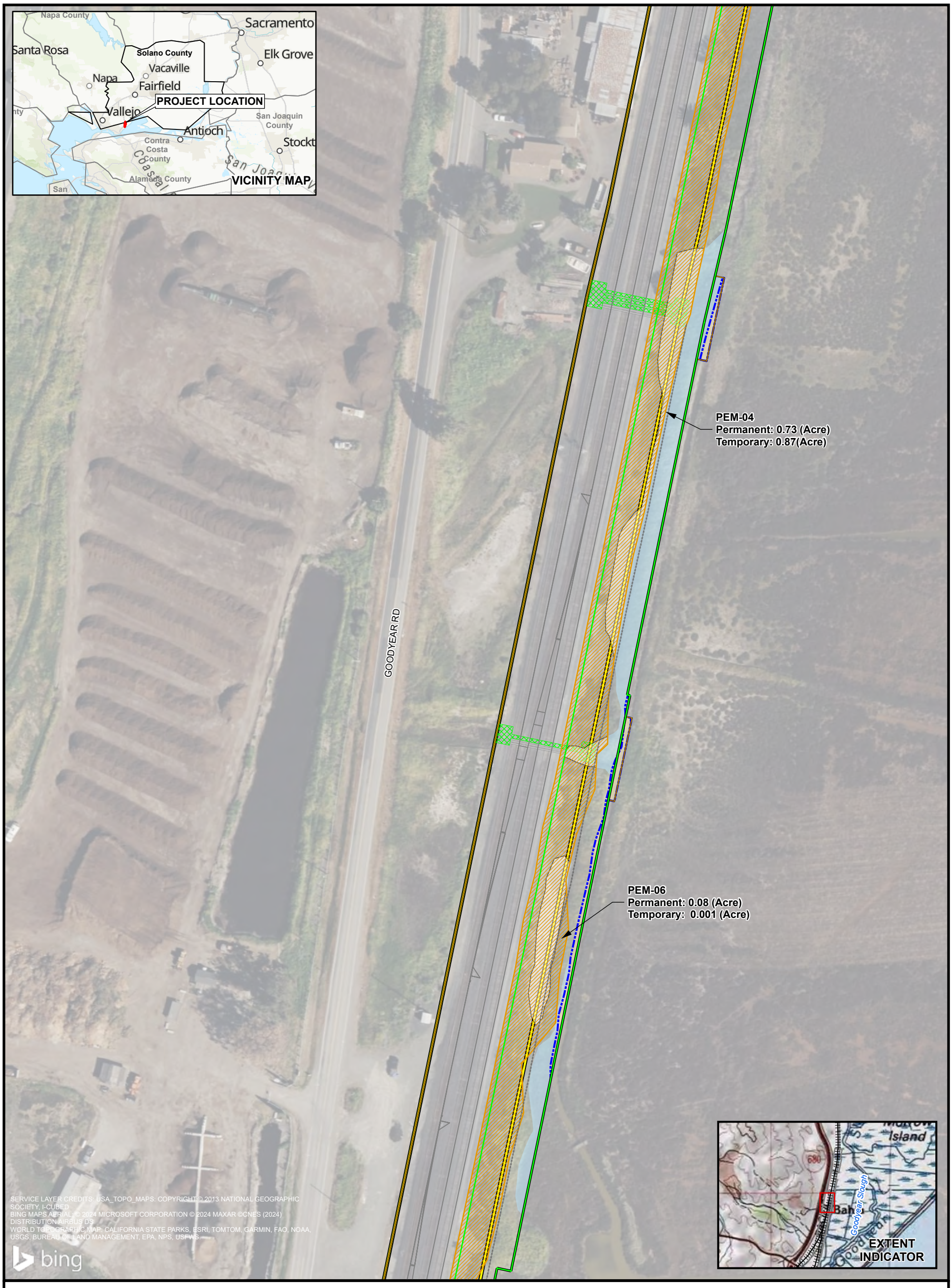
CONSTRUCTION VEHICLES AND EQUIPMENT WILL BE BROUGHT TO THE SITE VIA EXISTING ACCESS ROADS AT LAKE HERMAN ROAD AND AT MORROW LANE AND ALONG THE UPRR RIGHT-OF-WAY. LAYDOWN AREAS FOR RAIL, TIES AND OTHER TRACK MATERIAL WOULD BE WITHIN THE FOOTPRINT FOR THE PROPOSED TRACK..

FIGURE 3 (PAGE 2 OF 5)
IMPACTS TO WATERS OF THE UNITED STATES/STATE

BAHIA YARD EXPANSION PROJECT
UNION PACIFIC RAILROAD
SOLANO COUNTY, CALIFORNIA

Jacobs

\\DC1VS01\GISPROJ\U\UPRR\UPRR_BAHIAYARDEXP\MAPFILES\USACE_404\FIG03_404_IMPACTS.APRX FIG03_404_IMPACTS FELHADID 10/22/2024 1:16 PM



LEGEND

- PROPOSED TRACK
- EXISTING TRACK
- EXISTING CULVERT (PLUG AND FILL AS NEEDED)
- FENCELINE (TO BE REMOVED)
- FENCELINE
- RIGHT-OF-WAY (REQUIRED)
- UNION PACIFIC RAILROAD RIGHT-OF-WAY
- PROJECT LIMITS (19.46 ACRES)
- PERMANENT GRADING LIMIT (5.34 ACRES)
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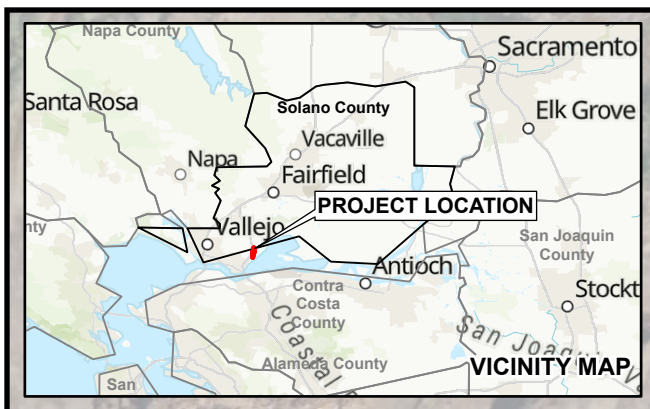
N

0 100 200
Feet

FIGURE 3 (PAGE 3 OF 5)
IMPACTS TO WATERS OF THE UNITED STATES/STATE

BAHIA YARD EXPANSION PROJECT
UNION PACIFIC RAILROAD
SOLANO COUNTY, CALIFORNIA

Jacobs

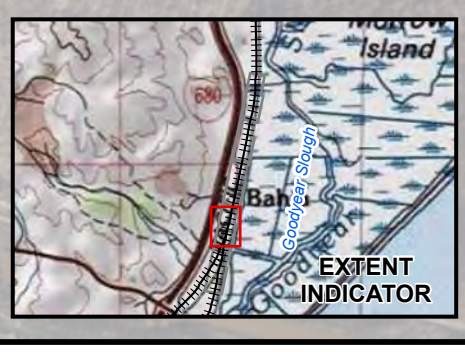


GOODYEAR RD

PEM-04
Permanent: 0.73 (Acre)
Temporary: 0.87 (Acre)

PEM-07
Temporary: 0.01 (Acre)

PSS-01
Permanent: 0.07 (Acre)
Temporary: 0.03 (Acre)



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Feet

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FIGURE 3 (PAGE 4 OF 5)
IMPACTS TO WATERS OF THE UNITED STATES/STATE

BAHIA YARD EXPANSION PROJECT
UNION PACIFIC RAILROAD
SOLANO COUNTY, CALIFORNIA

Jacobs

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- EXISTING TRACK
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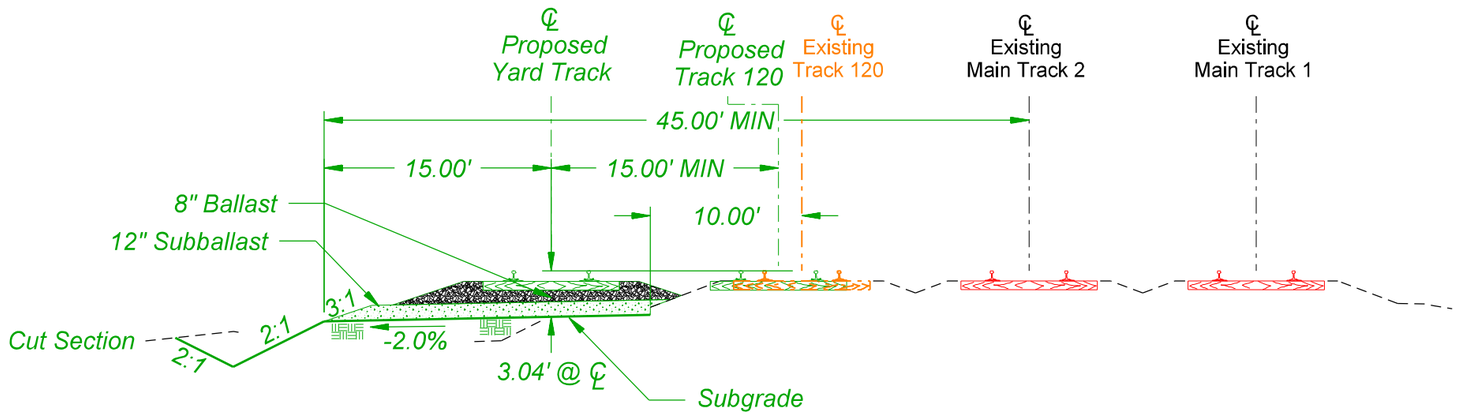
FIGURE 3 (PAGE 5 OF 5)
IMPACTS TO WATERS OF THE UNITED STATES/STATE

BAHIA YARD EXPANSION PROJECT
UNION PACIFIC RAILROAD
SOLANO COUNTY, CALIFORNIA

Jacobs



TYPICAL SECTION FOR PROPOSED YARD TRACK

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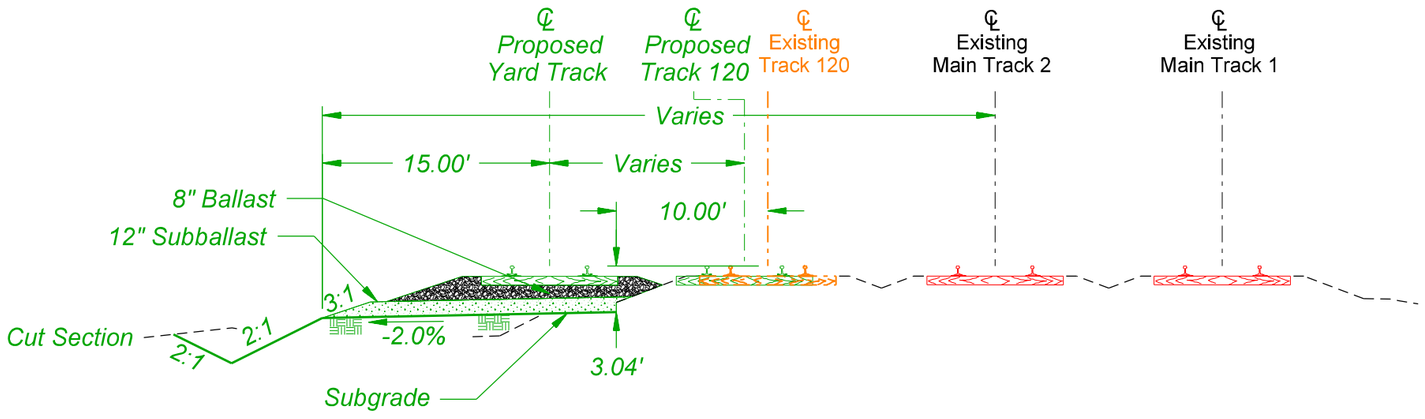

TYPICAL SECTION FOR PROPOSED YARD TRACK

Sta. 529+00.00 to Sta. 530+33.70

benesch
Alfred Benesch & Company
5430 Maass Rd, Suite 240
Bellevue, NE 68133
402-333-5792

DRAWN BY:	LJG
CHECKED BY:	CLH
DATE:	07/16/2024
SHEET NUMBER	T001 of 002

UNION PACIFIC RAILROAD

LOCATION & DESCRIPTION:
BAHIA, CA (SOLANO COUNTY)
MARTINEZ SUBDIVISION MP 37.42 TO MP 39.03
BAHIA SECOND SIDING TRACK (6,406' CLEAR)

SHEET TITLE:
TYPICAL SECTIONS

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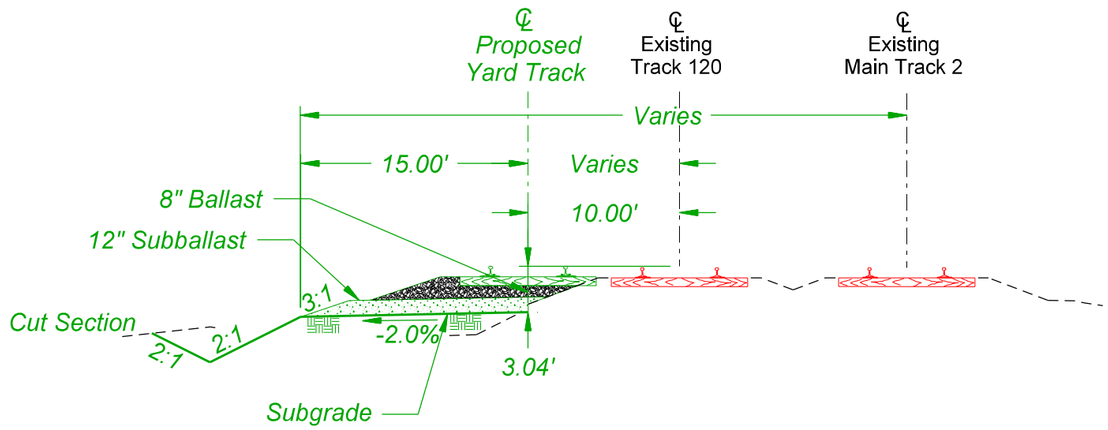
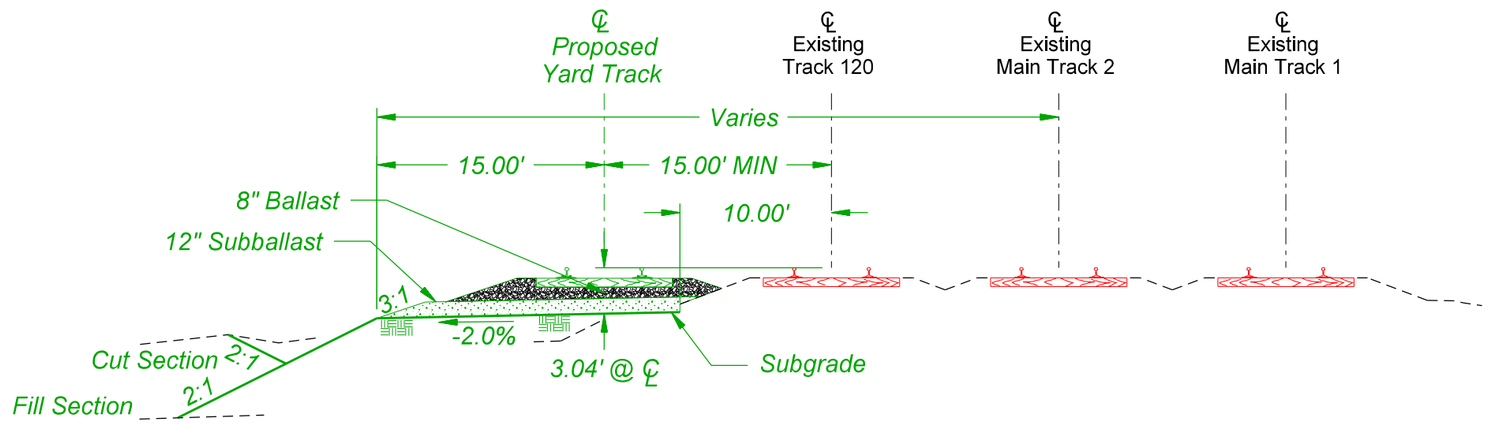
7/16/2024



TYPICAL SECTION FOR PROPOSED YARD TRACK

Sta. 595+35.35 to Sta. 596+54.98



TYPICAL SECTION FOR PROPOSED YARD TRACK

Sta. 535+01.07 to Sta. 595+35.35

benesch
Alfred Benesch & Company
5430 Maass Rd, Suite 240
Bellevue, NE 68133
402-333-5792

UNION PACIFIC

DRAWN BY: LJG
CHECKED BY: CLH
DATE: 07/16/2024
SHEET NUMBER: T002 of 002

UNION PACIFIC RAILROAD

LOCATION & DESCRIPTION:
BAHIA, CA (SOLANO COUNTY)
MARTINEZ SUBDIVISION MP 37.42 TO MP 39.03
BAHIA SECOND SIDING TRACK (6,406' CLEAR)

SHEET TITLE:
TYPICAL SECTIONS